



<p>RETURN BIDS TO: RETOURNER LES SOUMISSIONS À:</p> <p>Bid Receiving - Environment Canada / Réception des soumissions – Environnement Canada</p> <p>Atlantic Region Procurement & Contracting Contracting and Procurement Division, Finance Branch, Environment Canada 17th Floor, 45 Alderney Drive, Dartmouth NS B2Y 2N6</p> <p>BID SOLICITATION DEMANDE DE SOUMISSIONS</p> <p>PROPOSAL TO: ENVIRONMENT CANADA</p> <p>We offer to perform or provide to Canada the services detailed in the document including any attachments and annexes, in accordance with the terms and conditions set out or referred to in the document, at the price(s) provided.</p> <p>SOUSSION À: ENVIRONNEMENT CANADA</p> <p>Nous offrons d'effectuer ou de fournir au Canada, aux conditions énoncées ou incluses par référence dans le document incluant toutes pièces jointes et annexes, les services détaillés dans le document, au(x) prix indiqué(s).</p>	<p>Title – Titre Compilation of Volatile Organic Compound (VOC) Emissions from Solvent Use in Canada: Inventory Update</p>	
	<p>EC Bid Solicitation No. /SAP No. – N° de la demande de soumissions EC / N° SAP K8A42-15-0001</p>	
	<p>Date of Bid solicitation (YYYY-MM-DD) – Date de la demande de soumissions (AAAA-MM-JJ) 2015-02-06</p>	
	<p>Bid Solicitation Closes (YEAR-MM-DD) - La demande de soumissions prend fin (AAAA-MM-JJ)</p> <p>at – à 2:00 P.M. on – le 2015-03-17</p>	<p>Time Zone – Fuseau horaire Atlantic</p>
	<p>F.O.B – F.A.B Destination</p>	
	<p>Address Enquiries to - Adresser toutes questions à Jennifer Legere</p>	
	<p>Telephone No. – N° de téléphone 902-426-9940</p>	<p>Fax No. – N° de Fax 902-426-2690</p>
	<p>Delivery Required (YEAR-MM-DD) – Livraison exigée (AAAA-MM-JJ) 2016-03-31</p>	
	<p>Destination - of Services / Destination des services See herein.</p>	
	<p>Security / Sécurité There is a security requirement associated with this requirement.</p>	
	<p>Vendor/Firm Name and Address - Raison sociale et adresse du fournisseur/de l'entrepreneur</p>	
	<p>Telephone No. – N° de téléphone</p>	<p>Fax No. – N° de Fax</p>
<p>Name and title of person authorized to sign on behalf of Vendor/Firm: (type or print) / Nom et titre de la personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</p>		
<p>Signature</p>	<p>Date</p>	



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TITLE: Compilation of Volatile Organic Compound (VOC) Emissions from Solvent Use in Canada: Inventory Update

PART 1 - GENERAL INFORMATION

1. Introduction

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

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications: includes the certifications to be provided;
- Part 6 and Other Requirements includes specific requirements that must be addressed by bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Statement of Work and related Appendices, the Basis of Payment, the Non-Disclosure Certification, the Mandatory Requirements and Evaluation Criteria, and the Security Requirements Check List.

2. Summary

- 2.1 Environment Canada has a requirement for a Contractor to compile up-to-date, comprehensive inventories of Volatile Organic Compound (VOC) emissions from solvent use in Canada, for the years 2005 to 2017. This work will require the compilation of a comprehensive inventory of past emissions for the years 2005 to 2014 and projected emissions for the period 2015 to 2017 at the provincial/territorial level and the national level. Additional information can be found in the Statement of Work at Annex A of the Request for Proposal document. The contract period is anticipated to be from date of award to March 31, 2016 with the option to extend the contract for one (1) additional one (1) year period.
- 2.2 Bidders must provide a list of names, or other related information as needed, pursuant to section 01 Integrity Provisions of Standard Instructions 2003.
- 2.3 For services requirements, Bidders in receipt of a pension or a lump sum payment must provide the required information as detailed in article 3 of Part 2 of the bid solicitation.
- 2.4 The requirement is subject to the Agreement on Internal Trade, the North American free Trade Agreement, and the World Trade Organization – Agreement on Government Procurement.
- 2.5 There is a security requirement associated with this requirement. For additional information, consult Part 6 - Security, Financial and Other Requirements, and Part 7 - Resulting Contract



Clauses. For more information on personnel and organization security screening or security clauses, bidders should refer to the Canadian Industrial Security Directorate (CISD), Industrial Security Program of Public Works and Government Services Canada website (<http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>).

3. Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

PART 2 - BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the PWGSC *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2014-09-25) Standard Instructions - Goods or Services – Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

The standard instructions 2004 are modified as follows:

Under “Text” at 02:

Delete: “Procurement Business Number”

Insert: “Deleted”

At Section 02 Procurement Business Number

Delete: In its entirety

Insert: “Deleted”

At Section 05 Submission of Bids, Subsection 05 (2d):

Delete: In its entirety

Insert: “send its bid only to Environment Canada (EC) as specified on page 1 of the bid solicitation or to the address specified in the bid solicitation;”

At Section 06 Late Bids:

Delete: “PWGSC”

Insert: “Environment Canada”

At Section 07 Delayed Bids:

Delete: “PWGSC”

Insert: “Environment Canada”

At Section 08 Transmission by Facsimile, Subsection 08 (1):

Delete: In its entirety

Insert: “Bids may be submitted by facsimile if specified in the bid solicitation.”

At Section 12 Rejection of Bid, Subsection 12 (1) a. and b.:



Delete: In their entirety

Insert: "Deleted"

At Section 17 Joint Venture, Subsection 17 (1) b.:

Delete: "the Procurement Business Number of each member of the joint venture,"

Insert: "Deleted"

At Section 20 Further Information, Subsection 20 (2):

Delete: In its entirety

Insert: "Deleted"

2. Submission of Bids

Bids must be submitted to Environment Canada (EC) at the address and by the date, time and place indicated on page 1 of the bid solicitation.

3. Former Public Servant – Competitive Bid

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

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.



Former Public Servant in Receipt of a Pension

As per the above definitions, is Bidders 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.

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.

Signature: _____ **Date:** _____

4. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) business days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as “proprietary” will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that Bidders do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered to all. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

5. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Quebec.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or



territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to Bidders.

6. Basis for Canada's Ownership of Intellectual Property

Environment Canada has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, on the following grounds:

(6.4.1) the main purpose of the contract, or of the deliverables contracted for, is to generate knowledge and information for public dissemination.

7. Improvement of Requirement During Solicitation Period

Should Bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, Bidders is invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least five (5) business days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

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

- Section I: Technical Bid (1 hard copy)
- Section II: Financial Bid (1 hard copy)
- Section III: Certifications (1 hard copy)

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

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

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

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process Policy on Green Procurement (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, Bidders should:

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

Section I: Technical Bid

In their technical bid, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in



the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada 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 paragraph and page number where the subject topic has already been addressed.

Part 4, Evaluation Procedures, contains additional instructions that Bidders should consider when preparing their technical bid.

Section II: Financial Bid

- 1.1** Bidders must submit their financial bid in accordance with the Basis of Payment in Annex B. The total amount of Applicable Taxes must be shown separately.
- 1.2** Bidders must submit their financial bid in Canadian funds and in accordance with the Basis of Payment in Annex B. The total amount of Applicable Taxes must be shown separately.
- 1.3** Bidders must submit their rates FOB destination; Canadian customs duties and excise taxes included, as applicable; and Applicable Taxes excluded.

1.4 Price Breakdown

In their financial bid, Bidders is requested to provide a detailed breakdown of the price for the following elements for the performance of the Work, as applicable:

- (a) Professional fees: For each individual and (or) labour category to be assigned to the Work, Bidders should indicate: i) the firm hourly rate or the firm daily rate, inclusive of overhead and profit; and ii) the estimated number of hours or days, as applicable. Bidders should indicate the number of hours in one working day.

The professional fees must include the total estimated cost of all travel and living expenses that may need to be incurred for:

- (i) Work described in Part 7, Resulting Contract of the bid solicitation required to be performed within the National Capital Region (NCR). The NCR is defined in the *National Capital Act*, R.S.C. 1985, c. N-4, S.2. *The National Capital Act* is available on the Justice Website: [http://laws-lois.justice.gc.ca/eng/acts/N-4/;](http://laws-lois.justice.gc.ca/eng/acts/N-4/))
- (ii) travel between the successful bidder's place of business and the NCR; and
- (iii) the relocation of resources

to satisfy the terms of any resulting contract. These expenses cannot be charged directly and separately from the professional fees to any contract that may result from the bid solicitation.

