

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
**Bid Receiving Public Works and Government
Services Canada/Réception des soumissions
Travaux publics et Services gouvernementaux
Canada**
Pacific Region
401 - 1230 Government Street
Victoria, B.C.
V8W 3X4
Bid Fax: (250) 363-3344

REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION

**Proposal To: Public Works and Government
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Title - Sujet Flow Particle Image Analyzer	
Solicitation No. - N° de l'invitation 23145-140676/A	Date 2014-03-10
Client Reference No. - N° de référence du client 23145-140676	
GETS Reference No. - N° de référence de SEAG PW-\$VIC-239-6448	
File No. - N° de dossier VIC-3-36225 (239)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2014-04-22	Time Zone Fuseau horaire Pacific Daylight Saving Time PDT
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Large, Kathy	Buyer Id - Id de l'acheteur vic239
Telephone No. - N° de téléphone (250) 363-8456 ()	FAX No. - N° de FAX (250) 363-0395
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF NATURAL RESOURCES CANMET LAB 1 OIL PATCH DRIVE DEVON ALBERTA T9G 1A8 CANADA	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

Public Works and Government Services Canada - Pacific
Region
401 - 1230 Government Street
Victoria, B. C.
V8W 3X4

Delivery Required - Livraison exigée See Herein	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
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)	
Signature	Date

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PART 1 - GENERAL INFORMATION

1. Security Requirement

There is no security requirement associated with this bid solicitation.

2. Requirement

The requirement is detailed under Article 2 of the resulting contract clauses.

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 *[Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/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 (2014-03-01) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

2. Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than **15 calendar 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 questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

4. Applicable Laws

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

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 the bidders.

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)

If there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the hard copy will have priority over the wording of the soft 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) (<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.

Section I: Technical Bid

In their technical bid, bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

1.1 Exchange Rate Fluctuation

C3011T (2013-11-06), Exchange Rate Fluctuation

Section III: Certifications

Bidders must submit the certifications required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. 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

1.1.1 Mandatory Technical Criteria

See Annex A1 – Minimum Mandatory Requirements and Technical Evaluation

1.2 Financial Evaluation

SACC Manual Clause A0220T (2013-04-25), Evaluation of Price

2. Basis of Selection

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract

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 the Bidder 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 the Bidder's 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 Code of Conduct and Certifications - Bid of Standard Instructions 2003. The related documentation therein required will assist Canada in confirming that the certifications are true.

Bidders who are incorporated, including those bidding as a joint venture, must provide with their bid or promptly thereafter a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietorship, including those bidding as a joint venture, must provide with their bid or promptly thereafter the name of the owner. Bidders bidding as societies, firms, or partnerships do not need to provide lists of names.

List of applicable names and positions of all individuals who are currently directors or owners:

Name	Position

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 if the Bidder is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list at the time of contract award.

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement

There is no security requirement applicable to this Contract.

2. Requirement

The Contractor must provide the items detailed under the "Requirement" at Annex "A".

3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/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.

3.1 General Conditions

2010A (2014-03-01), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

4. Term of Contract

4.1 Delivery Date

See Annex B

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Kathy Large, Supply Officer
Public Works and Government Services Canada

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Buyer ID - Id de l'acheteur
vic239
CCC No./N° CCC - FMS No/ N° VME

401-1230 Government St, Victoria, B.C. V8W 3X4

Telephone: (250) 363-8456
Facsimile : (250) 363-0395
Email: kathy.large@pwgsc-tpsgc.gc.ca

Government of Canada

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 Project Authority

The Project Authority for the Contract is:

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

Telephone : _____
Facsimile: _____
E-mail address: _____

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project 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: _____
Organization: _____
Address: _____

Telephone : _____
Facsimile: _____
E-mail address: _____

7. Payment

7.1 Basis of Payment

See Annex B

7.2 Limitation of Price

SACC Manual clause C6000C (2011-05-16) Limitation of Price

7.3 Single Payment

SACC Manual clause H1000C (2008-05-12) Single Payment

7.4 SACC Manual Clauses

SACC Manual clause B7500C (2006-06-16) Excess Goods

8. Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:

The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

9. Certifications

9.1 Compliance

The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing cooperation in providing associated information are conditions of the Contract. Certifications are subject to verification by Canada during the entire period of the Contract. If the Contractor does not comply with any certification, fails to provide the associated information, or if 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 _____.

