

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Bid Receiving - PWGSC / Réception des
soumissions - TPSGC
11 Laurier St. / 11, rue Laurier
Place du Portage, Phase III
Core 0B2 / Noyau 0B2
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

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 PORTABLE WATER PURIFICATION SYSTEMS	
Solicitation No. - N° de l'invitation W8476-165401/A	Date 2015-10-05
Client Reference No. - N° de référence du client W8476-165401	
GETS Reference No. - N° de référence de SEAG PW-\$\$HL-658-68105	
File No. - N° de dossier hl658.W8476-165401	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2015-11-16	
Time Zone Fuseau horaire Eastern Standard Time EST	
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: Bisson, Phillippe	Buyer Id - Id de l'acheteur hl658
Telephone No. - N° de téléphone (819) 956-3935 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Specified Herein Précisé dans les présentes	

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

Fuel & Construction Products Division
11 Laurier St./11, rue Laurier
7A2, Place du Portage, Phase III
Gatineau, Québec K1A 0S5

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

Solicitation No. - N° de l'invitation

W8476-165401/A

Amd. No. - N° de la modif.

File No. - N° du dossier

hl658W8476-165401

Buyer ID - Id de l'acheteur

hl658

CCC No./N° CCC - FMS No/ N° VME

W8476-165401

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TABLE OF CONTENTS

PART 1 - GENERAL INFORMATION	2
1.1 REQUIREMENT - BID	2
1.2 DEBRIEFINGS	2
1.3 TRADE AGREEMENTS	2
PART 2 - BIDDER INSTRUCTIONS	3
2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS	3
2.2 SACC MANUAL CLAUSES	3
2.3 SUBMISSION OF BIDS.....	3
2.4 ENQUIRIES - BID SOLICITATION.....	3
2.5 APPLICABLE LAWS.....	3
2.6 IMPROVEMENT OF REQUIREMENT DURING SOLICITATION PERIOD	4
2.7 BEST DELIVERY DATE - BID	4
PART 3 - BID PREPARATION INSTRUCTIONS.....	5
3.1 BID PREPARATION INSTRUCTIONS	5
PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION	6
4.1 EVALUATION PROCEDURES.....	6
4.2 BASIS OF SELECTION.....	6
PART 5 - CERTIFICATIONS.....	7
5.1 CERTIFICATION REQUIRED WITH THE BID	7
5.2 CERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION	7
PART 6 - RESULTING CONTRACT CLAUSES	8
6.1 SECURITY REQUIREMENTS	8
6.2 REQUIREMENT - CONTRACT.....	8
6.3 STANDARD CLAUSES AND CONDITIONS.....	8
6.4 TERM OF CONTRACT	8
6.5 AUTHORITIES	9
6.6 PAYMENT	10
6.7 INVOICING INSTRUCTIONS	10
6.8 HOLDBACKS	11
6.9 CERTIFICATIONS	11
6.10 APPLICABLE LAWS.....	11
6.11 PRIORITY OF DOCUMENTS	11
6.12 DEFENCE CONTRACT	11
6.13 SACC MANUAL CLAUSES	11
6.14 RELEASE DOCUMENTS - DISTRIBUTION.....	12
6.15 IDENTIFICATION MARKINGS	13
6.16 PREPARATION FOR DELIVERY	13
6.17 SHIPPING INSTRUCTIONS	13

Annex "A" – Statement of Work

Appendix "1" of annex "A" – Equipment Environment Assessment (EEA)

Appendix "2" of annex "A" – First article test plan template (FATP)

Annex "B" – Contract deliverables pricing list

Annex "C" – Technical evaluation

Solicitation No. - N° de l'invitation
W8476-165401/A
Client Ref. No. - N° de réf. du client
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File No. - N° du dossier
hl658.W8476-165401

Buyer ID - Id de l'acheteur
hl658
CCC No./N° CCC - FMS No./N° VME

PART 1 - GENERAL INFORMATION

1.1 Requirement - Bid

The requirement is detailed under Annex "A" – Statement of Work.

1.2 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 from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

1.3 Trade Agreements

The requirement is subject to the provisions of the World Trade Organization Agreement of Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), and the Agreement on Internal Trade (AIT).

PART 2 - BIDDER INSTRUCTIONS

2.1 **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>) 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 (2015-07-03) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation. Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days
Insert: 90 days

2.2 **SACC Manual Clauses**

The following terms and conditions are incorporated herein

SACC Reference	Section	Date
B1000T	Condition of Material - Bid	2014-06-26

2.3 **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.

2.4 **Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than **ten (10)** 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 question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

2.5 **Applicable Laws**

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

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.

Solicitation No. - N° de l'invitation
W8476-165401/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

hl658

Client Ref. No. - N° de réf. du client
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File No. - N° du dossier
hl658.W8476-165401

CCC No./N° CCC - FMS No./N° VME

2.6 *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 are 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 10 calendar days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

2.7 *Best Delivery Date - Bid*

While delivery is requested by March 31, 2016, the best delivery that could be offered is

_____.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 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 annex "B" 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.

In their technical bid, Bidders must provide a full technical proposal showing their understanding of the requirement and how they propose to produce the Portable Water Purification Systems.

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.

3.1.1 SACC Manual Clauses

The following terms and conditions are incorporated herein

SACC Reference	Section	Date
C3011T	Exchange Rate Fluctuation	2013-11-06

Section III: Certifications

Bidders must submit the certifications required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 **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.

4.1.1 **Technical Evaluation**

All bids must be completed in full and provide all of the information requested in the bid solicitation to enable full and complete evaluation.

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.

4.1.1.1 **Mandatory Technical Criteria**

- a) The Bidder must provide documentation with their bid showing how they meet the technical requirements detailed in Annex "A" – Statement of Work and Annex "C" – Technical Bid Evaluation.
- b) The Bidder must provide the completed Annex "C" – Technical Bid Evaluation with their bid.

4.1.2 **Financial Evaluation**

4.1.2.1 **Mandatory Financial Criteria**

- a) The Bidder must bid a firm unit price(s) in Canadian funds, Applicable Taxes excluded, DDP Delivered Duty Paid to destination(s) Incoterms 2000, Customs Duties included for each item offered; and
- b) The Bidders' financial bid must be in accordance with the Basis of Payment

4.2 **Basis of Selection**

A bid must comply with all requirements of the bid solicitation to be declared responsive. The responsive bid with the lowest evaluated aggregate price will be recommended for award of a contract.

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and additional 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 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 will render the bid non-responsive or constitute a default under the Contract.

5.1 Certification Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Declaration of Convicted Offences

As applicable pursuant to subsection Declaration of Convicted Offences of section 01 of the Standard Instructions, the Bidder must provide its bid, a completed [Declaration Form](#), to be given further consideration in the procurement process

5.2 Certifications Precedent to Contract Award and Additional Information

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

5.2.1 Integrity Provisions – List of Names

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

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

5.2.2 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](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" 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

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

6.1 **Security Requirements**

There is no security requirement applicable to this Contract.

6.2 **Requirement - Contract**

The Contractor must provide the items detailed in accordance with the Requirements at Annex "A" – Statement of Work.

6.2.1 **Procedures for design change/deviations**

The Contractor must complete Part 1 of the Design Change/Deviation form DND 672 and forward one (1) copy to the Technical Authority and one (1) copy to the Contracting Authority.

The Contractor will be authorized to proceed upon receipt of the design change/deviation form signed by the Contracting Authority. A contract amendment will be issued to incorporate the design change/deviation in the Contract.

6.2.2 **Existing Technical Publications – Translation**

The Contractor grants to Canada a non-exclusive, perpetual, irrevocable and royalty-free license to translate and reproduce for government use all or any part of the technical publications supplied with the equipment delivered under the Contract. Copyright in the translation made by Canada or by independent contractors engaged by Canada will belong to Canada.