- (b) Equipment (*if applicable*): Bidders should specify each item required to complete the Work and provide the pricing basis of each one, Canadian customs duty and excise taxes included, as applicable. These items will be deliverable to Canada upon completion of the contract.
- (c) Materials and Supplies (*if applicable*): Bidders should identify each category of materials and supplies required to complete the Work and provide the pricing basis. Bidders should indicate, on a per category basis, whether the items are likely to be consumed during the performance of any resulting contract.
- (d) Travel and Living Expenses (*if applicable*): Bidders should indicate the number of trips and the number of days for each trip, the cost, destination and purpose of each journey, together with the basis of these costs without exceeding the meal, private vehicle and incidental expenses



provided in Appendices B, C and D of the *National Joint Council Travel Directive* and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".

- (e) Subcontracts (*if applicable*): Bidders should identify all of the proposed subcontractors and provide in their financial bid for each one a price breakdown.
- (f) Other Direct Charges (*if applicable*): Bidders should identify all of the categories of other direct charges anticipated, such as long distance communications and rentals, providing the pricing basis for each and explaining the relevance to the work described in Part 7 of the bid solicitation.
- (g) Applicable Taxes: Bidders should indicate the Applicable Taxes separately.

1.5 Bidders should include the following information in their financial bid:

- (a) Their legal name; and
- (b) The name of the contact person (including this person's mailing address, phone and facsimile numbers and email address) authorized by Bidders to enter into communications with Canada with regards to their bid; and any contract that may result from their bid.

Section III: Certifications

Bidders must submit the certifications required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

1.1 Technical Evaluation

Except where expressly provided otherwise, the experience described in the bid must be the experience of Bidders itself (which includes the experience of any companies that formed Bidders by way of a merger but does not include any experience acquired through a purchase of assets or an assignment of contract). The experience of Bidder's affiliates (i.e. parent, subsidiary or sister corporations), subcontractors, or suppliers will not be considered.

1.1 Technical Evaluation

Mandatory and point rated technical evaluation criteria are included in Annex D.

1.2 Financial Evaluation

The price of the bid will be evaluated in Canadian dollars, the Applicable Taxes excluded, Canadian customs and excise taxes included.

2. Basis of Selection

1. To be declared responsive, a bid must:
 - a. comply with all the requirements of the bid solicitation;
 - b. meet all mandatory technical evaluation criteria; and
 - c. obtain the required minimum of 75% overall for the technical evaluation criteria which are subject to point rating.

Bids not meeting (a) or (b) or (c) will be declared non-responsive. The responsive bid with the highest number of points will be recommended for award of a contract, provided that the total evaluated price



does not exceed the budget available for this requirement.

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and associated information to be awarded a contract. The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default in carrying out any of its obligations under the Contract, if any certification made by Bidders is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify Bidders' certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority may render the bid non-responsive or constitute a default under the Contract.

1. Certifications Required Precedent to Contract Award

1.1 Integrity Provisions - Associated Information

By submitting a bid, the Bidder certifies that the Bidder and its Affiliates are in compliance with the provisions as stated in Section 01 Integrity Provisions - Bid of Standard Instructions 2003. The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

1.2 Federal Contractors Program for Employment Equity - Bid Certification

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

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

2. Additional Certifications Required Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will inform Bidders of a time frame within which to provide the information. Failure to comply with the request of the Contracting Authority and to provide the certifications within the time frame provided will render the bid non-responsive.

2.1 Status and Availability of Resources

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default. If the Bidder has proposed any individual who is not an employee of the Bidder, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting



Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability. Failure to comply with the request may result in the bid being declared non-responsive.

Signature: _____ Date: _____

2.2 Education and Experience

The Bidder certifies that all the information provided in the résumés and supporting material submitted with its bid, particularly the information pertaining to education, achievements, experience and work history, has been verified by the Bidder to be true and accurate. Furthermore, the Bidder warrants that every individual proposed by the Bidder for the requirement is capable of performing the Work described in the resulting contract.

Signature: _____ Date: _____

2.3 Rate or Price Certification

The Bidder certifies that the price proposed

- a. is not in excess of the lowest price charged anyone else, including the Bidder's most favoured customer, for the like quality and quantity of the goods, services or both;
- b. not include an element of profit on the sale in excess of that normally obtained by the Bidder on the sale of goods, services or both of like quality and quantity, and
- c. does not include any provision for discounts to selling agents.

Signature: _____ Date: _____

PART 6 – SECURITY AND INSURANCE REQUIREMENTS

1. Security Requirement

There is a security requirement associated with this requirement.

- (a) Before award of a contract, the following conditions must be met:
 - (i) the Bidder must hold a valid organization security clearance as indicated in Part 7 - Resulting Contract Clauses;
 - (ii) the Bidder's proposed individuals requiring access to classified or protected information, assets or sensitive work site(s) must meet the security requirement as indicated in Part 7 - Resulting Contract Clauses;
 - (iii) the Bidder must provide the name of all individuals who will require access to classified or protected information, assets or sensitive work sites;
 - (iv) the Bidder's proposed location of work performance or document safeguarding must meet the security requirement as indicated in Part 7 - Resulting Contract Clauses;
 - (v) the Bidder must provide the address(es) of proposed location(s) of work performance or document safeguarding as indicated in Part 3 - Section IV Additional Information.
- (b) Bidders are reminded to obtain the required security clearance promptly. Any delay in the award of a contract to allow the successful bidder to obtain the required clearance will be at the entire discretion



of the Contracting Authority.

(c) For additional information on security requirements, bidders should refer to the Canadian Industrial Security Directorate (CISD), Industrial Security Program of Public Works and Government Services Canada (<http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>) website.

2. Insurance Requirements

Bidders must provide a letter from an insurance broker or an insurance company licensed to operate in Canada stating that the Bidder, if awarded a contract as a result of the bid solicitation, can be insured in accordance with the Insurance Requirements specified in the contract.

If the information is not provided in the bid, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.



PART 7 - RESULTING CONTRACT

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

1. Statement of Work

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

2. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the PWGSC *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

2.1 General Conditions

2010B (2014-09-25), General Conditions - Professional Services (Medium Complexity), as modified below, apply to and form part of the Contract.

General conditions 2010B is modified as follows:

At Section 12 Transportation Costs

Delete: In its entirety

Insert: "Deleted"

At Section 13 Transportation Carriers' Liability

Delete: In its entirety.

Insert: "Deleted"

At Section 18, Confidentiality:

Delete: In its entirety

Insert: "Deleted"

Insert Subsection: "35 Liability"

"The Contractor is liable for any damage caused by the Contractor, its employees, subcontractors, or agents to Canada or any third party. Canada is liable for any damage caused by Canada, its employees or agents to the Contractor or any third party. The Parties agree that no limitation of liability or indemnity provision applies to the Contract unless it is specifically incorporated in full text in the Articles of Agreement. Damage includes any injury to persons (including injury resulting in death) or loss of or damage to property (including real property) caused as a result of or during the performance of the Contract."

A. For professional services requirements where the deliverables are copyrightable works:

At Section 19 Copyright

Delete: In its entirety

Insert:

1. In this section:
"Material" means anything that is created or developed by the Contractor as part of the Work under the Contract, and in which copyright subsists.
"Background Information" means all Intellectual Property that is not Foreground Information that is incorporated into the Work or necessary for the performance



of the Work and that is proprietary to or the confidential information of the Contractor, its subcontractors or any other third party;

"Foreground Information" means all Intellectual Property first conceived, developed, produced or reduced to practice as part of the Work under the Contract;

2. Material that is created or developed by the Contractor as part of the Work under the Contract belongs to Canada. The Contractor must incorporate the copyright symbol and either of the following notices, as appropriate: © Her Majesty the Queen in right of Canada (year) or © Sa Majesté la Reine du chef du Canada (année).
3. At the request of the Contracting Authority, the Contractor must provide to Canada, at the completion of the Work or at such other time as the Contracting Authority may require, a written permanent waiver of moral rights as defined in the [Copyright Act](#), R.S., 1985, c. C-42, in a form acceptable to the Contracting Authority, from every author that contributed to the Work. If the Contractor is an author, the Contractor permanently waives the Contractor's moral rights.
4. All Intellectual Property Rights in the Material belongs to Canada as soon as they come into existence. The Contractor has no right in or to any such Intellectual Property except any right that may be granted in writing by Canada.
5. The Contractor also grants to Canada a non-exclusive, perpetual, irrevocable, worldwide, fully-paid and royalty-free license to use the Background Information to the extent that this information is required by Canada to exercise its rights to use the Material. This license cannot be restricted in any way by the Contractor providing any form of notice to the contrary, including the wording on any shrink-wrapped license attached to any deliverable.

