

# **REQUEST FOR PROPOSALS**

**Furthering the understanding of the migration of chemicals from  
consumer products to humans and the environment–Phase 2**

**for the project:  
Greening of Chemicals Management in North America**



**Commission for Environmental Cooperation**

**2017**

## I. Overview

The Commission for Environmental Cooperation (CEC) is requesting proposals from prospective consultants related to determining the migration of selected chemicals from manufactured products.

Specifically, the consultant would be expected to characterize the selected consumer products in relation to the chemicals of interest and test the migration of these chemicals from selected products to the applicable pathways: dermal exposure, source to dust, air emissions, release to water (through washing), and landfill leachate.

The CEC is a trilateral organization created by Canada, the United States and Mexico under the North American Agreement on Environmental Cooperation (NAAEC). The CEC was established to address regional environmental concerns, help prevent potential trade and environmental conflicts, and promote the effective enforcement of environmental law. The Agreement complements the environmental provisions of the North American Free Trade Agreement (NAFTA).

The CEC's Council, its governing body, approved the project entitled "*Greening of Chemicals Management in North America*" as part of the Operational Plan for 2015–2016, with the purpose of furthering the understanding of the migration of chemicals from manufactured items and subsequent human exposure and/or releases to the environment. For a complete description of the project, including tasks and related budget, please visit the CEC website at: <http://www.cec.org/our-work/projects/greening-chemicals-management-north-america>.

## II. Terms of Reference

### A. Overview and Scope

This project is focused on the migration of selected chemicals from manufactured items (see annex B) with the goal of developing knowledge useful to chemical risk assessment and/or risk management in Canada, Mexico and the United States.

The project is divided into two phases. The first phase (completed) consisted of reviewing existing methods for determining the migration of selected chemicals from selected manufactured items.<sup>1</sup> The second phase of the project—the subject of this request for proposals (RFP)—consists of performing laboratory testing of the migration of selected chemical substances from selected manufactured items listed in Annex B. This annex presents three sets of substances, products and pathways of interest in order of preference. **Based on the proposals and costs estimates received, the scope of the work to be undertaken will include one or more of the sets of substances, products and pathways, in part or in whole.**

### B. Description of Services

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<sup>1</sup> Internal document to be provided upon request.

The consultant shall coordinate with the CEC's designated contacts to accomplish the following:

**1. Presentation of a work plan for the contracted activities and a quality assurance plan (QAP) for the testing.**

- The consultant will present and discuss the proposed work plan and the quality assurance plan for the testing during an initial teleconference with the CEC Secretariat staff and the project's Steering Committee. These two documents should be sent to the Secretariat in advance of the teleconference.
- The work plan should identify sampling and measurement methods to be used (consider at least 10 samples per chemical, per product and per pathway), storage and transport of samples (if analysis not conducted on-site), and the source of any analytical reference standards. The QAP should include descriptions of: experimental design for source characterization and migration (annex B) <sup>2</sup>; acquisition and characterization of manufactured items for testing; handling and custody of manufactured items for testing and storage, including adherence to good laboratory practices; sample preparation; analytical procedures for screening analysis and in-depth analysis; analytical instrument calibration and associated detection limits; quality assurance (QA)/quality control (QC); and data management and verification.
- The work plan should include the proposed list of manufactured items to be purchased, indicating at a minimum brands, model, unit cost, country and retailer to be purchased from; total number of items to be purchased from each country.
- The work plan and QAP will be reviewed and approved by the Secretariat and project's Steering Committee.

**2. Acquisition and characterization of manufactured items for testing:**

The consultant will purchase new items (based on the list in annex B) at popular retail stores or outlets in Canada, Mexico, and the US. "New" items are items that have been manufactured in the last year and not used or previously sold (e.g., not floor models or customer returns). The consultant will take into account the following considerations for the purchase of manufactured items:

- use an equal distribution per country,
- acquire as many items as possible from multiple brands and regions within countries,
- indicate the number and general description of items to be purchased from each of the three countries within the provided budget, and describe how the consultant will maximize the sample sizes and testing results (consider at least 10 samples per chemical, per product and per pathway)—this should include a contingency plan in the event of a significant number of negative screening results; and
- prioritize items that are in the low-to-moderate end of the price spectrum and items that are popular with consumers,
- avoid purchasing from manufacturers and retailers that claim that their products do not contain the chemicals of interest, and
- describe the approach to be taken for acquiring, shipping, and storing items from the three countries; this approach should be further described in the QAP developed in Task 1.