In addition to the copies which are to be delivered with the equipment, one (1) copy of each publication must be forwarded to:

Department of National Defence
MGen George Pearkes Building
Ottawa, Canada
K1A 0K2
Attention: **DCSEM 2-6**

6.3 **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>) issued by Public Works and Government Services Canada.

6.3.1 **General Conditions**

2010A (2015-07-03) General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

6.4 **Term of Contract**

6.4.1 **Complete Delivery**

Confirmed Line Items 001 to 004 (CLIN)

The Contractor must make the complete delivery within _____ calendar days from the effective date of the Contract.

Optional Line Items 001 to 006 (OLIN)

FOR OLIN 001: If the option is exercised, up to a quantity of ten (10) Portable Water Purification Systems must be delivered within _____ weeks/calendar days after an option is exercised.

FOR OLIN 002: If the option is exercised, up to a quantity of twenty (20) Onion Water Tanks must be delivered within _____ weeks/calendar days after an option is exercised.

FOR OLIN 003: If the option is exercised, up to a quantity of twenty (20) Pillow Water Tanks must be delivered within _____ weeks/calendar days after an option is exercised.

FOR OLIN 004: If the option is exercised, up to a quantity of twenty (20) Power Generators must be delivered within _____ weeks/calendar days after an option is exercised.

FOR OLIN 005: If the option is exercised, up to a quantity of one (1) Equipment Environmental Assessments must be delivered within _____ weeks/calendar days after an option is exercised.

FOR OLIN 006: If the option is exercised, up to a quantity of ten (10) Operation and Maintenance Manuals must be delivered within _____ weeks/calendar days after an option is exercised.

6.4.2 Adherence to Delivery Schedule

The contractor will promptly give notice to the Department of Public Works and Government Services of its inability to meet the contract delivery schedule and will request therein an extension of time stating its proposed revised delivery schedule and offering consideration for such revisions. Until such notice is received and the revised delivery schedule agreed to by the Department of Public Works and Government Services, the Minister may, pursuant to the General Conditions, on the business day following the due date of delivery of any outstanding materials, **terminate the whole or part of the contract for default.**

6.4.3 Optional Goods and/or Services

The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described herein (and in Annex B) under the same conditions and at the prices and/or rates stated in the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

After contract award, the Contracting Authority may exercise the options until March 31, 2017 by sending a written notice to the Contractor.

6.5 Authorities**6.5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Phillipe Bisson

Public Works and Government Services Canada
Acquisitions Branch, Commercial Acquisition & Supply Management Sector
Logistics, Electrical, Fuel & Transportation Directorate
Fuel & Construction Products Division (HL)
11 Laurier Street, 7A2, Place du Portage, Phase III
Gatineau, QC K1A 0S5
Telephone: 819-956-3935 Facsimile: 819-956-5227
E-mail address: phillipe.bisson@tpsgc-pwpsc.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.

6.5.2 Contractor's Representative

Name and telephone number of the person responsible for :

	General Enquiries	Delivery Follow-up
Name:	_____	_____
Telephone No.:	_____	_____
Facsimile No.:	_____	_____
E-mail address:	_____	_____

6.6 Payment

6.6.1 Basis of Payment - Firm Unit Price(s)

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm unit price(s) as specified in the Annex "B" for a cost of \$ _____ CAD. Customs duties are included and Applicable Taxes are extra.

6.6.2 Limitation of Price

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

6.6.3 Terms of Payment

SACC Manual clause H1001C (2008-05-12) Multiple Payments

6.6.4 SACC Manual Clauses

The following terms and conditions are incorporated herein

SACC Reference	Section	Date
C2611C	Customs Duties - Contractor Importer	2007-11-30
C2800C	Priority Rating	2013-01-28
C2801C	Priority Rating - Canadian-based Contractors	2014-11-27

6.7 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.

Each invoice must be supported by the following documents, if applicable: (a) a copy of time sheets to support the time claimed; (b) a copy of the release document and any other documents as specified in the Contract; (c) a copy of the invoices, receipts, vouchers for all direct expenses, and all travel and living expenses; (d) a copy of the monthly progress report.

2. Invoices must be distributed as follows:

- a. The original and one (1) copy must be forwarded to the appropriate consignee(s) for certification and payment.
- b. One (1) copy must be forwarded to:
National Defence Headquarters
MGen George R. Pearkes Building
101 Colonel By Drive, Ottawa, Canada, K1A 0K2

Attention: **DLP 5-5-2-1**

c. One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

3. Payment will only be made on receipt of satisfactory invoices duly supported by specified release documents and/or other documents called for under this contract.

6.8 Holdbacks

A ten percent (10%) holdback will apply on the total price of the equipment delivered under the confirmed line item (CLIN) 001 on any due payment of the equipment. Release of the holdback is conditional upon receipt and certified acceptance by Canada of the Confirmed Line Items (CLIN) **002 to 004**.

A ten percent (10%) holdback will apply on the total price of the equipment delivered under the Optional Line Item (OLIN) 001 on any due payment of the equipment. Release of the holdback is conditional upon receipt and certified acceptance by Canada of the Optional Line Items (OLIN) **002 to 006**.

Applicable Taxes must be calculated on the total amount of the claim before the holdback is applied. At the time the holdback is claimed, there will be no Applicable Taxes payable as it was claimed and payable under the previous invoice.

6.9 Certifications

6.9.1 Compliance

The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing cooperation in providing additional 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 additional 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.

6.10 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____.

6.11 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 (2015-07-03) Goods (Medium Complexity);
- (c) Annex A, Statement of Work
- (d) Appendices 1-2 to Annex A
- (e) Annex B – Contract Deliverables Pricing List
- (f) the Contractor's bid dated _____ as clarified on _____, as amended on _____

6.12 Defence Contract

SACC Manual clause A9006C (2012-07-16) Defence Contract

6.13 SACC Manual Clauses

The following terms and conditions are incorporated herein

SACC Reference	Section	Date
A1009C	Work Site Access	2008-05-12
B1501C	Electrical Equipment	2006-06-16
B4019C	United States Military Specifications and Standards	2015-02-25
B4042C	Identification Markings	2008-05-12
B7500C	Excess Goods	2006-06-16
D2025C	Wood Packaging Materials	2013-11-06
D5510C	Quality Assurance Authority (DND) - Canadian-based Contractor	2014-06-26
D5515C	Quality Assurance Authority (DND) - Foreign-based and United States Contractor	2010-01-11
D5540C	ISO 9001:2008 Quality Management Systems - Requirements (QAC Q) (FOR CLIN Item: 001) (FOR OLIN Items: 001, 002, 003, 004 and 006)	2010-08-16
D5545C	ISO 9001:2008 - Quality Management Systems - Requirements (QAC C) (FOR CLIN Items: 002, 003 and 004) (FOR OLIN Item: 001)	2010-08-16
D5604C	Release Documents (DND) - Foreign-based Contractor	2008-12-12
D5605C	Release Documents (DND) - United States-based Contractor	2010-01-11
D5606C	Release Documents (DND) - Canadian-based Contractor	2012-07-16
D6010C	Palletization	2007-11-30
D9002C	Incomplete Assemblies	2007-11-30
G1005C	Insurance	2008-05-12

6.14 Release Documents - Distribution

The Contractor must prepare the release documents in a current electronic format and distribute them as follows:

- a. One (1) copy mailed to consignee marked: "Attention: Receipts Officer";
- b. Two (2) copies with shipment (in a waterproof envelope) to the consignee;
- c. One (1) copy to the Contracting Authority;
- d. One (1) copy to:
 - National Defence Headquarters
 - Mgen George R. Pearkes Building
 - 101 Colonel By Drive
 - Ottawa, ON K1A OK2
 - Attention: **DLP 5-5-2-1**
- e. One (1) copy to the Quality Assurance Representative;
- f. One (1) copy to the Contractor; and
- g. For all non-Canadian contractors, one (1) copy to:
 - DQA/Contract Administration
 - National Defence Headquarters
 - Mgen George R. Pearkes Building
 - 101 Colonel By Drive
 - Ottawa, ON K1A OK2
 - E-mail: ContractAdmin.DQA@forces.gc.ca

6.15 Identification Markings

1. When identification markings are required, the Contractor must arrange for their design and manufacture in accordance with the current issue of Canadian Forces Specification D-02-002-001/SG-001. The markings must be affixed to the deliverable end item(s) before delivery.
2. The Contractor must submit drawings for identification markings for approval through the responsible Department of National Defence Technical Authority at least thirty (30) days before production
3. The Identification markings must contain NATO Stock Number (NSN)
 - a. NSN's will be assigned by the Department of National Defense (DND) and provided to the Contractor
 - b. Each case of the Portable Water Purification System (PWPS) must also be marked in a sequence order for identification purposes (e.g. NSN #1 of 3, NSN #2 of 3, NSN #3 of 3)
 - c. In order for DND to obtain the NSN, the Contractor must provide the PWPS' layout to the Technical Authority
 - i. A draft layout must be delivered to the Technical Authority for review twenty business days after the kick-off meeting
 - ii. The Technical Authority will provide the Contractor comments within five (5) business days following the receipt of the draft.

6.16 Preparation for Delivery

6.16.1 Preparation for Delivery using Specification D-LM-008-036/SF-000

The Contractor must prepare item number(s) **CLIN: 001 and OLIN: 001, 002, 003 and 004** for delivery in accordance with the latest issue of the Canadian Forces Packaging Specification D-LM-008-036/SF-000, DND Minimum Requirements for Manufacturer's Standard Pack.

The Contractor must package item number(s) **CLIN: 001 and OLIN: 001, 002, 003 and 004** in quantities of 1 per package.

The equipment shall be serviced, adjusted and delivered in condition for immediate use. The equipment shall be clean when it arrives at their delivery destination.

6.17 Shipping Instructions

6.17.1 Shipping Instructions - Delivery at Destination

FOR (CLIN: 001 and 002*) (OLIN: 001, 002, 003, 004 and 006)

1. Goods must be consigned to the destination specified in the Contract and delivered:
 - (a) DDP Delivered Duty Paid to *25 DAFC Montreal Det Laval, 185 Bellerose West Laval QC, H7L 6A1* Incoterms 2000 for shipments from commercial contractor.
2. The Contractor is responsible for all delivery charges, administration, costs and risk of transport and customs clearance, including the payment of customs duties and applicable taxes.
3. The contractor must contact Mr. Steven Biondi (Laval Point of Contact) two days prior to the delivery. (450-963-3535, or 514-252-2777, ext. 6023)

6.17.2 Shipping Instructions - Delivery to Technical Authority (NDHQ)

(CLIN: 002*, 003 and 004) (OLIN: 005)

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

Solicitation No. - N° de l'invitation
W8476-165401/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

hl658

Client Ref. No. - N° de réf. du client
W8476-165401

File No. - N° du dossier
hl658.W8476-165401

CCC No./N° CCC - FMS No./N° VME

- (a) DDP Delivered Duty Paid to *MGen Pearkes Bldg, 101 Colonel By Dr, Ottawa ON, K1A 0K2* Incoterms 2000 for shipments from commercial contractor.
2. The Contractor is responsible for all delivery charges, administration, costs and risk of transport and customs clearance, including the payment of customs duties and applicable taxes.

*** PLEASE NOTE*:**

CLIN Item 002, Operation and Maintenance Manuals, has a required quantity of eleven (11) units:

- Ten (10) of the eleven (11) Operation and Maintenance Manuals must be delivered to the destination shown in section 6.17.1
- One (1) of the eleven (11) Operation and Maintenance Manuals must be delivered to the destination shown in section 6.17.2

STATEMENT OF WORK
FOR PORTABLE WATER PURIFICATION SYSTEM

TABLE OF CONTENTS

1.0	SCOPE	3
1.1	PURPOSE	3
1.2	BACKGROUND	3
1.3	ACRONYMS AND ABBREVIATIONS	3
2.0	APPLICABLE DOCUMENTS	3
2.1	APPLICABILITY	3
2.2	ORDER OF PRECEDENCE	3
2.3	STANDARDS AND SPECIFICATIONS	4
3.0	REQUIREMENTS	4
3.1	GENERAL.....	4
3.2	SYSTEM DESCRIPTION	4
3.3	PERFORMANCE CHARACTERISTICS	11
3.4	SPECIALTY ENGINEERING.....	12
3.5	ENVIRONMENTAL HEALTH AND SAFETY	13
3.6	EQUIPMENT ENVIRONMENTAL ASSESSMENT	13
3.7	CONSTRUCTION	13
3.8	PUBLICATIONS AND TECHNICAL DATA.....	13
3.9	PROJECT MEETINGS	16
3.10	FIRST ARTICLE UNIT	17
4.0	CONTRACT DELIVERABLES	18
4.1	LIST OF DELIVERABLES	19
Appendix 1	Equipment Environmental Assessment	
Appendix 2	First Article Test Plan Template	

1.0 SCOPE

1.1 Purpose

- 1.1.1 The purpose of this Statement of Work (SOW) is to describe the requirements and effort required to deliver a portable water purification system (PWPS), accessories and documentation for the Department of National Defence (DND).

1.2 Background

- 1.2.1 The Canadian Forces (CF) has a requirement for PWPS.
- 1.2.2 The PWPS is intended to be used in the Northern Canada region or anywhere else across Canada.

1.3 Acronyms and Abbreviations

CF	Canadian Forces
CSA	Canadian Standards Association
CLIN	Contract Line Item Number
DND	Department of National Defence
EEA	Equipment Environmental Assessment
FAT	First Article Test
NATO	North Atlantic Treaty Organization
NSN	NATO Stock Number
NTU	Nephelometric Turbidity Units
OLIN	Optional Line Item Number
PM	Project Manager
PPM	Parts Per Million
PWPS	Portable Water Purification System
RSPL	Recommended Spare Parts List
SOW	Statement Of Work
TA	Technical Authority
TDS	Total Dissolved Solids

2.0 APPLICABLE DOCUMENTS

2.1 Applicability

- 2.1.1 The following documents form part of this SOW to the extent specified herein.

2.2 Order of Precedence

- 2.2.1 In the event of conflict between the content of this SOW and the referenced documents, the content of this SOW must take precedence.

2.2.2 Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.3 Standards and Specifications

IDENTIFYING NUMBER	DOCUMENT TITLE
D-02-002-001/SG-001	Standard – Identification Marking of Canadian Military Property
FED-STD-595B	Colors Used in Government Procurement

3.0 REQUIREMENTS

3.1 General

3.1.1 The PWPS must be deployable and be ruggedized to sustain prolonged use in harsh environments.

3.1.2 The components of the PWPS in contact with the drinking water must be made of materials suitable to that purpose.

3.1.3 The PWPS must be portable and complete with every component needed for operation, including its own pumps and hoses.

3.1.4 The system must be modular and designed, manufactured and tested from a system perspective and not as a group of components.

3.1.5 The PWPS shall be able to derive purified / filtered water from the following source limitations:

- Maximum Total Dissolved Solids nominal 1,000 PPM;
- Maximum Turbidity Level nominal 6 NTU, and
- Water temperature between 4°C and 40°C.