2.2 Supplemental General Conditions

The following supplemental general conditions apply to and form part of the Contract:
4007 (2010-08-16), Canada to own Intellectual Property Rights in Foreground

2.3 Specific Person(s)

The Contractor must provide the services of the following person(s) to perform the Work as stated in the Contract: _____ (*name(s) of person(s) to be inserted by Bidder*).

2.4 Non-Disclosure Agreement

The Contractor must obtain from its employee(s) or subcontractor(s) the completed and signed non-disclosure agreement, attached at [Annex C](#), and provide it to the Contracting Authority before they are given access to information by or on behalf of Canada in connection with the Work.

3. Security Requirement

There is a security requirement applicable to this Contract.

- 3.1 The SRCL and related security clauses applies and forms part of the Contract.

3.2 Contractor's Site or Premises Requiring Safeguard Measures

The Contractor must diligently maintain up-to-date, the information related to the Contractor's site or premises, where safeguard measures are required in the performance of the Work, for the following addresses:

Address:

Street Number / Street Name, Unit / Suite / Apartment Number

City, Province, Territory / State

Postal Code / Zip Code & Country



4. Term of Contract

4.1 Period of the Contract

The period of the Contract is from date of Contract to March 31, 2016 inclusive.

4.2 Option to Extend the Contract

The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to one (1) additional one (1) year period under the same conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

Canada may exercise this option at any time by sending a written notice to the Contractor at least seven (7) calendar days before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced for administrative purposes only, through a contract amendment.

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Jennifer Legere
Contracting Manager, Atlantic
Contracting and Procurement Division
Finance Branch, Environment Canada
17th Floor, 45 Alderney Drive, Dartmouth NS B2Y 2N6
Tel: 902-426-9940
Fax: 902-426-269
E-mail: jennifer.legere@ec.gc.ca

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

5.2 Technical Authority

The Technical Authority for the Contract is: *(To be determined at contract award)*

The Technical Authority named above is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

5.3 Contractor's Representative

Name: _____
Title: _____
Legal Company Name: _____
Operating Name: _____
Address: _____

Telephone: ____ - ____ - _____



Facsimile: _____
E-mail address: _____
Procurement Business Number or Tax Number: _____

6. Proactive Disclosure of Contracts with Former Public Servants

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

7. Payment

7.1 Basis of Payment

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work, as determined in accordance with the Basis of Payment in Annex B, to a limitation of expenditure of \$_____ (*amount to be inserted at contract award*). Customs duties are not applicable and Applicable Taxes are extra.

7.2 Limitation of Expenditure

- (a) Canada's total liability to the Contractor under the Contract must not exceed \$ _____ (*to be inserted at contract award*). Customs duties are included and the Applicable Taxes are extra.
- (b) No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
 - (i) when it is 75 percent committed, or
 - (ii) four (4) months before the contract expiry date, or
 - (iii) as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,whichever comes first.
- (c) If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

7.3 PWGSC SACC Manual Clauses

A9117C (2007-11-30) T1204 - Direct Request by Customer Department

8. Invoicing Instructions

8.1 Milestone Payment

8.1.1 Canada will make milestone payments in accordance with the Schedule of Milestones detailed in Annex B of the Contract and the payment provisions of the Contract, up to 100 percent of the amount claimed and approved by Canada if:

- (a) 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;
- (b) the total amount for all milestone payments paid by Canada does not exceed 90% of the total amount to be paid under the Contract;



- (c) all such documents have been verified by Canada;
- (d) all work associated with the milestone and as applicable any deliverable required have been completed and accepted by Canada.

8.1.2 The balance of the amount payable will be paid in accordance with the payment provisions of the Contract upon completion and delivery of all work required under the Contract if the Work has been accepted by Canada and a final claim for the payment is submitted.

9. Certifications

9.1 Compliance

Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

10. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____. *(To be inserted by Bidder)*

11. Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) 4007 Supplemental General Conditions (2010-08-16), Canada to own Intellectual Property Rights in Foreground;
- (c) 2010B General Conditions - Professional Services (Medium Complexity) (2014-09-25) as modified;
- (d) Annex A, Statement of Work;
- (e) Annex B, Basis of Payment;
- (f) Annex C, the signed Non-Disclosure Certification;
- (g) Annex E, the Security Requirements Check List;
- (h) the Contractor's bid dated _____ *(To be inserted by Bidder)*.

12. Insurance

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.



ANNEX A STATEMENT OF WORK

SW 1 Title: Compilation of Volatile Organic Compound (VOC) Emissions from Solvent Use in Canada: Inventory Update

SW 2 Background

Solvent use is at the origin of broad and diverse sources of VOC emissions in Canada as solvents are used at virtually every industrial, residential, commercial and institutional site in the country. Solvent use is grouped into four source sectors within the Air Pollutant Emissions Inventory (APEI) which include Dry Cleaning, General Solvent Use, Surface Coatings and Printing. These four sources contribute approximately 22% of VOC emissions to the annual national total when open and natural sources are excluded.

Due to the far-reaching, varied and complex nature of this source, the Pollutant Inventories and Reporting Division (PIRD) periodically hires a consultant, with expertise in calculating solvent use emissions, to compile an updated comprehensive inventory. The resulting emission estimates are incorporated into the APEI. The last contract to update the APEI solvent use emissions was for the inventory years 2006 to 2010.

The emissions estimation methodology for the solvent use sector requires regular examination, analysis and improvement. Changes in technology, solvent use trends and other variations in the sector make this emission source difficult to estimate with only publicly available data. An appropriate contractor must have the necessary expertise and resources to properly compile, update, analyze and validate VOC emission estimates from solvent use for the current year (2014) and the historical years 2005 to 2014. The contractor will also have the required knowledge to accurately project solvent use emissions for the years 2015 to 2017 for incorporation into future APEIs.

In addition, several regulations have come into play since the completion of the last contract, which will have an impact on emission levels in the time-period of 2006 to 2017. These regulations include:

- The Volatile Organic Compound (VOC) Concentration Limits for Automotive Refinishing Products Regulations which were published in 2009 and established VOC concentration limits for automotive refinishing products. The manufacture and import prohibitions of products that exceed the VOC concentration limits came into force on June 19, 2010, while the offer for sale prohibitions came into force on December 19, 2010 (<https://www.ec.gc.ca/lcpe-cepa/eng/regulations/detailreg.cfm?intReg=118>).
- The Volatile Organic Compound (VOC) Concentration Limits for Architectural Coatings Regulations which were published in 2009 and established VOC concentration limits for architectural coating products. These regulations took effect in September 2010, when the majority of products could no longer be manufactured or imported, but could still be sold until September 2012 (<https://www.ec.gc.ca/lcpe-cepa/eng/regulations/detailReg.cfm?intReg=117>).

SW 3 Objective and Scope of Work

The main objective of this study is to compile up-to-date, comprehensive inventories of VOC emissions from solvent use in Canada, for the years 2005 to 2017. This work will require the compilation of a comprehensive inventory of past emissions for the years 2005 to 2014 and projected emissions for the period 2015 to 2017 at the provincial/territorial level and the national level. The historical emissions trends will use the latest inventory year and draw upon previous work on emissions inventories and trends



based on the 2005 and 2010 inventories. The uncertainties in the emissions estimates will also be quantified

Final VOC estimates for 2006 to 2017 will be provided by detailed solvent application area (as listed in Appendix A), province/territory and solvent group (Appendix B).

The solvent use emission inventories resulting from this contract will be incorporated into the national Air Pollutant Emissions Inventory (APEI) for the historical years 2005 to 2013, 2014 (the most recent year) and future APEIs for the projected years 2015 to 2017. This approach involves both a top down and bottom up component to the compilation as is further explained in Task 1. The aim is to use the best information available and to be as rigorous as practical within the budgeted level of effort.

SW 4 Tasks

The work is presented in a sequential fashion herein; however, the Contractor is free to suggest in the project proposal any sequence of steps that would be most efficient, while achieving the same or superior quality.