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<sup>2</sup> It is expected that the prospective consultant will provide specific testing methods per pathway per product and per chemical.

The list of products to be purchased will be approved by the Secretariat and project's Steering Committee.

**3. Conduct testing to identify and measure the chemicals of interest in the products and their migration**

The consultant will proceed to the source characterization, screening and quantitative analysis of the chemicals of interest present in the manufactured products (Annex B), after collecting and preparing the samples (as per the approved QAP). Based on the results, in consultation with the CEC Secretariat and the project's Steering Committee, the consultant will test the migration of those chemicals present per product, including estimates of absolute quantity of substance in the applicable material, and percentage weight per weight (% w/w) of the substance in the whole product. The specific methods to be used for migration testing will be indicated in the approved QAP.

**4. Presentation of project report and results**

The consultant will provide a final report describing the work completed, accompanied by supporting data as described in the QAP, as well as a summary report derived from the latter.

In collaboration with the CEC Program Manager and the project's Steering Committee, the Consultant(s) shall develop the outlines for the reports, including ideas for presentation style, use of graphics, and level of detail, and identify additional sources of information to use.

The intended audiences for this document are government agencies (environmental, health, consumer safety products agencies), academia, international organizations such as UNEP, and the public in general.

The consultant is to provide a Microsoft PowerPoint presentation summarizing the project, the methodology, the findings and results; as well as an oral presentation to the Secretariat and project's Steering Committee using this information. The presentation of project results will be either via teleconference/ videoconference/webinar.

Project activities will take place according to the schedule presented in Table 1 below. The timetable is approximate, and may change. **The CEC invites prospective consultants to modify the schedule suggested below, based on their evaluation of the proposed project activities.**

Table 1: Deliverables

Task	Activity	Deliverable	Deadline
1	Project initiation meeting via teleconference	Meeting summary record draft project work plan and draft Quality Assurance Plan (QAP),	Early April 2017
1 and 2	Delivery of final work plan (including list of products to be purchased) and QAP for testing	Final work plan and final QAP, addressing comments from CEC	Mid-April 2017

		Secretariat and project's Steering Committee	
4	Delivery of draft report with the results of the source characterization and migration testing for review by the Secretariat and Steering Committee	Draft report with the results of the source characterization and migration testing	End-May 2017
4	Delivery of presentation of project results and summary report	Presentation of project results via teleconference/ videoconference/webinar and report to the CEC Secretariat and project Steering Committee, including PowerPoint file and supporting document. Summary report	Second week of June 2017
4	Delivery of final project testing report	Final report, incorporating comments from CEC Secretariat and project Steering Committee	Third week of June 2017
	Periodic reporting	Monthly progress reports and, if required, conference calls with project Steering Committee	Ongoing

### C. Periodic Reporting Requirements

Throughout the project, the consultant will work in close collaboration with the CEC, the project's Steering Committee, and experts to gather information to support delivery of the work. The consultant may consult directly with government officials and other experts, as needed. However, the consultant shall report only to, and receive direction only from, the CEC Program Manager (or designate).

The CEC Secretariat will forward draft deliverables to the project's Steering Committee and other experts, for their review and comment. The CEC Secretariat will arrange teleconferences with the consultant, the Program Manager, and other experts on an as-needed basis. The goal of these meetings will be to present the products and assess progress on the project.

The consultant will prepare short monthly status reports that summarize the following:

- progress in previous month;
- current status;
- anticipated progress in upcoming month;
- potential problems, with description of and reasons for any delays; and
- actions that should be taken by the CEC Secretariat to facilitate the project.

These reports are to be sent to the CEC Program Manager by the first week of the following month, by e-mail.