3.1.6 The PWPS must be capable of producing purified water from fresh water source with the characteristics as set forth in the paragraph 3.1.5 (e.g., ponds, lakes, rivers) at a nominal rate of minimum 750 litres per hour at 8°C.

3.1.6.1 The turbidity level of the treated water must be less than one (1) NTU after filtration.

3.1.6.2 The Total Dissolved Solids of the treated water must be less than 500 PPM.

3.2 System Description

3.2.1 General

- 3.2.1.1 The PWPS must include the following components:
- a) Shipping cases see paragraph 3.2.2;
 - b) Raw water module, see paragraph 3.2.3;
 - c) Water filtration module, see paragraph 3.2.4;
 - d) Potable water distribution module, see paragraph 3.2.5, and
 - e) Miscellaneous equipment, see paragraph 3.2.6.
- The modules from b) to e) must be housed in the shipping cases.

3.2.2 Shipping Cases

- 3.2.2.1 The PWPS must include a cushioning system customized cases which protects the content from moisture and physical damage during handling and transport.
- 3.2.2.2 The shipping cases must hold all modules, ancillary equipment and spare parts of the system.
- 3.2.2.3 Each shipping case with gross weight up to 50 kg / 110 lbs must contain a minimum of two (2) handles.
- 3.2.2.4 Each shipping case with gross weight between 51 kg / 112 lbs and 100 kg / 220 lbs must contain a minimum of four (4) handles.
- 3.2.2.5 The PWPS must not contain cases with gross weight more than 100 kg / 220 lbs.
- 3.2.2.6 The shipping cases must be sealed with watertight gaskets and equipped with pressure relief valves.
- 3.2.2.7 The shipping cases must be painted with colour 24052 (forest green) in accordance with FED-STD-595B.
- 3.2.2.8 Each shipping case must be equipped with heavy-duty, handle-operated locking device.
- 3.2.2.8.1 The locking device must be capable of accepting a padlock and security seal.
- 3.2.2.9 All fasteners used for securing the case must be constructed in such a manner as to prevent access to the interior of the case without leaving visible signs of tampering.
- 3.2.2.10 Each shipping case must have a metal components check list permanently attached inside as per paragraph 3.8.3.2.1.

3.2.2.11 The shipping case(s) housing the water filtration module must be equipped with a permanently attached inside document holder.

3.2.2.11.1 The inside document holder must accommodate the PWPS's Operation and Maintenance Manual and the PWPS's Equipment Environmental Assessment Report as per paragraph 3.8.3 and 3.6 if applicable.

3.2.2.12 Every single water tank as per paragraph 3.2.3.4 and 3.2.5.2 with their components must be retained in an individual shipping case.

3.2.3 Raw Water Module

3.2.3.1 General

3.2.3.1.1 The raw water module must include the following items:

- a) Intake strainer assembly, see paragraph 3.2.3.2;
- b) Water pump, see paragraph 3.2.3.3;
- c) Onion water tank, see paragraph 3.2.3.4, and
- d) Water hoses, see paragraph 3.2.3.5.

3.2.3.2 Intake Strainer Assembly

3.2.3.2.1 The intake strainer assembly must be provided with an 800-micron screen and a 25.4 mm / one (1) inch diameter camlock coupler.

3.2.3.2.1.1 The intake strainer assembly must be floatable.

3.2.3.3 Water Pump

3.2.3.3.1 The water pump must be certified by the Canadian Standards Association (CSA) or an accredited organization approved by the CSA.

3.2.3.3.2 The water pump must be a 120-volt portable pump with 30.5 meters / 100 ft power cord equipped with NEMA 5 power plug.

3.2.3.3.2.1 The water pump must be capable of feeding the system from an elevation difference of three (3) meters / 9.8 ft between the water source and the PWPS (the PWPS being higher than the raw water source).

3.2.3.3.3 The water pump must be equipped with 25.4 mm / one (1) inch diameter camlock inlet and outlet couplers with permanently attached caps.

3.2.3.4 Onion Water Tank

- 3.2.3.4.1 The raw water pump module must be provided with one (1) onion water tank.
- 3.2.3.4.2 The onion water tank must be collapsible with attached fittings and accessories.
- 3.2.3.4.3 The onion water tank must have a minimum nominal volume of 1893 liters / 500 US gallons.
- 3.2.3.4.4 The onion water tank must be constructed with an urethane coating of a minimum 30 oz/sq.yd and with a minimum 10 oz/sq.yd nylon fabric.
 - 3.2.3.4.4.1 All seams must be radio frequency welded.
- 3.2.3.4.5 The onion water tank must have 25.4 mm / one (1) inch diameter camlock coupler(s) for water connection(s) with ball valve(s) and permanently attached dust cap(s) for fill/drain purposes.
- 3.2.3.4.6 The onion water tank must be provided with four (4) outside handles, one (1) inside handle and cover with zipper.
- 3.2.3.4.7 The onion water tank must have provisions for adding flocculent into the water and taking water samples without perturbing filling/draining process.
- 3.2.3.4.8 The onion water tank must be provided with a repair kit (e.g. abrasive pads, scissors, roller, clamps, patches, etc).
- 3.2.3.4.9 The onion water tank must be provided with a ground sheet to protect the tank against abrasion and help extend the tank's lifespan.
 - 3.2.3.4.9.1 The ground sheet must be constructed of a minimum 22 oz/sq.yd vinyl or PVC fabric.

3.2.3.5 Water Hoses

- 3.2.3.5.1 The raw water module must be provided with identical suction water hoses.
- 3.2.3.5.2 The water hoses must meet food grade standards for transfer of potable water.

- 3.2.3.5.3 The water hoses must have abrasion and weather resistant synthetic cover.
- 3.2.3.5.4 The water hoses must have a maximum of 127 mm / five (5) inches bend radius.
- 3.2.3.5.5 The water hoses must have resistance to commercially available cleaning solutions.
- 3.2.3.5.6 The water hoses must be reinforced with high-tensile steel wire helix embedded between layers of synthetic textile cords.
- 3.2.3.5.7 The water hoses must be 25.4 mm / one (1) inch diameter with minimum length 7.6 meters / 25 ft.
- 3.2.3.5.8 Each hose must be equipped with 25.4 mm / one (1) inch camlock couplers with permanently attached dust caps on the ends.
- 3.2.3.5.9 The quantity of the hoses must allow the delivery of water from the water source to the pump, to the onion tank and to the filtration module in line with the paragraph 3.2.6.1.

3.2.4 Water Filtration Module

- 3.2.4.1 The water filtration module must be capable of providing as a minimum particles filtration and chemical absorption.
- 3.2.4.2 “The water filtration module must have several stages of filtration; the last one to be down to 1 micrometer (0.001mm).
 - 3.2.4.2.1 The filters must be provided with manually operated valves for backwashing.
 - 3.2.4.2.2 The filters must be provided with means (e.g. pressure gage) to indicate to the operator when the backwash is required.
 - 3.2.4.2.3 The filtration module must treat minimum 60000 litres of source water as set forth in the paragraph 3.1.5 per filter set.
- 3.2.4.3 The water filtration module must be equipped with digital flow meter and pressure relive valve.
- 3.2.4.4 The water filtration module must by equipped with 25.4 mm / one (1) inch diameter camlock inlet and outlet couplers with permanently attached dust caps.

3.2.4.5 Any hose part of the water filtration module must be identical with the hoses from paragraph 3.2.3.5.

3.2.5 Potable Water Distribution Module

3.2.5.1 General

3.2.5.1.1 The potable water distribution module must include the following items:

- a) Water pump, identical with the pump from the paragraph 3.2.3.3;
- b) Pillow water tank, see paragraph 3.2.5.2;
- c) Water hoses, see paragraph 3.2.5.3, and
- d) Potable water tap stand, see paragraph 3.2.5.4.