1. Task 1 – Compilation of Historical Solvent Use VOC Emissions (up to 2014)

An up-to-date and comprehensive inventory of annual VOC emissions for solvent use in Canada shall be compiled for the years 2005 to 2014. The analysis methodology to be used by the successful proponent for compilation is described as a combination of “top-down” and “bottom-up” approaches. The top-down approach typically involves gathering statistical activity data on the VOC-containing product production, distribution, end-use patterns and disposal, and then building relationships between these stages. A bottom-up approach involves defining/estimating emissions at the facility, process or source-specific level. The development of the historical inventory will entail the collection of national solvent use data for the years of interests and calculation of emission estimates by source category at the provincial/territorial level.

The “List of Inventory Solvents” provided in Appendix C is to be applied to all annual emission inventories in this contract, namely from 2005 to 2017. The major application categories and sub-application categories to be considered, for all years, are provided in Appendix A. Previous inventories and trends can be found on the EC website at: <http://www.ec.gc.ca/inrp-npri/default.asp?lang=En&n=B85A1846-1>.

The successful proponent will be required to undertake, but is not limited to, the following work elements (not necessarily in sequential order) for the compilation of the 2005-2014 emission inventories. Note that certain tasks (e.g. Task 1.3) will also be applicable to the compilation of the historical emissions in Task 2 and the projected emissions in Task 3.

1.1 Conduct a literature search and contact solvent suppliers, distributors and users to obtain statistical trade and production data for the years of interest. Recent studies related to organic solvent emissions, speciation, market applications, controls, and recycling and disposal quantities should also be considered, including the most recently compiled solvent use inventory. As well, a list of recently completed Environment Canada studies (Appendix F) will be provided to the successful proponent for thorough review, consideration and incorporation of data where ever possible.

1.2 Conduct bottom-up emission data collection (at the facility, process or source-specific level) for the years of interest, through special surveys and/or existing studies focused on solvent use and VOC emissions in the following key sectors:



- a) Paints and coatings
- b) Personal care products
- c) Household products
- d) Other consumer and commercial products
- e) Asphalt, and
- f) Printing.

In addition, for sector (a) above, the impacts of the recently implemented “Volatile Organic Compound (VOC) Concentration Limits for Automotive Refinishing Products Regulations” and the “Volatile Organic Compound (VOC) Concentration Limits for Architectural Coatings Regulations” must be quantified in the emission estimates of the 2010 to 2017 inventories and quantified in the final report (Task 6).

1.3 Using the information collected in Tasks 1.1 to 1.2, determine for each year the national domestic consumption of the target solvents identified in Appendix C, through analysis of Canadian data on solvent production, trade (import/export) and inventory change. This step will support the mass balance approach that has been applied to past comprehensive solvent use VOC inventories compiled for Environment Canada. A table summarizing the quantities of solvent used each year at the national level, grouped by target solvent, will be presented in the draft and final reports and database(s) of Task 5.

1.4 For each year, segment national solvent consumption estimates into the different solvent application areas by combining market data and economic indicators with the mass balance data. This segmentation process should include all of the major application categories and sub-application categories listed in Appendix A and, if applicable, include new categories/sub-categories. A table summarizing the quantities of solvent used each year at the national level, for the aggregated target solvents (total VOC), by detailed solvent application area (list provided in Appendix A), will be presented in the draft and final reports and database(s) of Task 5.

1.5 Derive the corresponding VOC emission estimates for the year 2014 based on the estimated use of emission control technologies in each solvent application area. A table summarizing the final VOC emission estimates at the national level, by detailed solvent application area (list provided in Appendix A) will be presented in the draft and final reports and database(s) of Task 5.

1.6 Derive the corresponding VOC speciation profiles for the year 2014 based on the available information and literature review for the solvent groups. In addition to the data collected in Tasks 1.1 and 1.2, thorough review and consideration must be given to Environment Canada’s past solvent emission inventories for 2005 and 2010, trends and forecasts. The methodology used to compile the historical emissions will be clearly described in the draft and final reports of Task 5. The VOC speciation profiles for the solvent groups should be provided in the database(s) of Task 5 with appropriate referential integrity.

1.7 In consultation with the scientific authority, develop a method to allocate the national VOC emissions to the provinces/territories based on a combination of surrogate data such as macroeconomic indicators (population, manufacturing gross domestic product (GDP), commercial services GDP, number of households), and National Pollutant Release Inventory (NPRI) facility distribution and special allocation bases developed from previous research studies on specific solvent application areas. Note that previous research studies conducted by Environment Canada (Appendix F) will be provided to the successful proponent at the initiation of the contract. The final annual VOC emission estimates at the provincial/territorial level, by detailed solvent application area (list provided in Appendix A), will be presented in table format in the draft and final reports and database(s) of Task 5.



2. Task 2 - Compilation of Projected Emissions for 2015 to 2017

In consultation with the scientific authority, develop a methodology to forecast annual emissions annually to the year 2017 for all VOC containing solvents (Appendix C) and for each major application category and sub-category contained within the new 2014 inventory. Thorough review and consideration must be given to Environment Canada's past solvent emission inventories, trends and forecasts. The methodology used to compile the projected emissions will be sufficiently described in the draft and final reports of Task 5.

Note that adequate explanation should be provided for changes in the projected emissions, include a description of the methodology for projections and assumptions used. In addition, the draft and final projected emissions must be provided at the provincial/territorial level, by detailed solvent application area, in the database(s) of Task 5.

3. Task 3 – Quantification of Uncertainties in the Emission Estimates

Task 4 requires compiling uncertainty estimates for each data type and implementing routines to apply international standards such as the IPCC 2006 Good Practice Guidance procedures (<http://www.ipcc-nggip.iges.or.jp/public/gp/english/index.html>) for combining data uncertainties in emission calculations and the aggregation of emission estimates. The same procedures must also be applied to determine the uncertainties in all summary emissions, for all years (2010 to 2017) that are developed. The input uncertainties for each data type will be drawn from the available literature and calculated from the results of previous emissions measurement programs. The inputs and results of the uncertainty study will be provided in the draft and final reports of Task 5.

4. Task 4 – Definition of Inventory Solvent Use Categories and Comparison to Regulatory Categories

4.1 Provide clear definitions of the 9 major application categories and 92 sub-application categories (Appendix A) used in the VOC solvent use inventories and any additional sub-application categories that may have been created during the compilation of the updated inventories. These definitions should describe the types of industrial, residential, institutional and commercial sectors, activities, uses and products covered by each sub-application category in the inventories.

4.2 Compare the definitions produced in Task 5.1 with the products covered by the two regulations and the two proposed instruments listed under Objective 3. Identify all product categories/types of products which are covered by the regulations but which are not included in the definitions of the sub-application categories of the inventories. Also, identify cases where products are included in the inventories' categories but are not covered by the regulations.

The results of Tasks 5.1 and 5.2 shall be incorporated into separate appendices in the draft and final reports of Task 6.

5. Task 5 – Preparation of Draft and Final Reports

Reports will be in Microsoft (MS) Word 2010 format and will also be provided in Adobe Acrobat PDF format. All graphics, charts and figures shall be embedded directly in the word-processing document wherever practical to do so. This will allow easy distribution and use of the document by e-mail. All spreadsheets and databases will be in MS Excel 2010 and MS Access 2010 formats, respectively.



5.1 Prepare and provide to the project authority a draft report (in MS Word), based on the proposed table of contents in Appendix D, calculation spreadsheets (in MS Excel) and databases (in MS Access) which will include the following:

a) A complete update of the solvent -related VOC emissions (grouped and speciated VOCs) for all solvent-using sector categories (i.e. major application categories and sub-categories) for the years 2006 to 2017 by province/territory. For each application category and sub-category, the report must describe in detail the approach, methodologies, professional judgments, assumptions, analysis of results, uncertainties, areas for future study and references used. In addition, the report must clearly identify and define the types of processes, activities, products and sectors (industrial, commercial, institutional, residential etc.) captured under each solvent application sub-category (i.e. detailed list in Appendix A) reported in the inventory. The main causes of changes in emissions over time will be described, including the effect of regulations or changes in technologies that affect emissions, especially since the year 2007. In addition, the causes of recalculations from previously reported emissions will be identified and discussed.

b) Referential calculation database(s) consisting of raw data tables, related tables, interim calculated data, summary tables, queries, and macros for each application category and sub-category which must follow the approach and methodologies detailed in the report. If Visual Basic code is used for the calculations, there shall be sufficient comments included to explain what is occurring in each step of code. The database(s) must contain the draft national (aggregated and by solvent group) and provincial and territorial (aggregated) VOC emission estimates by major application category and sub-category for the years 2005 to 2017. The database(s) must also indicate the references used in the calculations.

