

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Réception des soumissions - TPSGC / Bid
Receiving - PWGSC
1550, Avenue d'Estimauville
1550, D'Estimauville Avenue
Québec
Québec
G1J 0C7

INVITATION TO TENDER APPEL D'OFFRES

**Tender 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.

Soumission 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 et sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Vendor/Firm Name and Address
Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution
TPSGC-PWGSC
601-1550, Avenue d'Estimauville
Québec
Québec
G1J 0C7

Title - Sujet MISE À NIVEAU DES CHAUDIÈRES	
Solicitation No. - N° de l'invitation EE517-133660/A	Date 2013-05-09
Client Reference No. - N° de référence du client EE517-133660	GETS Ref. No. - N° de réf. de SEAG PW-\$QCM-008-15388
File No. - N° de dossier QCM-3-36016 (008)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-05-27	
Time Zone Fuseau horaire Heure Avancée de l'Est HAE	
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: Rochette, Jean	Buyer Id - Id de l'acheteur qcm008
Telephone No. - N° de téléphone (418) 649-2834 ()	FAX No. - N° de FAX (418) 648-2209
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: TRAVAUX PUBLICS ET SERVICES GOUVERNEMENTAUX CANADA ESC 1 - MPO / TRANSPORT BASE DE QUÉBEC 101 BOUL. CHAMPLAIN R.063144.001 QUEBEC Québec G1K 7Y7 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée VOIR TEXTE	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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INVITATION TO TENDER

IMPORTANT NOTICE TO BIDDERS

CLAUSES REFERRED TO BY NUMBER (I.E. R2890D) CAN BE FOUND AT THE FOLLOWING WEB SITE

<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/5/R>

THIS DOCUMENT CONTAINS A SECURITY REQUIREMENT

LIMITATION OF LIABILITY

PWGSC is limiting the Contractor's first party liability for work in Low Rise, High Rise and Heritage Buildings. See changes to GC1.6 "Indemnification by the Contractor" of R2810D in the Supplementary Conditions.

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GENERAL INSTRUCTIONS TO BIDDERS (GI) - R2710T (2013-01-28)

The following GI's are included by reference and are available at the following Web Site
<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/5/R>

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SPECIAL INSTRUCTIONS TO BIDDERS (SI)

SI01 BID DOCUMENTS

1. The following are the bid documents:

- a. Invitation to Tender - Page 1;
- b. Special Instructions to Bidders;
- c. General Instructions to Bidders R2710T (2013-01-28);
- d. Clauses & Conditions identified in "Contract Documents";
- e. Drawings and Specifications;
- f. Bid and Acceptance Form and related Appendice(s); and
- g. Any amendment issued prior to solicitation closing.

Submission of a bid constitutes acknowledgement that the Bidder has read and agrees to be bound by these documents.

2. General Instructions to Bidders is incorporated by reference and is set out in the Standard Acquisition Clauses and Conditions (SACC) Manual, issued by Public Works and Government Services Canada (PWGSC). The SACC Manual is available on the PWGSC Web site:

<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>

SI02 ENQUIRIES DURING THE SOLICITATION PERIOD

1. Enquiries regarding this bid must be submitted in writing to jean.rochette@tpsgc-pwgsc.gc.ca, the Contracting Officer named on the Invitation to Tender - Page 1 as early as possible within the solicitation period. Except for the approval of alternative materials as described in GI16 of R2710T "General Instructions to Bidders", enquiries should be received no later than business days prior to the date set for solicitation closing to allow sufficient time to provide a response. Enquiries received after that time may not result in an answer being provided.
2. To ensure consistency and quality of the information provided to Bidders, the Contracting Officer shall examine the content of the enquiry and shall decide whether or not to issue an amendment.
3. All enquiries and other communications related to this bid sent throughout the solicitation period are to be directed ONLY to the Contracting Officer named on the Invitation to Tender - Page 1. Failure to comply with this requirement may result in the bid being declared non-responsive.

SI03 MANDATORY SITE VISIT

There will be a site visit on May 16 2013 at 9:30 AM. Interested bidders are to meet at the Base Quebec gatehouse located at 101 Champlain blvd, Quebec (QC) and register with the guard. Safety boots are to be worn by visitors to access the boiler room.

The site visit for this project is **MANDATORY**. The representative of the bidder will be required to sign the Site Visit Attendance Sheet at the site visit. Bids submitted by Bidders who have not signed the attendance sheet will not be accepted.

For security reasons, bidders interested to attend the visit are invited to confirm their presence before 3:00 PM on May 15 2013 to Contracting Officer who's email address is stated above in article SI02.