The consultant will work in his or her own offices.

#### **D. Quality of Deliverables**

The consultant is responsible for providing deliverables of **publishable quality** (i.e., copy-edited prior to submission) in English and, when applicable, for the technical editing of the materials. The consultant will submit to the CEC Secretariat all written material (including complete drafts and final reports) in Microsoft Word, following the format of the CEC's [Report Template](#) and adhering to the precepts of the [Guidelines for CEC Documents and Information Products](#), as supplemented by the CEC's English style guide (available at: <http://www.cec.org/about-us/opportunities/useful-documents>). Supporting documents for tables, figures and maps will be submitted with the report in their original file format (e.g., Excel or ArcGIS). Note that all amounts shall be presented in metric units. The CEC Secretariat will be responsible, when applicable, for translation, printing, publication and distribution of products from this activity.

Upon delivery by the consultant of a final version of the report or other written materials under the project, the CEC reserves the right to a 15-business day period to review the document(s), notify the consultant of any potential issues or errors, and return the document(s) to the consultant for appropriate corrections, at no extra cost. In all cases, contract payments will be withheld if products submitted to the CEC fail to fulfill the quality and formatting requirements specified above. In the event that the consultant neglects to make the required corrections or if, following corrections, a deliverable remains unsatisfactory, the document shall be edited or revised by a third party designated by the Secretariat, the cost of which shall be deducted from the consultant's fees at a rate of C\$60 per hour.

#### **E. Plagiarism**

Plagiarism is the act of conveying someone else's original expression or creative ideas as one's own and can be a violation of copyright law. Neither intentional nor unintentional plagiarism is acceptable to the CEC. The consultant must follow good scholarly methodology in preparing reports and deliverables under the contract, including systematic referencing in footnotes or in-sentence references, for any secondary sources, quotations, data, etc., that do not originate with the author. Sources for tables and figures reproduced from other literature must be given in a "Source" attribution immediately below the table or figure. Failure to properly reference the source of such borrowed material constitutes plagiarism and will be considered a breach of contract. For further information, see [Guidelines for CEC Documents and Information Products](#). In addition, for every written deliverable submitted, the Consultant must use iThenticate software, or an equivalent software approved by the Commission, to validate the written product in question and must forward the plagiarism review results to the CEC at the time of document submission. Contract payments will be retained if products do not fulfill these requirements.

### **III. Requirements and Proposal Evaluation**

#### **A. Mandatory Requirements**

*To be eligible for further consideration, all consultants must fulfill the following basic requirements.*

### **1. In-country Ability**

The consultant, as well as all their personnel and subconsultants, must reside and be authorized to work legally in Canada, Mexico or the United States of America. If travel is required, the consultant must possess valid documentation to travel within these countries.

### **2. Key Personnel**

For the purposes of this RFP, the term "consultant" may refer to either a group or company or a single individual.

If a proposal is submitted by a consortium of individuals or institutions, a "lead" consultant should be designated to take responsibility for ensuring overall coordination, the coherence of activity outputs, and the integration of information and ideas.

### **3. Qualifications Required**

The consultant and key support personnel must be qualified, competent and experienced in the subject area. The consultant must demonstrate competency, understanding, knowledge and documented experience in research on analytical methods, especially as that experience relates to the detection, analysis of chemicals in manufactured items, and migration testing of chemicals from manufactured products. The consultant must have access to necessary testing facilities and equipment.

The consultant must be fluent in both written and spoken English; proficiency in Spanish and/or French is considered an asset.

The consultant shall demonstrate competency and past work with country governments and/or international agencies and industry.

### **4. Proposal Submission**

It is the intention of the CEC Secretariat to include the **Terms of Reference (Section II)** of this document) in the contract negotiated with the successful applicant. Therefore, prospective consultants should refer to these for more detailed information on the project and the services to be provided. Prospective consultants are requested not to reiterate the Terms of Reference in their submissions, but are invited to suggest modifications to enhance the proposal.