3.2.5.2 Pillow Water Tank

3.2.5.2.1 The potable water distribution module must be provided with one (1) pillow water tank.

3.2.5.2.2 The pillow water tank must be collapsible with attached fittings and accessories.

3.2.5.2.3 The pillow water tank must have a minimum nominal volume of 1893 liters / 500 US gallons.

3.2.5.2.4 The pillow water tank must be constructed with an urethane coating of a minimum 30 oz/sq.yd and with a minimum 10 oz/sq.yd nylon fabric.

3.2.5.2.5 The pillow water tank must have 25.4 mm / one (1) inch diameter camlock coupler(s) for water connection(s) with ball valve(s) and permanently attached dust cap(s) for fill/drain purposes.

3.2.5.2.6 The pillow water tank must have provisions for adding chlorination tablets into the water and taking water samples without perturbing filling/draining process.

3.2.5.2.7 The pillow water tank must have a vent / overflow protection.

3.2.5.2.8 The pillow water tank must have a 25.4 mm / one (1) inch bottom drain.

3.2.5.2.9 The pillow water tank must be provided with a repair kit (e.g. abrasive pads, scissors, roller, clamps, clamps, patches, etc).

3.2.5.2.10 The pillow water tank must be provided with a ground sheet to protect the tank against abrasion and help extend the tank's lifespan.

3.2.5.2.10.1 The ground sheet must be constructed of a minimum 22 oz/sq.yd vinyl or PVC fabric.

3.2.5.3 Water Hoses

3.2.5.3.1 The water hoses for the potable water distribution module must be identical with the water hoses for the raw water module from paragraph 3.2.3.5.

3.2.5.3.2 The quantity of the hoses for the potable water distribution module must allow the distribution of water from the filtration module to the pillow water tank, to the pump and to the potable water tap stand in line with the paragraph 3.2.6.1.

3.2.5.4 Potable Water Tap Stand

3.2.5.4.1 The potable water distribution module must be provided with a robust potable water tap stand.

3.2.5.4.2 The potable water tap stand must be equipped with a minimum four (4) self-closing taps and a potable water distribution pump control in order to distribute 1000 litres per hour.

3.2.5.4.3 The potable water tap stand must allow the filling up of capacities with nominal capacity of 50 litres or less.

3.2.5.4.4 The taps must not lay down on the ground.

3.2.6 Miscellaneous Equipment

3.2.6.1 The PWPS must include miscellaneous equipment (e.g. ball valves, T-connectors, adapters, etc.) necessary to connect the components of the PWPS in order for the operator to fill/drain the onion tank, filtration module, pillow tank, tap stand only by manipulating the ball valves without disconnecting / connecting the hoses.

3.2.6.2 The miscellaneous equipment must include two (2) spare hoses as per the paragraph 3.2.3.5.

3.2.7 Power Generator

3.2.7.1 If the option is exercised, the PWPS must be provided with a power generator.

- 3.2.7.1.1 The power generator must be certified by the Canadian Standards Association (CSA) or an accredited organization approved by the CSA.
- 3.2.7.1.2 The power generator must be a diesel generator with direct fuel injection.
- 3.2.7.1.3 The power generator must deliver power as a single phase 120 VAC, 60 Hertz.
- 3.2.7.1.4 The power generator must be sized to provide sufficient power to operate, at the same time, the two (2) PWPS' water pumps.
- 3.2.7.1.5 The generator's fuel tank capacity must be sufficient to run for at least six (6) hours at full load.
- 3.2.7.1.6 The power generator output must deliver the required rated power output up to 1981 meters altitude.
- 3.2.7.1.7 The power generator must be brushless.
- 3.2.7.1.8 The power generator display must indicate minimum the following: the voltage, current, frequency, and cumulative run time hours.
- 3.2.7.1.9 The power generator must be configured to allow full access for maintenance.
- 3.2.7.1.10 The power generator must be delivered in the shipping case as per paragraph 3.2.2.

3.3 Performance Characteristics

3.3.1 Operating Conditions

- 3.3.1.1 The PWPS must be capable of operation in all climatic conditions from 3°C through 52°C.
- 3.3.1.2 The PWPS must operate when its normal operating plane is at an angle of 8° in any direction from the true horizontal.

3.3.2 Humidity

- 3.3.2.1 The PWPS must remain fully operable, must suffer no damage, and must experience no degradation of performance during and after exposure to hot humid conditions of up to 100% relative humidity.

3.3.3 Vibration

3.3.3.1 The PWPS must remain fully operable, must suffer no damage, and must experience no degradation of performance following exposure to vibration during operation and transportation (loading, handling and off-loading from its transport vehicle).

3.3.4 Shock

3.3.4.1 The PWPS must remain fully operable, must suffer no damage, and must experience no degradation of performance following exposure to impact shock during operation and transportation (loading, handling and off-loading from its transport vehicle).

3.3.4.2 The PWPS must be capable of passing shock test as per MIL-STD-810 Method 516, Procedure II. Certification, analysis or data from previous tests to other similar systems must be presented to the TA 30 days before the First Article Test (FAT) as per the paragraph 3.10.3. Certification of PWPS is not required.

3.3.5 Watertightness

3.3.5.1 The PWPS must be capable of passing rain test as per MIL-STD-810 Method 509. Certification, analysis or data from previous tests to other similar systems must be presented to the TA 30 days before the FAT. Certification of PWPS is not required.

3.4 Specialty Engineering

3.4.1 Transportability

3.4.1.1 The PWPS must be air, road and rail transportable.

3.4.1.2 The system must be free of any hazardous materials prohibited for air shipment.

3.4.2 Maintainability

3.4.2.1 The PWPS must be constructed to permit routine service and maintenance under field conditions where personnel may be hampered by exposure to extreme environmental conditions.

3.4.2.2 All repairs of the PWPS must be capable of being performed in field conditions.

3.4.3 Storage Temperature

3.4.3.1 The PWPS must be capable of being stored outdoors, without deterioration, at ambient temperatures between -46°C and $+60^{\circ}\text{C}$.

3.5 Environmental Health and Safety

- 3.5.1 The PWPS must comply with Canada Occupational Health and Safety Regulations (<http://laws-lois.justice.gc.ca/eng/regulations/Sor-86-304/>).
- 3.5.2 The PWPS must have danger and caution signs, labels and markings on it for warning of specific hazards such as voltage, current, thermal or physical hazards in accordance with Canada Occupational Health and Safety Regulations (<http://laws-lois.justice.gc.ca/eng/regulations/Sor-86-304/>).

3.6 Equipment Environmental Assessment Report

- 3.6.1 If the option is exercised, the Contractor must prepare and deliver an Equipment Environmental Assessment (EEA) report in accordance with Appendix 1 to this SOW.
 - 3.6.1.1 The report must be provided in English and French.
 - 3.6.1.2 The hard copy and soft copy on the USB memory stick of the TA approved EEA must be provided to the TA and for each PWPS.

3.7 Construction

3.7.1 Materials and Parts

- 3.7.1.1 The PWPS must be made using new materials and components only.

3.7.2 Protection Against Corrosion and Chemical Agents

- 3.7.2.1 The PWPS must be constructed of materials resistant to or life term protected against corrosion and deterioration caused by atmospheric conditions, corrosive agents, ground moisture, and salt.

- 3.7.3 The PWPS must be constructed in accordance with industry standards.