SI04 REVISION OF BID

A bid may be revised by letter or facsimile in accordance with GI11 of R2710T "General Instructions to Bidders". The facsimile number for receipt of revisions is (418) 648-2209.

SI05 BID RESULTS

1. A public bid opening will be held in the office designated on the Front Page "Invitation to Tender" for the receipt of bids shortly after the time set for solicitation closing.
2. Following solicitation closing, bid results may be obtained by calling at (418) 649-2888.

SI06 INSUFFICIENT FUNDING

In the event that the lowest compliant bid exceeds the amount of funding allocated for the Work, Canada in its sole discretion may

- a. cancel the solicitation; or
- b. obtain additional funding and award the Contract to the Bidder submitting the lowest compliant bid; and/or
- c. negotiate a reduction in the bid price and/or scope of work of not more than 15% with the Bidder submitting the lowest compliant bid. Should an agreement satisfactory to Canada not be reached, Canada shall exercise option (a) or (b).

SI07 BID VALIDITY PERIOD

1. Canada reserves the right to seek an extension to the bid validity period prescribed in BA04 of the Bid and Acceptance Form. Upon notification in writing from Canada, Bidders shall have the option to either accept or reject the proposed extension.
2. If the extension referred to in paragraph 1. of SI07 is accepted, in writing, by all those who submitted bids, then Canada shall continue immediately with the evaluation of the bids and its approvals processes.
3. If the extension referred to in paragraph 1. of SI07 is not accepted in writing by all those who submitted bids then Canada shall, at its sole discretion, either
 - a. continue to evaluate the bids of those who have accepted the proposed extension and seek the necessary approvals; or
 - b. cancel the invitation to tender.

4. The provisions expressed herein do not in any manner limit Canada's rights in law or under GI12 of R2710T "General Instructions to Bidders".

SI08 CONSTRUCTION DOCUMENTS

The successful contractor will be provided with one paper copy of the sealed and signed drawings, the specifications and the amendments upon acceptance of the offer. Obtaining more copies shall be the responsibility of the contractor including costs.

SI09 TRANSMISSION OF THE BID BY FACSIMILE OR EMAIL

Bids transmitted by facsimile or email are not accepted.

SI10 WEB SITES

The connection to some of the Web sites in the solicitation documents is established by the use of hyperlinks. The following is a list of the addresses of the Web sites:

Treasury Board Appendix L, Acceptable Bonding Companies

<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494§ion=text#appL>

Contracts Canada (Buy and Sell) <https://www.achatsetventes-buyandsell.gc.ca/eng/welcome>

Canadian economic sanctions <http://www.international.gc.ca/sanctions/index.aspx?lang=eng>

Contractor Performance Evaluation Report (Form PWGSC-TPSGC 2913)

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/2913.pdf>

Bid Bond (form PWGSC-TPSGC 504) <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/504.pdf>

Performance Bond (form PWGSC-TPSGC 505)

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/505.pdf>

Labour and Material Payment Bond (form PWGWSC-TPSGC 506)

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/506.pdf>

Certificate of Insurance (form PWGSC-TPSGC 357)

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/357.pdf>

Standard Acquisition Clauses and Conditions (SACC) Manual

<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>

Schedules of Wage Rates for Federal Construction Contracts

http://www.rhdcc-hrsdc.gc.ca/eng/labour/employment_standards/contracts/schedule/index.shtml

PWGSC, Industrial Security Services <Http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>

PWGSC, Code of Conduct and Certifications

<Http://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/index-eng.html>

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PWGSC Consent to a Criminal Record Verification (PWGSC-TPSGC 229)

[Http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/229.pdf](http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/229.pdf)

SUPPLEMENTARY CONDITIONS (SC)

SC01 SECURITY REQUIREMENT

Contractor personnel and sub-contractor personnel MAY NOT ENTER NOR PERFORM WORK ON sites where PROTECTED or CLASSIFIED information or assets are kept, without an escort provided by the department or agency for which the work is being performed.

SC02 BREACH OF THE DATE OF COMPLETION OF WORK

The Contractor agrees that Canada would suffer actual damages as a result of a breach of obligations under Article BA06 Construction time and that prejudice can affect the health and safety of occupants of buildings 100, 200, 400 and 500, which are served by boilers located in building 400.

If such a breach occurs, for each day that the contractor is in default of its obligations under Article BA06 Construction time, the contractor agrees to install and commission a temporary external boiler in accordance with Section 4.0 Boiler temporary external to the Statement of Work. The contractor can not recover the costs incurred from Canada to comply with this article.