Proposals must include the following:

- A brief statement of interest and intent. This statement should be based upon and serve to demonstrate the consultant's experience and subject knowledge. The statement should address desired results; guidelines (parameters within which results are to be accomplished); resources (human, financial, technical, or organizational support available to help accomplish the results); and other aspects deemed applicable by the consultant. The purpose of this statement is to demonstrate not only the consultant's general and specific familiarity with the subject area, but also to highlight writing skills;
- A general work plan for carrying out this project;
- Proposed methodology;
- Suggested modifications to the Terms of Reference, and the reasons for such modifications;
- Resumes of the key personnel involved in the project;
- Detailed cost breakdown, including number of person/days of key and other personnel, direct and indirect costs, travel costs and applicable taxes;

For the purposes of this RFP, the prospective consultants are requested to submit cost estimates for each of the following:

1. Substances, products and pathways included in B1
2. Substances, products and pathways included in B1 and B2
3. Substances, products and pathways included in B3
4. All substances, products and pathways listed in annex B

The cost associated with estimating the absolute quantity of a substance in the applicable material, and percentage weight per weight (% w/w) of the substance in the whole product should be provided;

- Description of relevant experience and any other relevant information;
- Two samples of previous work;
- Two letters of recommendation from previous assignments; and
- Three References must be presented upon request.

## **B. Other Information to be Provided**

Potential consultants are encouraged to submit any additional information that they believe will assist the CEC Secretariat in the evaluation of their proposal. However, the proposal should not exceed six (6) pages, exclusive of applicant resumes, samples of previous work, or corporate brochures.

## **C. Type of Contract to be Used for These Services**

The CEC Secretariat intends to use its standard milestone-based contract for these services. A sample is available upon request. If the contract is negotiated with a consortium, the CEC will offer the consultants the option to have separate contracts between each consultant and the CEC.

All work within the contract must be completed by 30 June 2017.

## **D. Selection Procedure**

The consultant deemed best qualified will be selected on the basis of a competitive process, in accordance with sections 2.5-2.7 of the [\*CEC Consultant Services Procurement Manual\*](#).

Proposals that the CEC Secretariat determines to be complete will be evaluated according to the procedure described below. Prospective consultants who submit proposals determined by the CEC Secretariat to be incomplete will be so notified in writing.

Each complete proposal that is submitted will be evaluated by the CEC Secretariat according to the following criteria, with a point rating assigned for each:

<b>Evaluation Criteria</b>	<b>Maximum Point Rating</b>
Understanding of project requirements, adequacy of work plan	20
Suitability of the proposed approach	20
Consultant's experience and qualifications and competency of key personnel	40
Consultant's ability to analytically approach the subject, and writing ability	10
Adequacy of budget	10
<i>Total</i>	<i>100</i>



A minimum score of 80 will be required for the prospective consultant's proposal to be eligible for further consideration. Cost efficiency will be taken into account in the evaluation.

Proposals in response to this request will be evaluated by the CEC Program Manager and designated technical reviewers, who will form an Evaluation Committee. Each member of the Evaluation Committee will receive a copy of the proposals and will be asked to rate each proposal using the evaluation criteria and its maximum point ratings given above.

The CEC Program Manager will arrange for a conference call/meeting among the members of the Evaluation Committee to discuss the ratings, arrive at final scores, and, subsequently, a ranking of all proposals. The strengths and weaknesses of each proposal, in terms of the evaluation criteria, will be noted and summarized. Once the selection has been made, each prospective consultant will be provided with their score—if requested—along with their comparative ranking. However, neither the evaluations nor the scores of other bidders will be provided.

### **E. Estimated Level of Resources Required**

The budget for this activity is expected to range between C\$285,000 to C\$300,000 (Canadian dollars), including professional fees and expenses. Reimbursable expenses are detailed in the CEC standard contract, available upon request; in addition, the cost of using approved plagiarism detection software should also be considered. The cost of using iThenticate software, or an equivalent software approved by the Commission, to detect plagiarism (US\$50) should also be considered.

For universities and nongovernmental organizations, note that the CEC accepts that overhead be charged for administration and other indirect costs up to 15% of the total value of the contract.