5.2 Revise and resubmit the draft report and database(s) as required, according to feedback from the project authority and those designated by the project authority.

5.3 Submit a final report to the project authority. The final report (in MS Word and Adobe Acrobat PDF format), calculation spreadsheets (in MS Excel), and databases (in MS Access).

6. Task 6 – Development of Database Application to Reconcile Emissions

Develop a database application which will automatically perform the reconciliation of the solvent use emissions estimates (produced in Task 1) with the facility level emissions from the National Pollutant Release Inventory (NPRI), by year, province and sector.

The NPRI database contains emissions estimated at the facility level rather than at the process or activity level. Reconciliation consists of eliminating the double counting of emissions between the solvent use emissions inventory and the NPRI emissions. A key challenge resides in the different classifications of emission sources between the two inventories; NPRI facilities are classified according to the North American Industry Classification System (NAICS) codes while the solvent use inventory emissions are classified into 9 major application categories and 92 application sub-categories as outlined in Appendix A.

The task to develop a database application which will automatically reconcile the solvent use emissions produced in Task 1, with the solvent use emissions from the NPRI requires the development and supply of a user-friendly interface for convenient management and future reconciliation of solvent use emissions inventories by Environment Canada. The application will be developed in MS Access 2010 and will provide sufficiently detailed user documentation in both MS Word and Adobe Acrobat PDF format.



The Contractor is encouraged to propose modifications to the approach of reconciling the solvent use emissions inventory and the work elements listed to complete the database application (Tasks 6.1 to 6.11), predicated on achieving improved efficiency, enhanced accuracy or both.

The successful proponent will be required to undertake, but is not limited to, the following work elements (not necessarily in sequential order) to develop the automated reconciliation process:

6.1 Review the current methodology used for the reconciliation of the solvent use emissions inventory and the NPRI solvent use VOC emissions. The following files will be provided to the successful proponent for review at the contract initiation meeting:

- a) The Environment Canada document entitled “Volatile Organic Compound Emissions from the Use of Solvents in Canada – Inventory Improvement and Trends Compilation Task #3: Mapping of Solvent Application Sub-categories to NAICS Codes”, Final Report, May 31, 2007.
- b) The current reconciliation tool in spreadsheet format “Solvent VOC NAICS4 Mapping.xls”.
- c) The Environment Canada internal document “Standard Operating Procedures (SOP): Miscellaneous Sources, 5.04 Solvent Use”.

6.2 In the “Solvent VOC NAICS4 Mapping.xls” file, review the worksheet with the tab labeled “Final”. Based on the data in this worksheet, create a database table that can be used to allocate portions of the emissions in each of the 92 application sub-categories of the solvent use inventory, to the appropriate NAICS4 codes used in the NPRI database and listed in the worksheet.

6.3 In the “Solvent VOC NAICS4 Mapping.xls” file, review the worksheet with the tab labeled “NPRI05N4”. Based on the data in this worksheet, create a database table that can be used to partition a portion of the total VOC emissions for each NAICS4 code in the NPRI into solvent use emissions and the remaining portion into process emissions.

6.4 Develop an automated process to import the final emissions dataset produced in Task 6 to form the required input table for the automated reconciliation application. The input table must contain the solvent use emissions by year and province and by major application category and sub-category from the inventory database(s) of Task 5.

6.5 Develop an automated process to import VOC air emissions data from the NPRI database to create the required input table for the automated reconciliation application. The input table should contain the VOC emissions to air summed by NAICS4 code, province and year.

6.6 Develop a query which applies the allocated percentages found in the table produced in Task 6.2 to the solvent use emissions in the input table of Task 6.4 and provides the final emissions by NAICS4 code, province and year.

6.7 Develop a query which applies the percentages in the database table of Task 6.3 to the emissions in the input table of Task 6.5 to provide the estimated quantity of emissions from solvent use from NPRI facilities in each NAICS4 code by province and year.

6.8 Develop a query to subtract the NPRI estimated solvent use emissions by NAICS4 code, province and year (Task 6.7) from the solvent use emissions inventory by NAISC4 code, province and year (produced in Task 6.6). This operation will provide the reconciled solvent use emissions inventory. Instances where the subtraction of the emissions for a particular NAICS4 code produces a negative value (i.e. the NPRI estimated emissions from solvent use are greater than the estimated emissions in the



solvent use inventory) should be minimized. One option is to override the negative value with a quantity of zero; the contractor could use an alternative method if approved by the contracting authority. This operation will prevent the incorporation of the emissions from the solvent use inventory for this NAICS4 code since the NPRI solvent use emissions account for all and more of the emissions from this source.

6.9 Review the worksheet with the tab labeled “RevAlloc” in the “Solvent VOC NAICS4 Mapping.xls” file. Based on the calculations in this worksheet, develop a query that will calculate percentages to allocate the reconciled solvent use emissions from Task 7.8, back to the original 92 application sub-categories. These percentages will be calculated from the solvent use emissions inventory allocated to the NAICS4 codes, before the reconciliation was carried out (Task 7.6). The query output will contain new allocation percentages to apply in Task 7.10.

6.10 Develop a query to apply the reconciled solvent use emissions by NAICS4 code, province and year (Task 7.8) to the query output (new allocation percentages) developed in Task 7.9 to derive the reconciled solvent use emissions by year, province, and by APEI Sector and Major Sector (as noted in columns 1 and 3 of the table in Appendix E). The relationships between the APEI Sectors, Major Application Categories, Major Sectors and NAICS4 Codes are presented in the table of Appendix E. The relationships between the Major Application Categories and Application Sub-categories are shown in the table of Appendix A.

6.11 Develop sufficiently detailed user documentation for the database application to facilitate user understanding and future modifications.

7.0 General Instructions

The Statement of Work is intended to be detailed enough to ensure that the Department receives, as a minimum, the information requested above but, at the same time, flexible enough to permit innovation and initiative by the candidate firms in the interests of the Department.

Deliverables, including reports and databases, are described in this Statement of Work and according to the Schedule, Deliverables & Reporting Format section. The reports will contain the required information, responses, findings, data, analysis, observations, and professional opinions.

After completion of the study, the Contractor shall make a presentation to EC staff and other interested parties to provide a summary of the key findings and to demonstrate the database application. The presentation will be made at EC’s offices in Gatineau, Quebec.

All reports shall be written in English, and both draft and final reports shall be written in a clear and logical fashion and shall be submitted in Microsoft Word 2010 and Adobe Acrobat PDF format. The consultant shall report all the sources of information. Key uncertainties should be identified and the source explained.

The tasks above are not necessarily exhaustive. The consultant is encouraged to provide any additional information discovered during the course of this work that is deemed relevant in fulfilling the objectives of this contract.

7.1 SCHEDULE, DELIVERABLES & REPORTING FORMAT

All deliverables and successful completion of the project are subject to the acceptance and/or approval of the project authority. Table 1 outlines the schedules, deliverables and formats required for completion of this contract. All reports are to be provided in English and in electronic format MS Word 2010. All databases are to be provided in Microsoft Access 2010 and spreadsheets in Microsoft Excel 2010 format.
Progress Reports



Throughout the duration of the contract, the Contractor shall advise the Scientific Authority via email or telephone, on a bi-weekly basis, of the status of the work currently underway. This may include the progress to date on the elements of the Statement of Work, any expected or unforeseen delays, challenges encountered, and ability to meet the timelines and schedule proposed.

Teleconference Calls

After each deliverable identified below in Table 1, a conference call will be arranged for the Contractor and the Departmental Representative to discuss the information provided and the questions and feedback provided by the Scientific Authority. The teleconference call should occur within ten (10) calendar days of the receipt of a deliverable.

