

**REQUEST FOR PROPOSAL (RFP)****Reference Number: K4E21-13-0019****CLOSING DATE: December 19, 2013****PROJECT TITLE: Analysis of Water, Sediment and Tissue Samples for Total Mercury and Methyl Mercury for the Integrated Monitoring Plan for the Oil Sands****Duration of Contract:**Start Date: **upon award**Termination Date: **31 March 2014, with two option periods****Short Title: Mercury Analysis****Branch/Directorate:** Environment Canada / PNWQMS**CONTRACTING OFFICER TO CONTACT FOR ADDITIONAL INFORMATION:****Elizabeth Logan**

Procurement and Contacting

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RFP Issue Date: November 14, 2013



1.0 BACKGROUND

1.1 The Integrated Monitoring Plan for the Oil Sands, and the Joint Canada/Alberta Implementation Plan for Oil Sands Monitoring require that Environment Canada initiate or continue long-term water quality monitoring at a number of sites on the Athabasca River and tributaries, Peace River, Slave River and sites within the Peace-Athabasca Delta. Parameters to be monitored include both total mercury and methyl mercury in water, sediment and tissue samples.

1.2 There will be up to 400 water samples, 150 sediment samples and up to 150 tissue samples to be analyzed for both total mercury and methyl mercury for the duration of the contract. These numbers may increase or decrease, depending upon field conditions which may preclude collecting some samples, and upon QA/QC samples, which may be increased if necessary

2.0 STATEMENT OF WORK

- 2.1 The Contractor will analyze water samples for ultra-trace level total mercury and methyl mercury, and must be CALA – accredited for these analyses, as described below. Also, the contractor must have extensive experience, both recent and long-term, in these analyses.
- 2.2 The Contractor must be accredited for total mercury and methyl mercury analyses of water, tissue and sediments by the Canadian Association for Laboratory Accreditation (CALA) to ISO/IEC 17025.
- 2.3 The Contractor will perform total mercury analyses in water within the 28 day holding time.
- 2.4 The Contractor will ensure total mercury measurements in water are to be based upon the SnCl₂ reduction method, gold amalgam trapping, with fluorescence detection (EPA1631e). For water samples, a method detection limit (MDL) of 0.04 ng mercury per litre with a 50 ml sample is required.
- 2.5 The Contractor will ensure methyl mercury measurements in water will employ an ethylation step followed by purge and trap/GC separation and fluorescence detection (EPA1630). For water samples, a method detection limit of 0.01 ng mercury per litre with 40 ml sample or 0.03 ng mercury per litre with 20 ml sample is required.
- 2.6 The Contractor will ensure total Hg in tissue and sediments is to be measured according to EPA Method 7473 using a DMA-80 analyser, to a detection limit of 0.4 ng/g, based on a 200 mg wet sample size.



- 2.7 The Contractor will measure methyl mercury in wet samples of sediment according to EPA 1630, to a method detection limit of 0.1 ng/g based on 200 mg wet sample size. Methyl mercury in tissue is to be measured to a method detection limit of 1 ng/g based on 100 mg wet sample size.
- 2.8 The Contractor will transfer analytical results to the Scientific Authority within 4 weeks of receipt of samples.
- 2.9 The Contractor will participate in, at its own expense, relevant Quality Assurance programs and proficiency tests to maintain accreditation. The Contractor must reveal to the Scientific Authority all the results, quality records, reports and correspondences in connection with the studies upon request and at no cost to the Scientific Authority. If any accreditation is revoked the Contractor must advise the Scientific Authority immediately.
- 2.10 The Contractor will advise the Scientific Authority as to the appropriate sampling containers, field sampling protocols and any field preservation requirements.
- 2.11 The Contractor will promptly notify the Scientific Authority if any samples are damaged (container broken), spoiled (left unattended at ambient temperature), mixed-up, discarded, or lost. If the Contractor is found responsible for causing damage, spoilage, misidentification or loss of samples, or allows samples to exceed standard holding times for the specific test, the Contractor will agree to compensate the Scientific Authority for any direct re-sampling costs which will be determined by the Scientific Authority.
- 2.12 The Contractor will store sample extracts and unanalyzed remainder of samples for a minimum of 90 days after delivery of the final data report to the Scientific Authority. Within those 90 days, the Scientific Authority has the right to request re-analysis and/or re-work if analysis was not performed in accordance with the Agreement. After 90 days the Contractor may dispose of the remaining samples or extracts, unless otherwise requested by the Scientific Authority. Disposal of samples must be conducted within the boundary of all applicable federal, provincial and city laws at no extra charge to Environment Canada.
- 2.13 The Contractor will receive samples in coolers delivered by courier (ground or air) from Mondays through Fridays, except all statutory holidays, from Environment Canada.
- 2.14 The Contractor will establish a continuity/chain of custody form for sample tracking which must be appended to the final data report.
- 2.15 The Contractor will ensure that the site names and numbers on the sample containers correspond to those on the submission sheet; inspect sample containers to ensure all samples have been received in good condition, and measure and record internal



cooler temperature on arrival. These recordings must become part of the data report file. All discrepancies or problems with sample condition must be reported to the Scientific Authority immediately.