If the proposal were presented by a consultant established in Mexico, the applicable value-added tax will be 0%, in accordance with Article 29, section IV, paragraph a) of Mexico's VAT Act, as these are technical services that were engaged from abroad.

If a currency other than Canadian dollars is used, the consultant should indicate the total cost of the professional services in Canadian dollars as well as the currency of choice, for comparison purposes.

### **F. Basis of Payment Required**

The consultant will be paid based on the specific milestones to be detailed in the consultant's contract.

Payment shall be made only for *bona fide* consultant fees and legitimate expenses incurred in accordance with the contract for professional services, and only upon receipt and documented acceptance by the Secretariat of statement(s) of account/invoice(s) from the consultant. Settlement of invoices that are acceptable for payment will normally be made 30 days from the date of receipt by the Commission.

### **G. Financial and Other Confidential Information**

For this proposal, the CEC Secretariat will not require the submission of any confidential information nor will the CEC Secretariat require information regarding insurance, bonding financial status, or company ownership.

## H. Conflict of Interest

“Conflict of interest” means, but is not limited to, a situation where a consultant’s personal interest is sufficiently connected with professional duties under the contract, such that it results in a reasonable apprehension that said personal interest may influence the exercise of professional responsibilities under the contract. For example, a direct conflict of interest exists when the consultant is also a CEC government official, or is related to or closely affiliated with a CEC government official, CEC staff member or third party involved with the performance of the services.

The consultant will inform the CEC Secretariat of any circumstance that existed prior to the execution of this contract, or that could manifest during the performance of this contract, which could constitute a conflict of interest. The consultant will complete and sign, on behalf of all his or her personnel, the attached *Declaration of Acceptance and Impartiality and Independence* (see Annex A).

The Consultant will also take note of the [CEC Consultant Services Procurement Manual](#).

## I. Deadlines for Proposal Submission and Decision

The proposal, including all relevant attachments, must be received by the CEC Secretariat offices by **17:00 EDT on 24 March 2017**. Proposals submitted after this deadline will not be considered.

**Proposals must be submitted via e-mail to [ocabrera@cec.org](mailto:ocabrera@cec.org), with a copy to [ehercules@cec.org](mailto:ehercules@cec.org).** Proposal format may be in Microsoft Word or Adobe PDF format. Once the proposal has been submitted electronically, the CEC will confirm receipt within three business days. If receipt is not confirmed by e-mail within this time, **applicants must contact the CEC**. The contact person is:

Orlando Cabrera-Rivera  
Program Manager, Environmental Quality and Climate Change  
Commission for Environmental Cooperation  
393, rue St-Jacques Ouest, bureau 200  
Montreal, QC, Canada H2Y 1N9  
Tel: 514-350-4323; Fax: 514-350-4314

The CEC Secretariat intends to select the consultant and notify the applicants within a reasonable period of time following the proposal submission deadline.

**ANNEX A** (see also Schedule D in CEC standard contract)

**CONSULTANT'S  
DECLARATION OF ACCEPTANCE AND IMPARTIALITY AND  
INDEPENDENCE FOR CONTRACT**

I, the undersigned,

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

**ACCEPTANCE**

☐

hereby declare that I accept to serve as consultant in the subject contract.

**IMPARTIALITY AND INDEPENDENCE**

*(If you accept to serve as a consultant, please check one of the two following boxes. The choice of which box to check will be determined after you have taken into account, inter alia, whether there exists any past or present relationship, direct or indirect, with any of the Parties to the North American Agreement on Environmental Cooperation ("NAAEC") or their Commission for Environmental Cooperation ("CEC") representatives, Secretariat staff, and/or third parties involved in the performance of this contract, whether financial, professional, familial, or of another kind and whether the nature of any such relationship is such that disclosure is called for pursuant to the criteria set out below. Any doubt should be resolved in favor of disclosure.)*

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**I am impartial and independent** with respect to the NAAEC Parties and their CEC representatives, CEC Secretariat staff, and third parties involved in the performance of this contract, and intend to remain so; to the best of my knowledge, there are no facts or circumstances, past or present that need be disclosed because they are likely to give rise to justifiable doubts as to my impartiality or independence, and that may constitute a conflict of interest.