SW 5 Deliverables and Schedule

Item	Description of Deliverable	Schedule
	<i>Phase I Deliverables – 2014 Emissions Inventory</i>	
1.	<i>Kick-off Meeting via Conference Call</i>	No later than ten (10) business days after award of this contract.
2.	<p><i>Milestone #2: Draft Table of Contents and Outline for Project Report</i></p> <p>A proposed draft table of contents and outline for the project report which address <u>all elements of TASKS 1 THROUGH 5</u> in the statement of work. The drafts will be provided to EC for review and comment in English and in electronic Microsoft Word 2010 format.</p>	4 weeks from date of contract award
3.	<p><i>Milestone #3: Draft Data Tables for 2005-2014 Emissions Inventory</i></p> <p>Draft emissions inventory data tables for the years 2005-2014, compiled according to TASK 1 in the Statement of Work. The data tables will be submitted to EC for review and comment in English and in electronic Microsoft Access format.</p>	No later than July 31, 2015
4.	<p><i>Milestone #4: Draft Report</i></p> <p>The draft report will contain <u>all elements of TASKS 1 THROUGH 5.1</u> of the Statement of Work. The draft report will be submitted to EC for review and comment, in English, in hard copy (four copies, double sided and printed on recycled paper certified by the Environmental Choice Program) and in electronic Microsoft Word and Adobe PDF formats. The detailed draft data tables will be submitted to EC in electronic Microsoft Access format. Comments will be prepared and delivered to the Contractor for inclusion in the final documentation within 2 weeks of receipt of the drafts.</p>	20 weeks from date of contract award
5.	<p><i>Milestone #5: Final Report and Data Tables</i></p> <p>The final report as outlined in TASK 5.2 will be submitted to EC in English, in hard copy (four copies, double sided and printed on recycled paper certified by the Environmental Choice Program) and in electronic Microsoft Word and Adobe PDF formats. The final detailed data tables will be submitted to EC in electronic Microsoft Access format.</p>	30 weeks from date of contract award



Item	Description of Deliverable	Schedule
6.	<p><i>Milestone #6: Draft Database Application and User Manual</i> The draft database application and user manual will contain <u>all elements of TASK 6</u> of the Statement of Work. The draft user manual will be submitted to EC for review and comment, in English, in hard copy (four copies, double sided and printed on recycled paper certified by the Environmental Choice Program) and in electronic Microsoft Word and Adobe PDF formats. The database application will be submitted to EC in electronic Microsoft Access format. Comments will be prepared and delivered to the Contractor for inclusion in the final application and documentation within 3 weeks of receipt of the drafts.</p>	By September 18
7.	<p><i>Presentation of Key Findings and Database Application</i> The contractor shall make a presentation to EC staff and other interested parties. The presentation will be made at EC’s offices in Gatineau, Quebec.</p>	28 weeks from date of contract award
8.	<p><i>Milestone #7: Final Database Application and User Manual</i> The final database application and user manual will be submitted to EC in English, in hard copy (four copies, double sided and printed on recycled paper certified by the Environmental Choice Program) and in electronic Microsoft Word and Adobe PDF formats. The final database application will be submitted to EC in Microsoft Access format.</p>	No later than October 16, 2015

SW 6 Official Languages:

The work will be conducted in English. The department is under the obligation to respect the spirit and the letter of the Official Languages Act R.S.1985,C.31 (4th Suppl.). It is therefore imperative that the Contractor when representing the Crown ensures that verbal communications are in the preferred official language of the participants. Written communications will be in the language(s) of the participants and must be submitted to the Project authority before they are issued. If participants are required to communicate by telephone with the Contractor or his/her representatives, the Contractor must ensure that all persons, including receptionists and other contacts who will be receiving these calls, are bilingual.

SW 7 Travel Considerations

Travel is anticipated in the scope of this contract for the final project presentation meeting.

The final invoice must include a breakdown of the travel expense such as transport, accommodation and meal cost.

Additional travel costs (for example to conduct field measurement) may be required, and shall be included as part of the overall project cost.

No travel costs are to be incurred without prior authorization, in writing, of the Departmental Project Manager.

Travel costs will be reimbursed subject to the Treasury Board Travel Directive: http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/TBM_113/menu-travel-voyage_e.asp



SW 8 Government Supplied Materiel/Crown Input

Applicable data and/or reference documents will be provided by the scientific authority upon contract award.

SW 9 Security

The work, services, equipment and/or material covered by this contract are Protected B, therefore, all persons undertaking the work or services covered by the contract must have an enhanced reliability check in accordance with the Government Security Policy.

SW 10 Confidentiality

The parties anticipate that it may be necessary to transfer to each other information relating to the Licensed Process, Patents, Trade-mark, Know-How or other information relating to this Agreement, of a confidential nature. The parties shall keep all such information confidential during and after the life of this Agreement.

Subject to the Access to Information Act, R.S. 1985, c.A-1, the parties agree that the terms of this Agreement are confidential and each party shall use the same degree of care to prevent disclosure of the terms of this Agreement to third parties as it uses to protect its own confidential information of similar nature.

SW 11 Communications

During the contract period the Contractor shall remain in regular contact with the Project authority identified in this solicitation either by telephone or in person to ensure the project is progressing well. Communications will occur as per an agreed schedule for the duration of the project.



APPENDIX A

Solvent Application Categories and Sub-categories

Major Application Category	Application Sub-category
Dry Cleaning	Petroleum Solvent Other
Printing	Flexographic Gravure Letterpress Lithographic Other
Paints and Coatings	Aircraft Architectural Auto Re-finishing Cars, Vans and Light Trucks Trucks, Buses and Other Vehicles Auto Parts Coatings Electronic and Other Electrical Textile Manufacturing Flatwood Products Large Appliances Large Ships Machinery Magnet Wire Maintenance Coatings



Major Application Category	Application Sub-category
	Metal Cans Metal Coil Metal Furniture Miscellaneous Metal Parts Paper Plastic Parts Plastics Processing Railroad Steel Drums Structural Steel Thining Solvents Traffic Markings Wood Furniture Other
Degreasing	Open Top Conveyorised Cold Cleaning Other
Other Industrial	Adhesives and Sealants Aerosols Blowing Agents Asphalt Cutbacks Film Laminations General Purpose Cleaning



Major Application Category	Application Sub-category
	Metal Working Mining Natural Oil Extraction Paint Stripper Petroleum Refining Pharmaceuticals Manufacturing Resin Manufacturing Tapes Water Treatment Wood Treatment Refrigerant Food Processing
Other Consumer and Commercial Products	Antifreeze Windshield washer Other auto products Electrostatic copying fluids Miscellaneous
Pesticides	Insecticides Herbicides Fungicides & Nematicides Other FIFRA-Regulated Products
Personal Care Products	Deodorants and Antiperspirants Hair Care Products Nail Care Products



Major Application Category	Application Sub-category
	Fragrance Products Powders Facial and Body Treatments Oral Care Products Health Care Products Miscellaneous Personal Care Products Shaving Creams
Household Products	Furniture Maintenance Products Fabric and Carpet Care Air Fresheners Bathroom and Tile Cleaners Laundry Dish Washing Glass Cleaners Oven Cleaners General Purpose Cleaners Shoe and Leather Care Products Spot Removers Waxes & Polishes Floor Wax Strippers Silicone-based Multi-purpose Lubricants Charcoal Lighter Fluid Other (including Heavy duty hand cleaners/soaps)



APPENDIX B

List of Solvent Groups

Solvent Type
Aliphatics
Aromatics
Alcohols
Ketones
Glycols
Ethers/Esters
Halogenated
Nitrogenated



APPENDIX C

List of Inventory Solvents

Solvent Group	Specific Solvents / Speciation
Aliphatic	Propane Butanes Pentanes Hexane Cyclohexane Naphthas (C7 - C10)
Aromatic	Toluene Xylene Heavy aromatics (Aromatic100, 150 and 200) Styrene N-Methyl-2-Pyrrolidone
Alcohol	Methanol Ethanol Isopropanol (IPA) Butanols (n-butanol, isobutanol) Methyl isobutyl carbinol (MIBC)
Ketone	Methyl ethyl ketone (MEK) Methyl isobutyl ketone (MIBK)
Glycol	Ethylene glycol Propylene glycol
Ether & Ester	Glycol ethers, glycol ether esters Ethyl acetate Propyl acetate Butyl acetates (n-butyl acetate, i-butyl acetate) Other esters
Halogenated	Trichloroethylene Chloromethane
Nitrogenated	Ethanolamines Morpholine



APPENDIX D

Proposed Table of Contents

- 1. EXECUTIVE SUMMARY**
- 2. INTRODUCTION**
- 3. EMISSION TRENDS BY MAJOR APPLICATION**
- 4. EMISSION TRENDS BY SOLVENT TYPE**
- 5. EMISSION TRENDS BY PROVINCE/TERRITORY**
- 6. UNCERTAINTY ANALYSIS**
- 7. BIBLIOGRAPHY**
- 8. APPENDICES**