- 2.16 The Contractor will provide distilled/de-ionized/ultra-pure water, field blanks and travel spikes, if and when requested by Environment Canada scientists or field staff.
- 2.17 The Contractor will ensure that all water samples are properly preserved after their receipt and prior to extraction or analysis. Any chemical preservatives added to samples upon receipt at the Contractor's premises must be documented and must be done according to established or published methods.
- 2.18 The Contractor will report test results within the turnaround times indicated below in electronic file format. Analytical reports must include internal quality assurance information (eg. SRMs, spike recovery for batches, duplicates and blanks). There will be no extra charge to the Scientific Authority for formatting and transporting results into the Environment Canada database.
- 2.19 The Contractor will ensure all data reports/certificates of analysis include pertinent Quality Assurance / Quality Control (QA/QC) data and must be approved and certified by authorized personnel of the Contractor prior to release to the Scientific Authority.
- 2.20 The Contractor will maintain quality records demonstrating conformance to specified requirements and the effective operation of the quality system of the Contractor. All records will be legible and stored such that they are readily retrievable in facilities that provide a suitable environment to prevent damage or deterioration and to prevent loss. All raw data and pertinent internal quality control data will be made available for evaluation by the Scientific Authority or their representative for an agreed period, and all such records must be archived for a minimum of 3 years. (Quality records may be in the form of any type of media, such as hard copy or electronic media, and may include raw data, control charts and chromatograms).
- 2.21 The Contractor will complete the analysis within the shelf life of the sample.
- 2.22 The Contractor will report results within 30 calendar days from receipt of sample.
- 2.23 The Contractor's laboratory will be in a location where delivery of samples is achievable in 72 hours or less from time of shipment. This time frame must include potential customs clearance.



3.0 DELIVERABLES

3.1 The contractor will provide the analyte data in Excel format, including QA/QC data (e.g., spikes, blanks, recoveries, etc) to the satisfaction of the departmental representative.

3.2 All deliverables will to be submitted to the Environment Canada Departmental Representative within the timings identified in section 2.0 Statement of Work.

4.0 INTELLECTUAL PROPERTY

4.1 There are no intellectual property issues arising from this contract.

5.0 NOTIFICATION OF PROCUREMENT

5.1 Notification of the procurement must be issued to the appropriate claimant group(s). For the procurement of goods, services or construction destined for locations covered by land claim agreements, fax a copy of a notice describing the procurement, e.g. the Notice of Proposed Procurement (NPP) or Advance Contract Award Notice (ACAN), to all land claimant group(s) listed under each of the applicable agreements on the date of posting to the Government Electronic Tendering Service (GETS):

Tlicho Land Claims Agreement
Tlicho Government
P.O. Box 412
Rae-Edzo, NT X03 0Y0
Telephone: 867-392-6381
Facsimile: 867-392-6389

6.0 BASIS OF PAYMENT

6.1 Payment will be processed through to EC Finance on receipt of all deliverables and invoicing to the satisfaction of the departmental representative. Invoices will be submitted quarterly

7.0 METHOD OF PAYMENT

7.1 Payment shall be made upon completion of each deliverable to the satisfaction of the Departmental Representative.

8.0 ENQUIRIES

8.1 All enquiries or issues concerning this Request for Proposal must be submitted in **writing only** to the Contracting Authority named on the front cover page of this RFP document **not later than three (3) working days prior to the bid closing date.**



8.2 To ensure consistency and quality of information to Bidders, the Contracting Authority will provide simultaneously to all bidders to which this solicitation has been sent the following:

- Any information with respect to significant enquiries received, and
- The replies to such enquiries without revealing their sources

8.3 All enquiries and other communications with government officials throughout the solicitation and evaluation period are to be directed only to the Contracting Authority named on the front cover of this RFP document. **Non-compliance with this condition during the bid solicitation and evaluation period may be sufficient reason for bid disqualification.**

8.4 Bidders must ensure that they follow the instructions in the Appendix “A” Bid Evaluation Criteria.

8.5 Pricing provided must be broken down to per sample.

8.5 The successful bidder will be expected to enter into a Short Form Service Contract.



Appendix A

BID EVALUATION CRITERIA

Reference Number: K4E21-13-0019 MUST appear on all submissions.