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) the general conditions 2010A (2014-03-01), General Conditions - Goods (Medium Complexity);
- (c) Annex A, Requirement
- (d) Annex, B, Basis of Payment;
- (e) the Contractor's bid dated _____

ANNEX "A"

Requirement

Background:

Oil sand consists of a complex hydrocarbon mixture, coarse sand grains, fine minerals, clay particles, formation water and electrolytes. Bitumen recovery (extraction of bitumen from oil sand) is usually carried out using aerated water and froth treatment. Froth treatment is the process of eliminating the aqueous and solid contaminants from the froth to produce a clean bitumen product. In Paraffinic Solvent Froth Treatment (PSFT), the froth is diluted with an aliphatic solvent to reduce the viscosity and density of the oil phase, thereby accelerating the settling of the dispersed phase impurities by gravity or centrifugation. Mixing aliphatic solvent at required solvent-to-bitumen ratio (*SIB*) results in the formation of aggregates composed of emulsified water droplets (*WD*), dispersed mineral solid particles (*DS*) and precipitated asphaltenes (*PA*). The *WD/DS/PA* aggregates in solvent-diluted bitumen exhibit zone settling and the settling rate is strongly influenced by aggregated structure, size and shape^{1, 2}. The size, shape, equivalent diameter, porosity, density and volume fraction of the aggregates plays a vital role in settling velocity of the aggregates, which is essential in the efficiency of PSFT^{1, 2}.

References

¹ J. Zawala, T. Dabros, H.A. Hamza, "Settling Properties of Aggregates in Paraffinic Froth Treatment", *Energy & Fuels*, 26(2012) 5775-5781.

² J. Zawala and T. Dabros, "Settling Properties of Aggregates in Paraffinic Bitumen Froth Treatment", *Surfactants in Solutions 2012 conference*, Edmonton, Canada June 24-28, 2012.

Requirement:

Natural Resources Canada has a requirement to purchase 1 Flow Particle Image Analyzer. See Minimum Mandatory Requirements for further detail.

Annex A1: Minimum Mandatory Requirements and Technical Evaluation

INSTRUCTIONS FOR COMPLETING THIS SECTION Your proposal must address each item and also be compliant, or your proposal will be deemed non-responsive and no further consideration of the proposal will be given. If there is insufficient space in the table, assign an SIR# (Supplementary Information Reference) and provide the appropriate details on a separate page in your proposal.

NOTE: When no published documentation currently available, (or applicable), Indicate the acronym CSP, (for Certified by Signature on our Proposal

Any interested supplier must demonstrate by way of a statement of capabilities that its product meets the following requirements:

Item	Description	Statement of Capabilities/Bidders Response	Complies	Does not Comply	Bidders SIR #
Scanning, image analysis and processing time	Must be less than ten (10) minutes.				
Particle Orientation	Particles must orient in a way that places the largest area of the particle towards the Charge-Couple Device (CCD) camera.				
Particle Identification	Must be able to identify the particles in the range of 1 µm to at least 250 µm				
Characterization of morphological parameters	Ability to fully characterize particles using a number of morphological parameters. The morphological include two equivalent diameters based on the area (the diameter of a circle with the same surface area) and perimeter (the diameter of a circle with the same perimeter), length,				

	width, perimeter, area, maximum and minimum distance from the centre of mass, ferret horizontal and ferret vertical diameters (the horizontal and vertical caliper dimensions of the particle based on the particle's orientation), convexity, circularity, solidity and aspect ratio. For each of these parameters a statistical distribution should be calculated and combined in a scattergram.				
Allocation of Values	Must be able to allocate a value, based on the surface area covered by each pixel, to each pixel depending on the relationship with its immediate neighbours.				
Image Magnification	Images must be easily magnified and sorted on any size or shape parameter allowing the operator to quickly and easily identify anomalies or the presence of unexpected foreign particles.				
Particle Volume	Unit must be able to statistically analyze significant number of particles (up to 250,000) in				

	a short period of time -less than ten (10) minutes.				
Compatibility	Must be able to work with water, common alcohols and organic solvents such as Toluene, Pentane and Heptane.				
Image Analysis	The software must be able to clean the raw data and remove erroneous data.				
Background Correction Capabilities	The software must be able to use background correction to eliminate any non-uniformity of the illumination conditions.				
Analysis	The software must have the ability to further manipulate (ability to overlay results from different measurements on a single plot for immediate comparison) the data and compare multiple records to identify slight differences and trends of key parameters.				

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vic239
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ANNEX B

Basis of Payment

PRICING: The price of the bid must be submitted and evaluated in Canadian dollars, the Goods and Services Tax or the Harmonized Sales Tax excluded, Delivery Duty Paid (DDP) to: **Devon Alberta, T9G 1A8**, Incoterms 2000, Canadian custom duties and excise taxes, included.

No further charges will be allowed.

DELIVERY: Goods must be consigned to the destination specified in the Contract and delivered:

Delivered Duty Paid (DDP) **Devon Alberta, T9G 1A8** Incoterms 2000.

DELIVERY LOCATION: 1 Oil Patch Drive, Devon, Alberta, T9G 1A8

DELIVERY DATE:

The Contractor must make the complete delivery within 3 weeks from the effective date of the Contract.

Item #	Description	Unit	QTY	Unit Price	Extended Price \$ CDN
1	Flow Particle Image Analyzer	Each	1		
Total Evaluated Price (Excluding GST/PST)					

The Total Evaluated price **includes** delivery.