**OR**

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**I am impartial and independent** with respect to the NAAEC Parties and their CEC representatives, Secretariat staff, and/or third parties involved in the performance of this contract, and intend to remain so; **however**, I wish to call your attention to the following facts or circumstances which I hereafter disclose because they might be of such a nature as to give rise to justifiable doubts as to my impartiality or independence, and that may constitute a conflict of interest. Where facts or circumstances exist that might give rise to the latter such doubts, I may set out measures I intend to take to mitigate or eliminate any doubts regarding my impartiality and independence, and/or a possible conflict of interest. (Use separate sheet and attach.)

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

## Annex B. Complete Matrix of Chemicals, Manufactured Items of Interest and Pathways

SUBSTANCE	PRODUCT	PATHWAY/TESTING*
<p>B1. Flame retardants (preliminary list to be adjusted before the testing begins)</p> <ul style="list-style-type: none"> <li>- 1,1'-(1,2-Ethanediy)bis[2,3,4,5,6-pentabromo-; or Decabromodiphenyl ethane (DBDPE), CAS RN 84852-53-9</li> <li>- Dechlorane Plus, CAS RN 2385-85-5</li> <li>- Tetrabromobisphenol A (TBBPA), CAS RN 79-94-7</li> <li>- 1,2-Benzenedicarboxylic acid, 3,4,5,6-tetrabromo-bis(2-ethylhexyl) ester (TBPH), CAS RN 26040-51-7</li> <li>- 2,3,4,5-Tetrabromobenzoic acid 2-ethylhexylester (TBB), CAS RN 183658-27-7</li> <li>- Ethyl 2-(2-aminothiazol-4-yl)-2-methoxyiminoacetate (ATE), CAS RN 60846-15-3</li> <li>- DOPO (CAS RN 35948-25-5),</li> <li>- Fyrol PMP (CAS RN 63747-58-0)</li> <li>- Aluminum diethylphosphinate (CAS RN 225789-38-8),</li> <li>- Aluminum hydroxide (CAS RN 21645-51-2)</li> <li>- Magnesium hydroxide (CAS RN 1309-42-8)</li> <li>- Melamine polyphosphate (CAS RN 15541-60-3)</li> <li>- Silicon dioxide (amorphous) (CAS RN 7631-86-9)</li> <li>- HBCD</li> </ul>	<ul style="list-style-type: none"> <li>- Computer equipment, and peripheral equipment such as power cable/cord, wire, cable jacketing, connectors, cord covers</li> <li>- Cell phones/smartphones</li> <li>- Laptops</li> <li>- Tablets</li> <li>- Televisions</li> <li>- Computer monitors</li> </ul>	<p>Source characterization Dermal exposure Source to dust Air emission Landfill leachate</p>
<p>B2. Plasticizers: DEHP</p>	<ul style="list-style-type: none"> <li>- Computer equipment, and peripheral equipment such as power cable/cord, wire, cable jacketing, connectors, cord covers</li> <li>- Cell phones/smartphones</li> <li>- Laptops</li> <li>- Tablets</li> </ul>	<p>Source characterization Dermal exposure Source to dust Air emission Landfill leachate</p>

	<ul style="list-style-type: none"> <li>- Televisions</li> <li>- Computer monitors</li> </ul>	
<p>B3. Durable water repellent chemicals:</p> <ul style="list-style-type: none"> <li>- Perfluorooctanoic acid (PFOA)</li> <li>- Perfluorooctanesulfonate (PFOS)</li> </ul>	<ul style="list-style-type: none"> <li>- Protective clothing: children's raincoats, adult (men's and women's) raincoats, adult workwear (i.e., protective coveralls)</li> </ul>	<p>Source characterization</p> <p>Dermal exposure</p> <p>Source to dust</p> <p>Air emission</p> <p>Release to water (through washing)</p> <p>Landfill leachate</p>

\*Consultant to assess the pathway and migration testing method per product and per chemical.