3.8 Publications and Technical Data

- 3.8.1 The Contractor must create and submit publications and technical data for the PWPS.
- 3.8.2 The publications and technical data provided must be as follows:
 - a) Operation and Maintenance Manual, see paragraph 3.8.3, and
 - b) Recommended Spare Parts List, see paragraph 3.8.4.
- 3.8.3 Operation and Maintenance Manual

3.8.3.1 The Operation and Maintenance (O&M) manual must be a single document provided in English and French.

3.8.3.2 The O&M manual must include as a minimum:

- a) Unpacking and setup procedures;
- b) Safety instructions, cautions and warnings;
- c) Operation procedures;
- d) Teardown and preparation for shipping and storage instructions;
- e) Maintenance instructions along with recommended frequency;
- f) Exploded PWPS and components views with part identification;
- g) PWPS and components specifications;
- h) PWPS components OEM literature;
- i) PWPS components checklists;
- j) PWPS spare parts and consumables list;
- k) Water Schematic Diagram;
- l) PWPS manufacturer contact information;
- m) PWPS layout, and
- n) PWPS packing/storage layout per case.

3.8.3.2.1 PWPS components checklists

3.8.3.2.1.1 The Contractor must produce a master system components checklist including all components of the PWPS.

3.8.3.2.1.1.1 A metal master system components checklist must be permanently attached inside the water filtration module case(s).

3.8.3.2.1.2 The Contractor must also produce detailed components checklists for each of the PWPS case.

3.8.3.2.1.2.1 A metal checklist must be permanently attached inside each of the PWPS' cases.

3.8.3.2.1.3 The lists must be included in the O&M manual and will be used to verify the inventory of the system's components when the PWPS is deployed.

3.8.3.2.2 PWPS spare parts and consumables list

- 3.8.3.2.2.1 The Contractor must identify and include in the O&M manual a list itemizing the recommended spare parts and consumables for the first one (1) month of operation of the PWPS.
 - 3.8.3.2.2.1.1 The list must include all relevant information required for DND to purchase these parts when required as per paragraph 3.8.4.3 from a) to f) and recommended buy quantities.
 - 3.8.3.2.2.2 The Contractor must deliver with each PWPS a set of actual spare parts and consumables intended for the first one (1) month of operation.
 - 3.8.3.2.2.2.1 The spare parts and consumables must be delivered in appropriate package and secured in the shipping cases as per paragraph 3.2.2.
- 3.8.3.2.3 PWPS layout
 - 3.8.3.2.3.1 A draft of the layout must be delivered to the TA for review 20 business days after the kick-off meeting.
 - 3.8.3.2.3.2 The TA will provide to the Contractor comments within five (5) business days following the receipt of the draft.
 - 3.8.3.2.3.3 The final layout must be included in the manual.
- 3.8.3.3 The draft of the O&M manual in electronic Microsoft Word format must be delivered to the TA for review within fifteen (15) business days prior to the First Article Test (FAT) as set forth in paragraph 3.10.3.
 - 3.8.3.3.1 The TA will provide to the Contractor comments within five (5) business days following the receipt of the draft.
- 3.8.3.4 The final hard copy and soft copy on the USB memory stick of the TA approved manual must be provided to the TA and for each PWPS.
- 3.8.3.5 Hard copy of the draft manual may accompany the PWPS delivery until the final approved manual is printed.
- 3.8.4 Recommended Spare Parts List
 - 3.8.4.1 The Contractor must provide a recommended spare parts list (RSPL) of the PWPS.

- 3.8.4.2 The RSPL must contain the Contractor's recommendations for the line replaceable items (main components, spares, and consumables) required to maintain the equipment for one (1) year period. It is anticipated that the number of the line replaceable items selection will be approximately 25.
- 3.8.4.3 The RSPL provided must consist at the minimum, for the PWPS and each item selected the following:
- a) Item name;
 - b) Manufacturer name (not reseller);
 - c) Manufacturer's part number;
 - d) Quantity per PWPS;
 - e) Estimated standard unit price;
 - f) Unit of issue;
 - g) Procurement lead time;
 - h) Shelf life;
 - i) Recommended buy quantity (one (1) year of operation); and
 - j) Illustrations and / or basic engineering drawings.
- 3.8.4.4 The draft of the RSPL must be delivered to the TA for review 30 business days prior to the FAT as per the paragraph 3.10.3.
- 3.8.4.5 The TA will provide to the Contractor comments within five (5) business days following the receipt of the draft.
- 3.8.4.6 The final RSPL must be provided to the TA within five (5) business days after the FAT.

3.9 Project Meetings

3.9.1 Project Start-up Meeting

- 3.9.1.1 The Contractor must within ten (10) business days of being awarded the contract arrange a project start-up meeting with the TA to discuss the work to be performed and project milestones.
- 3.9.1.2 The Contractor must be responsible for recording and distributing meeting minutes and action items.

3.9.2 Progress Review Meetings

- 3.9.2.1 Progress status meetings, chaired by the TA, can take place at regular intervals at mutually agreed times and locations.
- 3.9.2.1.1 The Contractor must be responsible for recording and distributing meeting minutes and action items.

3.10 First Article Unit

3.10.1 First Article Production

- 3.10.1.1 The Contractor must produce one (1) first article PWPS for DND test and evaluation at the Contractor's facility.
- 3.10.1.2 The first article PWPS must be manufactured using the established procedures, processes, personnel, materials, and facilities of a full production system.
- 3.10.1.3 The first article system must be verified against its requirements of this SOW.
- 3.10.1.4 The Contractor must proceed with the fabrication of the first article following the acceptance of the data / drawings by the TA.
 - 3.10.1.4.1 The data from the First Article Test Plan as set forth in the paragraph 3.10.2 showing requirement compliance by analysis / calculations must be approved by the TA prior to design freezing and manufacturing of the PWPS.

3.10.2 First Article Test Plan

- 3.10.2.1 The Contractor must produce one (1) First Article Test Plan (FATP).
- 3.10.2.2 The Contractor must provide the proposed FATP to the TA.
 - 3.10.2.2.1 The Appendix 2 to this SOW provides a template / example.
- 3.10.2.3 The plan must cover the requirements of this SOW.
 - 3.10.2.3.1 The FATP must present how the herein requirements will be evaluated: by inspection, testing or certification (statements, analysis / calculations, documentation).
- 3.10.2.4 The FATP must include a leak detection, and functionality test.
- 3.10.2.5 The draft FATP must be forwarded to the TA within thirty (30) business days after the start-up meeting.
 - 3.10.2.5.1 The TA will provide comments to the Contractor within ten (10) business days following the receipt of the draft FATP.
- 3.10.2.6 The FAT must not commence until notification is received from the TA that the FATP has been approved.

3.10.3 First Article Test (FAT)

- 3.10.3.1 The Contractor must subject the first article unit to all required inspections and tests at system level in accordance with the approved FAT plan to verify conformance to the specified requirements.
- 3.10.3.2 The TA will witness the FAT.
- 3.10.4 FAT Rejection
 - 3.10.4.1 If the FAT is rejected, the Contractor must resolve deficiencies with the equipment and, if requested by the TA, repeat any or all first article tests as expeditiously possible.
 - 3.10.4.1.1 All costs related to these activities must be borne by the Contractor.
- 3.10.5 First Article Test Report
 - 3.10.5.1 The first article test data must be forwarded to the TA for approval in the form of a First Article Test (FAT) Report within five (5) business days of the completion of the FAT.
 - 3.10.5.2 The FAT Report must be presented as a single document showing the cross-reference of the FATP and the supporting documentation from the FAT (e.g.: inspection check lists, testing results, certification documents).
 - 3.10.5.3 The TA will provide to the Contractor, a formal notice of approval or rejection of the FAT report within five (5) business days of receipt of the report.
- 3.10.6 Finalization of the First Article System
 - 3.10.6.1 The first article test must be considered finalized when the system is in the accepted configuration following the completion and acceptance of the FAT, including any changes to equipment because of the FAT rejection.
- 3.10.7 Delivery of Test Article
 - 3.10.7.1 The Contractor may deliver the tested article as deliverable equipment if the article meets all contract requirements for acceptance.
 - 3.10.7.2 Delivery will only come into effect when the FAT is completed.

