



Request for Proposals

Capacity Building for the Analysis of Perfluorooctanesulfonic Acid (PFOS) in Mexico

for the project
Greening of Chemicals in North America

Commission for Environmental Cooperation

2017

The Commission for Environmental Cooperation (CEC) is requesting proposals from prospective consultants to provide capacity-building activities related to the analysis of substances containing perfluorooctanesulfonic acid (PFOS) in Mexico. These activities will take place at Mexico's National Institute of Ecology and Climate Change (INECC) chromatography laboratory. Specifically, the consultant would be expected to plan and deliver a training workshop with theoretical and practical sessions related to sample preparation and analysis of PFOS-containing substances, and provide recommendations to implement or improve PFOS quality assurance in Mexican government laboratories. 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>>.

The CEC is an intergovernmental 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).

Terms of Reference

This training on the analysis of substances containing perfluorooctanesulfonic acid (PFOS) in Mexico will enhance Mexico's capacity to identify and quantify PFOS in environmental media, and support further source characterization and chemicals management efforts in North America.

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

1. Planning the training workshop, which includes:
 - a. Delivering a draft training schedule and work plan, previous to a project kick-off teleconference to be held with the project's Steering Committee and the CEC Secretariat, after which a final schedule and work plan should be submitted for approval.
The training schedule and work plan should take into account the following considerations:

- i. Assessing the needs of the INECC chromatography laboratory in terms of personnel skills and infrastructure (see Annex B).
 - ii. Five days training;
 - iii. Attendance of six to ten people (technical staff from INECC and other interested government institutions);
 - iv. Purchase of standardized protocols or laboratory material for the training (see Annex C). *Note that the consultant is not required to purchase these;*
 - v. The environmental media of interest are surface freshwater and seawater, as well as ambient air (polyurethane foam and cartridge are expected to be used for air sampling); and
 - vi. Theoretical and practical sessions.
2. Conducting the training workshop. This activity will include the following:
 - a. Conduct theoretical sessions;
 - b. Conduct practical sessions consisting of at least:
 - i. Sample preparation, extraction and extract cleaning previous to the analysis, for water and air media;
 - ii. Mounting method for analysis of PFOS in gas chromatography- mass spectrometry (GC-MS/MS);
 - iii. Data analysis;
 - iv. Evaluation of the theoretical and practical knowledge (methodology) acquired by the trainees; and
 - v. Evaluation of the workshop by the trainees.
3. Delivering a summary report after the delivery of the training workshop.
 - a. The document should include the following:
 - i. Scope of the training carried out, based on the work plan;
 - ii. List of participants;
 - iii. List of training materials;
 - iv. Recommendations to improve laboratory quality assurance for the analysis of PFOS, based on the evaluation of the trainees;
 - v. Bibliography; and
 - vi. Annexes, including protocols and results of the evaluations (2.b.iv and v).
 - b. Delivery of training certificates.

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	Approximate Dates
1	Planning of training workshop	Draft training schedule and work plan; Participation at a kick-off teleconference and summary record; Final training schedule and work plan, addressing comments from CEC	Early March 2017

		Secretariat and project's Steering Committee	
2	Delivery of training workshop	Training workshop	End-March 2017
3	Delivery of summary training report	Draft training report	Early-April 2017
		Final training report incorporating comments received by CEC Secretariat and project's Steering Committee	

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 work in his or her own offices, with the exception of conducting the training, which will take place in Mexico City at INECC's chromatography laboratory.

Quality of Deliverables

The consultant is responsible for providing deliverables **of publishable quality** (i.e., copy-edited prior to submission) in English or Spanish 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](#) or the [CEC's Spanish Style Guide](#). 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.

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,¹ 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.

Requirements

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

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.

The consultant and key support personnel must be qualified, competent and experienced in the subject area. The consultant must demonstrate competency, understanding and documented experience in research on analytical methods, especially as related to the detection and analysis of PFOS in environmental matrixes, specifically in water and air samples.

The consultant must demonstrate past work in a scientific/technical field, competency, knowledge and experience in developing Quality Assurance Project Plans, testing protocols and application of Good Laboratory Practices.

The consultant must be fluent in both written and spoken Spanish or English.

The proposal should not exceed six (6) pages, exclusive of applicant resume or corporate brochures. It should include a detailed cost breakdown, including number of person/days of key and other personnel, direct and indirect costs, travel costs and applicable taxes.

Potential consultants must also submit any additional information that will assist the CEC Secretariat in the evaluation of their proposal, such as samples of previous work and letters of recommendation from previous assignments. This information is not subject to the six (6) page limit.

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](#).

The CEC Secretariat intends to use its standard milestone-based contract for these services. A sample is available upon request.

¹ The Secretariat has tested Unplag and Plagscan and found comparably good results.

The consultant will be paid based on 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.

The budget for this activity will not exceed C\$25,000 (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.

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.

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

Deadlines for Proposal Submission and Decision

The proposal, including all relevant attachments, must be received by the CEC Secretariat offices by **17:00 EST on 9 February 2017**. Proposals submitted after this deadline will not be considered.

Proposals must be submitted via e-mail to Orlando Cabrera-Rivera: ocabrera@cec.org and Erika Hercules: 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: 514-350-4300; 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

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.)

☐

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

☐

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. National Institute of Ecology and Climate Change (INECC) Chromatography Laboratory Equipment for Training

The chromatography laboratory of INECC has the following equipment available for conducting the training:

Item	Description	Brand	Model
1	Mass spectrometer with electron ionization triple quadrupole	Thermo Scientific	TSQ Quantum™ XCS
2	High performance liquid chromatograph (HPLC)	Thermo Scientific	Accela™
3	Ultratrace gas chromatograph (autosampler Backflush and TriPlus with SPME*, Headspace and liquid sampler, including all parts and accessories contained therein)	Thermo Scientific	TRACE™ Ultra k443000000000D0
4	System of extraction type Soxhlet automatic with: Two automatic Soxhlet extraction with 6 positions; One automatic Soxhlet extraction with 4 positions; Controller Multistat for Soxtherm	Gerhardt	Soxtherm® SE416 Soxtherm® SE414
5	System 3 modules PLE-extraction** and controller module	FMS	PLE 10-10-2014
6	Concentrator N ₂ system with six positions	FMS	SuperVap™ Small Volume 10-10-2014
7	GPS-3 system extraction modules and controller module and UV detector	FMS	GPC 10-10-2014
8	Liquid-liquid extractor	Yamato Scientific Co.	SA 400
9	Extract-clean columns	Pyrex	SN

* Solid Phase Microextraction

** Pressurized Liquid Extraction

ANNEX C Materials and standards required for the training (to be assessed by the prospective consultant):

Supplies
SEP-HPLC column RP Fluoro Octyl column, 15 cm x 2.1 mm, 0.5 µm
Pre Column Symmetry C18 column, 20 mm x 3.9 mm, 5 µm
Symmetry C18 column, 50 mm x 2.1 mm, 5 µm
Oasis SPE cartridges Wax 6 cc
25% purity ammonium p.a.
Acetic acid 100% pro analysis (p.a.) purity
Ammonium acetate p.a. purity
Ammonium formate (> 99%)
Standard FOSA (Wellington FOSA-M, 1.2 ml vial to 50 µg / mL)
Standard PFOS (Wellington br-PFOS, 1.2 ml vial to 50 µg / mL)
PFOS internal standard: 13C4 PFOS (PFOS Wellington, 1.2 ml vial to 50 µg / mL in methanol)
FOSA internal standard: 13C8 FOSA (Wellington M8 FOSA-M, 1.2 mL vial to 50 µg / mL)