Submit the technical proposal (non-cost criteria) **separate from** the financial proposal (2 separate envelopes/files). **Submissions that do NOT separate technical proposals from the financial proposal will be disqualified.**

Basis of Selection

The Method of Selection to issue the resulting Contract is:

Calculation Technical and Financial Scores

Calculation of Technical Score: the technical score is calculated by prorating the technical score obtained by the proposal against the total possible score of 90.

$$\text{TECHNICAL SCORE} = \frac{\text{Bidder's TECHNICAL SCORE}}{\text{Total Possible TECHNICAL SCORE}} \times 90 \text{ points}$$

Calculation of Financial Score: the financial score is calculated by giving full points (10) to the lowest priced responsive proposal (based on the proposal's **Total Estimated Cost**) and prorating all other responsive proposal financial scores accordingly.

The calculation used to determine points for all other Bidders (other than the lowest) will be Lowest **Total Estimated Cost** (\$) divided by Bidder's **Total Estimated Cost** (\$), multiplied by 10 points, as follows:

$$\text{FINANCIAL SCORE} = \frac{\text{Lowest TOTAL ESTIMATED COST (\$)}}{\text{Bidder's TOTAL ESTIMATED COST (\$)}} \times 10 \text{ points}$$

Calculation of Total Score:

[Bidder's **TECHNICAL SCORE** (out of 90 points)] + [Bidder's **FINANCIAL SCORE** (out of 10 points)] = Bidder's **TOTAL SCORE** (out of 100 points).



Mandatory and Rated Requirements

Mandatory Criteria

Proposals must clearly indicate that the Bidder meets **all** of the mandatory requirements described below. This will be evaluated as either “Yes” or “No”. Proposals receiving “No” for any mandatory requirement will **not** be considered further.

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.

Criteria	Page #	Yes	No
Bidders must be Accredited for these analysis by Canadian Association for Laboratory Accreditation (CALA)			
Bidders must have a minimum five years recent experience (within the last 6 years) and ten years overall experience in the analysis of water samples for ultra-trace level total mercury and methyl mercury			
Bidders must demonstrate ability to reach all of the following: 1) 0.04 ng/L detection limit for total mercury in water; and 2) 0.04 ng/g for total mercury in sediment and tissue at a rate of 93% of completed analyses.			
Bidders must demonstrate ability to reach all of the following: 1) 0.01 ng/L detection limit for methyl mercury in water; 2) 0.1 ng/g for methyl mercury in sediment; and 3) 1.0 ng/g detection limit for methyl mercury in tissue at a rate of 93% of completed analyses.			
Bidders must demonstrate ability to complete all analyses/testing and reporting within 30 days of sample receipt.			
Bidders must be located where shipment of samples can be achieved within 72 hours from time of shipment in 95% of shipments. The 72 hour shipment timeframe includes time required to clear customs. Chain of custody must be maintained.			



Rated Criteria

Proposals meeting the mandatory requirements will be evaluated in accordance with the following criteria. Bidders are advised to address these criteria in sufficient depth in their proposals. A minimum score of 70% must be obtained for the proposal to be considered responsive.

<u>Criteria</u>	<u>Points Achieved</u>	<u>Reference page # in Proposal</u>
<p><u>Experience and Certification</u> Years of experience performing mercury analysis (maximum 20 points).</p> <ul style="list-style-type: none"> • 0 – 10 years – 0 points • 10+ - 15 years – 5 points • 15+ - 20 years – 10 points • 20+ years – 20 points 		
<p><u>Understanding of Statement of Work</u> Demonstrated understanding of technical nature of required work and Expected deliverables; (15 points)</p> <p>Demonstrated knowledge of shipping and safe handling of preserved Samples; (15 points)</p>		
<p><u>Quality Control</u> Provision of THREE (3) professional references for previous total mercury and methyl mercury analysis, including contact information. (5 points for each reference provided)</p> <p>Confirmation of reliability, quality of work and ability to deliver results in a timely fashion based on reviews from references (maximum 10 points for each reference confirmation of reliability, maximum 30 points)</p>		
<p>Total point available – 95 points Minimum points required (70%) – 67 points</p>		