4.0 CONTRACT DELIVERABLES

4.1 List of Deliverables

Item	Item Description	Qty	Option
1	PWPS as specified in this SOW	10	10
2	Additional onion water tank (para 3.2.3.4) in the shipping case (para 3.2.2) with hoses (para 3.2.3.5) and miscellaneous equipment (para 3.2.6)	0	20
3	Additional pillow water tank (para 3.2.5.2) in the shipping case (para 3.2.2) with hoses (para 3.2.5.3) and miscellaneous equipment (para 3.2.6)	0	20
4	Power Generator (para 3.2.7) in the shipping case (para 3.2.2)	0	20
5	Equipment Environmental Assessment Report (para 3.6)	0	1 soft copy for TA, 1 hard copy and 1 soft copy per PWPS
6	Operation and Maintenance Manual (para 3.8.3)	1 soft copy for TA, 1 hard copy and 1 soft copy per PWPS	1 hard copy and 1 soft copy per PWPS
7	RSPL (para 3.8.4)	1 soft copy for TA	0
8	First Article Test Report (para 3.10.5)	1 soft copy for TA	0

APPENDIX 1 to Annex A																													
1. TITLE Equipment Environmental Assessment (EEA)			2. IDENTIFICATION NUMBER Appendix 1																										
3. DESCRIPTION The EEA identifies and documents potential environmental impacts of the equipment over various life-cycle phases (test and evaluation following production, operation and maintenance, and demilitarization and disposal) and the associated mitigation measures required to reduce or eliminate them.																													
4. APPROVAL DATE		5. OFFICE OF PRIMARY INTEREST		6. GIDEP APPLICABLE																									
7. APPLICATION/INTERRELATIONSHIP 7.1. This Data Item Description (DID) contains content and preparation instructions for the EEA as required by the SOW.																													
8. ORIGINATOR			9. APPLICABLE FORMS																										
10. PREPARATION INSTRUCTIONS 10.1 FORMAT The EEA will be in the Contractor's format. 10.2 CONTENT The EEA shall contain the following sections and information, as a minimum: 10.2.1 Title Page a. Equipment Name and NSN (if available) b. Originating Directorate: TBD c. DGLEPM EEA Registration Number: TBD d. Assessment Contact: Name, title and company name of the author of the EEA 10.2.2 Executive Summary Provide a brief summary of potential environmental impacts and recommended mitigation measures for each life-cycle (production, test and evaluation following production, operation and maintenance and demilitarization and disposal). 10.2.3 Equipment Description a. Equipment description: Provide an overview of the equipment and identify each major sub-system as per the Equipment Breakdown Structure. b. For each major sub-system, identify the following: i. Ionizing radiation sources (radioisotopes and x-ray). e.g. Uranium, Radon, plutonium and tritium etc. ii. Non-ionizing radiation sources (radiofrequency and lasers). iii. Materials incorporated into the design, including type and composition. For hazardous materials identified in the following table, provide additional information in tabular form as Annex 1 to the report: Annex 1 - List of Equipment Parts Containing Hazardous Material <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 40%;">Material</th> <th style="width: 10%;">NSN</th> <th style="width: 15%;">Original OEM Part Number</th> <th style="width: 15%;">Item Description</th> <th style="width: 10%;">Location</th> <th style="width: 10%;">Additional Details</th> </tr> </thead> <tbody> <tr> <td>Metal components in pure element form, contained in any compound, alloy or mixture or surface treatment containing: arsenic, aluminum, antimony, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, thallium and zinc. Precious metals such as gold, silver, rhodium, platinum, palladium, tellurium etc should also be identified.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Asbestos</td> <td></td> <td></td> <td></td> <td></td> <td>Type and Mil Spec</td> </tr> <tr> <td>Halocarbons</td> <td></td> <td></td> <td></td> <td></td> <td>Include MSDS in Annex 3</td> </tr> </tbody> </table>						Material	NSN	Original OEM Part Number	Item Description	Location	Additional Details	Metal components in pure element form, contained in any compound, alloy or mixture or surface treatment containing: arsenic, aluminum, antimony, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, thallium and zinc. Precious metals such as gold, silver, rhodium, platinum, palladium, tellurium etc should also be identified.						Asbestos					Type and Mil Spec	Halocarbons					Include MSDS in Annex 3
Material	NSN	Original OEM Part Number	Item Description	Location	Additional Details																								
Metal components in pure element form, contained in any compound, alloy or mixture or surface treatment containing: arsenic, aluminum, antimony, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, thallium and zinc. Precious metals such as gold, silver, rhodium, platinum, palladium, tellurium etc should also be identified.																													
Asbestos					Type and Mil Spec																								
Halocarbons					Include MSDS in Annex 3																								

Polychlorinated Biphenyl					Form (liquid or solid), quantity (kg), volume (L) and concentration in ppm
Mercury and its compounds					Manufacturer of component, form of mercury (e.g. liquid, vapour, amalgam, metal halide), quantity (kg) volume (L) and concentration in ppm

iv. **Controlled Products:** All controlled products incorporated into the sub-systems design (i.e. paints/surface treatments, adhesives, lubricants, consumables such as batteries, etc.) and those that are recommended by the Contractor during the in-service life-cycle phase (i.e. lubricants, cleaners, decontaminants, etc.) or contained in the Technical Documentation. For the purposes of the EEA, controlled products are defined as materials/products/consumables that contain the following substances: regulated and proposed to be regulated under the *Canadian Environmental Protection Act, 1999*; targeted in Schedule 1, Toxic Substance List under CEPA and/or subject to the reporting requirements under the National Pollutant Release Inventory (NPRI). Provide the following information for all controlled products in tabular form in Annex 2. All MSDSs are to be provided in Annex 3.

Annex 2 – List of Controlled Products

Chemical Product	NSN	Product Part Number / Manufacturer	Ingredient	Chemical Abstract Service Number	Controls*
Adhesives, anti-seize, anti-static, batteries, solvents, cleaners and degreasers, compressed gases, coolant, corrosion inhibitor, cutting fluid, decontaminant, desiccant, detector kit, dielectric compounds, fire extinguishing agent, flame retardant, fuel, grease, inspection penetrant, lubricants, paints and related commodities (topcoat, primer, wash-primer, thinner, paint stripper, powder coating, underbody coating), polishing compounds (automotive polish, leather care), refrigerants sealants, spill kits, welding compounds (solder, flux, electrode etc.), etc.					

*Controls: Identify if the substance is regulated and proposed to be regulated under the *Canadian Environmental Protection Act, 1999*; targeted in Schedule 1, Toxic Substance List under CEPA and/or subject to the reporting requirements under the National Pollutant Release Inventory (NPRI).

10.2.4 Environmental Assessment

For each lifecycle phase (test and evaluation following production, operation and maintenance, and demilitarization and disposal) discuss the following:

- a. **Lifecycle activities:** Describe anticipated activities (including operator and maintenance tasks that are detailed in Contractor provided Technical Documentation) and identify if any of these activities have the potential to: release a polluting substance to air, water or land (e.g. exhaust emissions, hazardous waste, spills, etc.); impact human health; noise or vibration; and/or alter landscape features. **Note:** The scope of the EEA excludes activities related to the use of munitions.
- b. **Environmental impacts:** Describe the potential environmental impacts identified above.
- c. **Mitigation Measures:** Describe mitigation measures to eliminate or reduce identified potential environmental impacts, including those that are part of the design, any warning devices, emission control equipment, spill response, safe handling and disposal procedures, training, PPE, labels on equipment, cautions and warnings in the Technical Documentation, monitoring or inspections, etc.