APPENDIX E

APEI Sectors	Major Application Categories	Major Sectors	Sectors/Activities Included	NAICS4 Codes
General Solvent Use	Degreasing Other Industrial Other Consumer and Commercial Pesticides Personal Care Products Household Products	1. Natural Resources	Farming, Fishing, Forestry	1111-1153
		2. Construction	Residential; Non-Residential; Heavy & Civil; Specialty	2361-2389
		3. Primary Industry	Oil & Gas; Mining; EPG; Pulp & Paper; Wood Products; Petroleum; Chemicals; Non-Metallic Minerals; Primary Metals; Petroleum Distribution; Pipelines	2211-2213 3211-3222 3241-3259 3271-3315 4121, 4861-4869
		4. Manufacturing & Assembly	Food & Beverage; Textiles & Leather; Printing; Plastic & Rubber Product Mfg.; Machinery, Parts & Equipment Mfg.	3111-3169 3231 3261-3262 3321-3399
		5. Distribution & Retail	All Distribution & Retail (except Petroleum Distribution)	4111-4543 (not 4121)
		6. Commercial Services	Transportation Services (except Pipelines); Information & Commercial Services;	4811-5629 (not 4861-4869) 7111-8139
		7. Institutional & Government	Education & Health Care Government Services	6111-6244 9111-9141
		8. Private Households (Consumer)	Private Households	8141
		Surface Coatings	Paints and Coatings	1. Natural Resources
2. Construction	Residential; Non-Residential; Heavy & Civil; Specialty			2361-2389
3. Primary Industry	Oil & Gas; Mining; EPG; Pulp & Paper; Wood Products; Petroleum; Chemicals; Non-Metallic Minerals; Primary Metals; Petroleum Distribution;			2211-2213 3211-3222 3241-3259 3271-3315 4121, 4861-4869



APEI Sectors	Major Application Categories	Major Sectors	Sectors/Activities Included	NAICS4 Codes
			Pipelines	
		4. Manufacturing & Assembly	Food & Beverage; Textiles & Leather; Printing; Plastic & Rubber Product Mfg.; Machinery, Parts & Equipment Mfg.	3111-3169 3231 3261-3262 3321-3399
		5. Distribution & Retail	All Distribution & Retail (except Petroleum Distribution)	4111-4543 (not 4121)
		6. Commercial Services	Transportation Services (except Pipelines); Information & Commercial Services;	4811-5629 (not 4861-4869) 7111-8139
		7. Institutional & Government	Education & Health Care Government Services	6111-6244 9111-9141
		8. Private Households (Consumer)	Private Households	8141
Dry Cleaning	Dry Cleaning	6. Commercial Services	Transportation Services (except Pipelines); Information & Commercial Services;	4811-5629 (not 4861-4869) 7111-8139
Printing	Printing	3. Primary Industry	Oil & Gas; Mining; EPG; Pulp & Paper; Wood Products; Petroleum; Chemicals; Non-Metallic Minerals; Primary Metals; Petroleum Distribution; Pipelines	2211-2213 3211-3222 3241-3259 3271-3315 4121, 4861-4869
		4. Manufacturing & Assembly	Food & Beverage; Textiles & Leather; Printing; Plastic & Rubber Product Mfg.; Machinery, Parts & Equipment Mfg.	3111-3169 3231 3261-3262 3321-3399
		6. Commercial Services	Transportation Services (except Pipelines); Information & Commercial Services;	4811-5629 (not 4861-4869) 7111-8139

APPENDIX F

List of Available References

- Cheminfo Services Inc.** Volatile Organic Compound (VOC) Emissions from the Use of Solvents in Canada for the Year 2000. Gatineau : Environment Canada, Pollution Data Branch, 2002.
- Cheminfo Services Inc.** Estimation and Forecast of Volatile Organic Compounds Emissions from the Solvent Sector in Canada: 1990 to 2020. Gatineau : Environment Canada, Pollution Data Branch, 2002.
- Cheminfo Services Inc.** Solvent Use for General Cleaning Purposes in Canada. Gatineau : Environment Canada, Chemical Controls Division, 2003.
- Cheminfo Services Inc.** Volatile Organic Compound Emissions from the Use of Solvents in Canada for the Year 2002. Gatineau : Environment Canada, Pollution Data Branch, 2004.
- Cheminfo Services Inc.** Technical Assessment of Categorization and VOC Content Limits for Architectural and Industrial Maintenance Coatings in Canada. Hull : Environment Canada, Chemical Controls Division, 2004.
- Cheminfo Services Inc.** Volatile Organic Compound Emissions from the Use of Solvents in Canada for the Year 2004. Gatineau : Environment Canada, Pollution Data Division, 2006.
- Cheminfo Services Inc.** Technical Study of Coatings and Operations for Refinish of Automobiles and Mobile Equipment in Canada. Gatineau : Environment Canada, 2006.
- Cheminfo Services Inc.** Volatile Organic Compound (VOC) Emissions from the Use of Solvents in Canada - Inventory Improvement and Trends Compilation, Task #2: VOC Emission Trends Compilation 1985-2005. Gatineau : Environment Canada, Pollution Data Division, 2007.
- Cheminfo Services Inc.** Volatile Organic Compound (VOC) Emissions from the Use of Solvents in Canada - Inventory Improvement and Trends Compilation, Task #3: Mapping of Solvent Application Sub-Categories to NAICS Codes. Gatineau : Environment Canada, Pollution Data Division, 2007.
- Cheminfo Services Inc.** Technical and Economical Study on Volatile Organic Compounds in Industrial and Commercial Adhesives. Gatineau : Environment Canada, 2009.
- Cheminfo Services Inc.** Technical Study on Volatile Organic Compounds/Challenge Substances in Aerosol Coating Products in Canada. Gatineau : Environment Canada, 2010.
- Conestoga-Rovers & Associates.** Inventory Improvement and Compilation of Volatile Organic Compound (VOC) Emissions from the Use of Solvents in Canada. Gatineau : Environment Canada, 2012.
- Environmental Health Strategies Inc.** Estimating Solvent Use and VOC Emissions from Institutional, Commercial and Industrial Cleaning and Degreasing in Canada. Gatineau : Environment Canada, Chemical Sectors, Products, 2008.
- Environmental Health Strategies Inc.** Technical and Economic Study on VOC Emissions from Emulsified and Cutback Asphalt Use in Canada. Gatineau : Environment Canada, Chemicals Sector Directorate, 2010.



Environmental Health Strategies Inc. Technical and Economic Study of VOC Emissions from Coal Tar-based Pavement Sealers. Gatineau : Environment Canada, Products Division, Chemical Sectors, 2010.

Environmental Health Strategies Inc. Volatile Organic Compound Emission Factors Estimations for the Canadian Printing, Packaging and Graphic Arts Industry. Gatineau : Environment Canada, Products Division, 2011.



**ANNEX B
BASIS OF PAYMENT and SCHEDULE OF MILESTONES**

The prices below are firm, all inclusive prices for the work as described in the Statement of Work at Annex A.

Deliverable #	Rate (\$) (a)	Estimated Level of Effort (hours) (b)	Extended Price (a x b)
1		N/a	N/a
2		20	
3		450	
4		100	
5		80	
6		200	
7		25	
8		25	
Hourly rate for Option Year 1 April 1, 2017 to March 31, 2018		100	
Evaluated Total			

Price Breakdown for Deliverables:

Deliverable	Professional Fees	Materials/equipment/ supplies	Travel	Other	Total
1					
2					
3					
4					
5					
6					
7					
8					

Payment will only be made in when deliverables are received and accepted by Canada.

Schedule of Milestones

Milestone/Deliverable #	Estimated Delivery Date	% of Contract Value	\$ of Contact Value
1	10 days from award	N/a	N/a
2	4 weeks from award	N/a	N/a
3	July 31, 2015	47%	
4	20 weeks from award	N/a	N/a
5	30 weeks from award	N/a	N/a
6	September 18, 2015	39%	
7	28 weeks from award	N/a	N/a
8	October 16, 2015	14%	
Total		100%	



ANNEX C
NON-DISCLOSURE CERTIFICATION

I, _____, recognize that in the course of my work as an employee or subcontractor of _____, I may be given access to information by or on behalf of Canada in connection with the Work, pursuant to Contract Serial No. _____ between Her Majesty the Queen in right of Canada, represented by the Minister of Public Works and Government Services and Environment Canada, including any information that is confidential or proprietary to third parties, and information conceived, developed or produced by the Contractor as part of the Work. For the purposes of this agreement, information includes but not limited to: any documents, instructions, guidelines, data, material, advice or any other information whether received orally, in printed form, recorded electronically, or otherwise and whether or not labeled as proprietary or sensitive, that is disclosed to a person or that a person becomes aware of during the performance of the Contract.