10.2.5 Conclusion and Recommendations

Summarize environmental impacts and recommended mitigation measures for each life-cycle.

10.2.6 References

List any references consulted in the completion of the EEA (such as Canadian legislation, DND policies and procedures, technical documentation, etc.)

Annex 1 – List of Equipment Parts Containing Hazardous Material

Annex 2 – List of Controlled Products

Annex 3 - Material Safety Data Sheets (MSDS) for controlled products identified in the EEA

PORTABLE WATER PURIFICATION SYSTEM
FIRST ARTICLE TEST PLAN (FATP) TEMPLATE

Project Name:

DND Contract No:

Introduction:

First Article Test Plan Objective:

Location of the First Article Test (FAT) :

Tentative date for the FAT :

Participants :

Matrix definitions:

Inspection (I)

Verification of the physical characteristics by examination of the equipment and associated documentation. Comparison of pertinent characteristics against a predetermined qualitative or quantitative standard. May require moving or partial disassembling of the item to accomplish the verification.

Test (T)

Test is a method of verification whereby the properties, characteristics, and parameters of the item are determined by testing the performance against the requirements. Pass/fail criteria are simple yes/no indications.

Contractor Certification (CC)

Certification (CC) is a method of confirmation of certain characteristics of the system. The confirmation is provided by some form of internal review or assessment by the Contractor. It could be Statement (S) or Analysis / Calculations (A/C) or Documentation (D).

External Certification (EC)

Certification (EC) is a method of confirmation of certain characteristics of the system. The confirmation is provided by some form of external review or assessment by supplier of the Contractor. It could be from an External office (OEM or CSC / CSA) providing a Statement (S) or Documentation (D).

Equipment used

List of test equipment used during the FAT (e.g.: scale, measuring tape, etc).

First Article Test Plan Matrix

LEGEND	
I Inspection DND / Contractor	T Test with Approved Test Protocol
CC Contractor Certification: Statement (S) or Analysis / Calculations (A/C) or Documentation (D)	EC – External Certification: External office (OEM or CSC / CSA) Statement (S) or Documentation (D)

SOW Ref No.	Requirement as per SOW	Type of inspection				Pas s	Fail	Inspect or's Initials
		I	T	CC	EC			
3.1	General							
3.1.1	The PWPS must be deployable and be ruggedized to sustain prolonged use in harsh environments.	√						
3.1.3	The PWPS must be portable and complete with every component needed for operation, including its own pumps and hoses.	√						
3.1.4	The system must be modular and designed, manufactured and tested from a system perspective and not as a group of components.	√						
3.1.5	The PWPS shall be able to derive purified / filtered water from the following source limitations: • Maximum Dissolved Solids nominal 1,000 PPM; • Maximum Turbidity Level nominal 6 NTU, and • Water temperature between 4°C and 40°C.		√	√ (A/C)				
3.1.6	The PWPS must be capable of producing purified water from fresh water source with the characteristics as set forth in the paragraph 3.1.5 (e.g., ponds, lakes, rivers) at a nominal rate of minimum 750 litres per hour at 8°C.		√	√ (A/C)				
3.1.6.1	The turbidity level of the treated water must be less than one (1) NTU after filtration.		√	√ (A/C)				
3.1.6.2	The Total Dissolved Solids of the treated water must be less than 500 PPM.		√	√ (A/C)				
3.2	System Description							
3.2.1.1	The PWPS must include the following components:	√						
	a) Shipping cases see paragraph 3.2.2;	√						
	b) Raw water module, see paragraph 3.2.3;	√						
	c) Water filtration module, see paragraph 3.2.4;	√						
	d) Potable water distribution module, see paragraph 3.2.5, and e) Miscellaneous equipment, see paragraph 3.2.6. The modules from b) to h) must be housed in the shipping cases.	√						

Contract Deliverables Pricing List

Portable Water Purification System
Requisition Number: W8476-165401

Prepared by:
DLP 5-5-2-1
National Defence Headquarters
Major General George R. Pearkes Building
Ottawa, Ontario
K1A 0K2

Annex B - Contract Deliverables Pricing List

Acquisition Deliverables									
CLIN	Deliverables	Instructions	Destination	Quality Assurance Code	Basis Of Payment	Unit of Issue	Firm Unit Price	Quantity	Extended Price
1	Portable Water Purification System	As per Annex "A"	Laval	Q	BOP #1	EA	\$ _____	10	\$ _____
2	Operation and Maintenance Manual	As per Annex "A"	NDHQ TA/Laval	C	BOP #1	EA	\$ _____	11	\$ _____
3	Recommended Spare Parts List	As per Annex "A"	NDHQ TA	C	BOP #1	EA	\$ _____	1	\$ _____
4	First Article Test Report	As per Annex "A"	NDHQ TA	C	BOP #1	EA	\$ _____	1	\$ _____
Sub-Total Table 1									
Tax									
Total (GST/QSTi)									

Optional Deliverables									
OLIN	Costed Options	Instructions	Delivery	Quality Assurance Code	Basis of Payment	Unit of Issue	Firm Unit Price	Quantity	Extended Price
1	Portable Water Purification System	As per Annex "A"	Laval	Q	BOP #1	EA	\$ _____	10	\$ _____
2	Onion Water Tank	As per Annex "A"	Laval	Q	BOP #1	EA	\$ _____	20	\$ _____
3	Pillow Water Tank	As per Annex "A"	Laval	Q	BOP #1	EA	\$ _____	20	\$ _____
4	Power Generator	As per Annex "A"	Laval	Q	BOP #1	EA	\$ _____	20	\$ _____
5	Equipment Environmental Assessment	As per Annex "A"	NDHQ TA	C	BOP #1	EA	\$ _____	1	\$ _____
6	Operation and Maintenance Manual	As per Annex "A"	Laval	Q	BOP #1	EA	\$ _____	10	\$ _____
Sub-Total Table 2									
Sub-Total Tables 1 & 2									
Tax Tables 1 & 2									
Total (GST/QSTi)									

TECHNICAL BID EVALUATION
FOR
PORTABLE WATER PURIFICATION SYSTEM

1. INTRODUCTION

1.1 Scope

This document outlines a plan for bid evaluation. It identifies the technical criteria to be evaluated. Evaluation will be based on mandatory criteria.

1.2 General Form of Proposals

Proposals must address in clearly organized, narrative form all subjects identified in this bid evaluation plan.

1.3 Evaluation

Bid proposals will be evaluated on the basis of mandatory criteria. To be considered responsive, a bid must satisfy **all** mandatory criteria.

2. MANDATORY CRITERIA

Responses to the mandatory requirements set forth in this section will be evaluated on a simple, stringent pass/fail basis. Proposals not meeting each and every one of the mandatory requirements identified in the tables below will be considered non-compliant and given no further consideration.

2.1 The Bidder must provide:

Description of Requirement	Cross-reference to bid documents (page / paragraph)
a) Submit a full Technical Proposal showing the company has an understanding of the requirement and demonstrating the approach they would take to produce the required Portable Water Purification System as per the requirements specified of the Statement of Work.	
b) Demonstrate history of directly related experience in the manufacture or repair and overhaul for any Government entity (Municipal, Provincial and/or Federal) of minimum one (1) system providing purified potable water with a nominal rate of minimum 600 liters per hour in the last five (5) years from the date of bid closing. The year when the system was completed must be provided.	
c) Provide reference(s) to confirm the experience related to the point b).	
d) Provide technical information supporting the experience related to the point b).	