I agree that I will not reproduce, copy, use, divulge, release or disclose, in whole or in part, in whatever way or form any information described above to any person other than a person employed by Canada on a need to know basis. I undertake to safeguard the same and take all necessary and appropriate measures, including those set out in any written or oral instructions issued by Canada, to prevent the disclosure of or access to such information in contravention of this agreement.

I also acknowledge that any information provided to the Contractor by or on behalf of Canada must be used solely for the purpose of the Contract and must remain the property of Canada or a third party, as the case may be.

I agree that the obligation of this agreement will survive the completion of the Contract Serial No.: _____

Signature

Date



Annex D
MANDATORY REQUIREMENTS AND EVALUATION CRITERIA

All proposals will be evaluated based on mandatory and point rated criteria. All proposals must demonstrate that mandatory requirements are fully met. Point rated criteria will be evaluated by the scientific authority.

If no acceptable bids are received, Environment Canada reserves the right to not award this contract.

Mandatory Criteria

For each mandatory criterion, the Bidder must indicate whether the requirement is met, and identify the page(s) where each criterion is demonstrated in the documentation provided with the bid. Canada will verify any and all information relating to mandatory requirements. Failure to meet any of the mandatory requirements listed below will render the proposal non-compliant and no further consideration will be given.

Item	Description	Met	Not Met	Page # Reference
MT1	The Project Manager must demonstrate a relevant engineering or science degree such as mechanical engineering, chemical engineering, environmental engineering, civil engineering or environmental science from a recognized university.			
MT2	The Project Manager must demonstrate two (2) projects relevant to the statement of work within the past 10 years. Relevant projects are considered to be those that pertain to the compilation of emissions inventories of VOCs from solvent use and projects pertaining to a more in-depth assessment of solvent use and VOC emissions from one of the key sectors listed in Task 1.3.			
MT3	The project team must consist of resources with relevant engineering or science degrees such as mechanical engineering, chemical engineering, environmental engineering, civil engineering or environmental science.			
MT4	One project resource must demonstrate a minimum of two (2) years post-university experience related to conducting statistical and scientific literature searches, data collection and creating and conducting surveys.			
MT5	One project resource must demonstrate a minimum of two (2) years' experience compiling estimates of VOCs, or other air emissions using both top down (statistical activity data and emission factors) and bottom up (facility level) approaches.			
MT6	The proposal must include a detailed schedule with a breakdown showing time allocated for specific tasks as well as the resources assigned to each task.			



Point Related (PR) Criteria

For a proposal to be technically acceptable it must receive a minimum score of 65% for each PR criteria.

	Criteria	Max Score
EXPERIENCE OF FIRM AND PROPOSED RESOURCES		80
The proposal shall identify resources to be assigned to the project, experience in relevant work, relevant company experience, and familiarity with and established contacts in regulatory, industry-based partner organizations required for execution of the project.		
<u>PR1 – Contractor Experience</u>		38
a.	<i>Number of projects related to the key sectors listed in Task 1.3 – the contractor should provide a list of the projects with a brief description of the work that was done (two points for paints and coatings industry projects; two points for printing industry projects; two points for asphalt industry projects; one point for each project related to the other sectors of Task 1.3; maximum of 10 points)</i>	10
b.	<i>Number of projects related to VOCs or other air emissions – the contractor should provide a list of the projects with a brief description of the work that was done (one point for each project, maximum of 10 points)</i>	10
c.	<i>Number of projects related to the Canadian key sectors listed in Task 1.3 – the contractor should provide a list of the projects that involved Canadian industries in the key sectors listed in Task 1.3 (two points for paints and coatings industry projects and one point for each project related to the other sectors of Task 1.3, maximum of 4 points)</i>	4
d.	<i>Development of emission inventory methodology – the contractor should briefly describe any emission inventory methodology developed by the firm for VOCs from solvent use (1 point per method)</i>	6
e.	<i>Development of emission inventory methodology – the contractor should briefly describe any emission inventory methodology developed by the firm specifically for the key sectors listed in Task 1.3 (2 points per method)</i>	6
f.	<i>Development of emission inventory uncertainty methodology – the contractor should briefly describe any emission inventory uncertainty methodology developed by the firm for VOCs from solvent use (1 point per method)</i>	2
<u>PR 2 – Proposed Resources’ Collective Experience</u>		22
a.	<i>Contributions to publications related to the key sectors listed in Task 1.3 – the contractor should list the title of any publications (i.e. technical reports, journal papers, etc.) along with the abstract that the proposed resources for this project have worked on that relate to these key sectors (2 points for each key sector publication, to a maximum of 6 points)</i>	6
b.	<i>Contributions to VOC or other air emissions publications – the contractor should list the title of any publications (i.e. technical reports, journal papers, etc.) along with the abstract that the proposed resources for this project have worked on that relate to VOCs or other air emissions (2 points for each publication to a maximum of 6 points)</i>	6



c.	<i>Experience in developing a solvent use emissions inventory</i> – the contractor should identify emissions inventories that the proposed resources for this project have worked on (1 point per inventory to a maximum of 6 points)	6
d.	<i>Experience in quantifying uncertainty</i> – the contractor should identify any experience of the proposed resources in quantifying uncertainty of emission estimates such as emission factors, solvent use data, emission control data, etc. (4 points)	4
<u>PR 3 – Understanding of the Solvent Industry Emission Sources and Inventories</u>		20
The Contractor should demonstrate their expert understanding of: (Rating guide: 0-poor, 3-satisfactory, 5-excellent)		
a.	solvent use emission sources	5
b.	data collection	5
c.	top down (statistical activity data and emission factors) and bottom up (facility level) approaches to inventory compilation	5
d.	VOC or other air emissions inventories	5
METHODOLOGY PROPOSED		44
The proposal will be evaluated based upon the technical approach and methodology presented to achieve the identified project objectives within the timelines indicated.		
<u>PR 4 – Emission Inventory Methods</u>		16
The methodology will be evaluated based on its potential to fulfill the study objectives and obtain the required information as follows: (Rating guide: 0-poor, 1-satisfactory, 2-excellent)		
a.	suitability of methods to gather relevant information from solvent producers, distributors and users and government agencies	2
b.	suitability of methods for gathering facility specific information and/or data and sector specific for use in determining emissions for the key sectors of Task 1.3	2
c.	suitability of Canadian sources of information including facility specific information for use in evaluating emission and uncertainty estimates	2
d.	quality of literature proposed for review and/or sources of reference material for such things as organic solvent emissions, controls and recycling and disposal quantities	2
e.	suitability of methods to distribute national solvent use quantities amongst the various solvent use categories, sectors and sub-sectors	2
f.	suitability of methods to distribute national solvent use emission estimates amongst the Canadian provinces and territories	2
g.	level of effort consistent with complexity of the work	2
h.	provisions for unforeseen circumstances	2
<u>PR 5 – Historical and Projected Emissions and Database Application Methods</u>		8
(Rating guide: 0-poor, 2-satisfactory, 4-excellent)		



a.	suitability of methods for the development of a database application for current, historical and projected VOC emissions	4
b.	suitability of methods for development of database application for reconciliation of estimates	4
PR 6 – Quality Management The proposal will be evaluated upon the quality assurance and control measures to be implemented. (Rating guide: 0-poor, 1-satisfactory, 2-excellent)		4
a	<u>Quality control</u> The program will be evaluated based on its potential in reducing errors as well as finding and correcting any errors throughout the data analysis.	2
b.	<u>Quality Assurance</u> The program will be evaluated based on its potential in ensuring that accurate and up-to-date information will be obtained. The extent of the program must be consistent with the importance and complexity of issues.	2
PR 7 – Work Breakdown Structure The proposal will be evaluated upon the work breakdown structure presented. (Rating guide: 0-poor/not addressed, 1-acceptable, 2-exceptional)		16
a.	work plan identified	2
b.	proposed resources allocation, role and level of effort	2
c.	schedule identified	2
d.	major milestones addressed	2
e.	identification of key steps in the project	2
f.	identification of key activities	2
g.	prioritization of pre-assessment activities	2
h.	deliverables identified	2

Scoring

Submitted proposals will be evaluated based on the mandatory criteria, point related (PR) criteria and the best value to the Crown. The bidder must obtain a minimum score of 65% in each point related (PR) criteria to qualify and candidates must obtain an overall minimum score of 75% to be declared responsive. In the case of a tie, a cost per point formula will be applied where the total bid price is divided by the total score received and the lowest cost per point will be awarded the contract.



Annex E
Security Requirements Check List

Refer to attachment on the following pages.