Canada and the Contractor agree that this article represents their best estimate of the minimum loss that will be incurred by Canada if the above situation occurs, and that it is not intended to be, nor is it to be interpreted as, a penalty.

Nothing in this section shall be construed as relieving the Contractor from its default, to limit the liability of the contractor or as limiting the rights and remedies which Canada may otherwise be entitled under the contract or the law.

SC03 LIMITATION OF LIABILITY

GC1.6 of R2810D is deleted and replaced with the following:

GC1.6 Indemnification by the Contractor

1. The Contractor shall indemnify and save Canada harmless from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings whether in respect to losses suffered by Canada or in respect of claims by any third party, brought or prosecuted and in any manner based upon, arising out of, related to, occasioned by, or attributable to the activities of the Contractor in performing the Work, provided such claims are caused by the negligent or deliberate acts or omissions of the Contractor, or those for whom it is responsible at law.
2. The Contractor's obligation to indemnify Canada for losses related to first party liability shall be limited to:
 - a. In respect to each loss for which insurance is to be provided pursuant to the insurance requirements of the Contract, the Commercial General Liability insurance limit for one occurrence. as referred to in the in the insurance requirements of the Contract .

b. In respect to losses for which insurance is not required to be provided in accordance with the insurance requirements of the Contract, the greater of the Contract Amount or \$5,000,000, but in no event shall the sum be greater than \$20,000,000.

The limitation of this obligation shall be exclusive of interest and all legal costs and shall not apply to any infringement of intellectual property rights or any breach of warranty obligations.

3. The Contractor's obligation to indemnify Canada for losses related to third party liability shall have no limitation and shall include the complete costs of defending any legal action by a third party. If requested by Canada, the Contractor shall defend Canada against any third party claims.
4. The Contractor shall pay all royalties and patent fees required for the performance of the Contract and, at the Contractor's expense, shall defend all claims, actions or proceedings against Canada charging or claiming that the Work or any part thereof provided or furnished by the Contractor to Canada infringes any patent, industrial design, copyright trademark, trade secret or other proprietary right enforceable in Canada.
5. Notice in writing of a claim shall be given within a reasonable time after the facts, upon which such claim is based, became known.

CONTRACT DOCUMENTS (CD)

1. The following are the contract documents:
 - a. Contract Page when signed by Canada;
 - b. Duly completed Bid and Acceptance Form and any Appendices attached thereto;
 - c. Drawings and Specifications;
 - d. General Conditions and clauses

GC1 General Provisions	R2810D	(2012-11-19)
GC2 Administration of the Contract	R2820D	(2012-07-16);
GC3 Execution and Control of the Work	R2830D	(2010-01-11);
GC4 Protective Measures	R2840D	(2008-05-12);
GC5 Terms of Payment	R2850D	(2010-01-11);
GC6 Delays and Changes in the Work	R2860D	(2012-07-16);
GC7 Default, Suspension or Termination of Contract	R2870D	(2008-05-12);
GC8 Dispute Resolution	R2880D	(2012-07-16);
GC9 Contract Security	R2890D	(2012-07-16);
GC10 Insurance	R2900D	(2008-05-12);
Supplementary Conditions		
Insurance Terms	R2910D	(2008-12-12);
Fair Wages and Hours of Labour - Labour Conditions	R2940D	(2012-07-16);
Allowable Costs for Contract Changes Under GC6.4.1	R2950D	(2007-05-25);
 - e. Any amendment issued or any allowable bid revision received before the date and time set for solicitation closing;
 - f. Any amendment incorporated by mutual agreement between Canada and the Contractor before acceptance of the bid; and
 - g. Any amendment or variation of the contract documents that is made in accordance with the General Conditions.
2. The documents identified by title, number and date above are incorporated by reference and are set out in the Standard Acquisition Clauses and Conditions (SACC) Manual, issued by Public Works and Government Services Canada (PWGSC). The SACC Manual is available on the PWGSC Web site:
<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>
3. Schedules of Wage Rates for Federal Construction Contracts is included by reference and may be accessed from the Web site:
http://www.rhdcc-hrsdc.gc.ca/eng/labour/employment_standards/contracts/schedule/index.shtml.
4. The language of the contract documents is the language of the Bid and Acceptance Form submitted.

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BID AND ACCEPTANCE FORM (BA)

BA01 IDENTIFICATION

Retubing of boiler #1 and 3 located in Building 400 of the Base Quebec of the Canadian Coast Guard.

Solicitation no : EE517-133660/A

Project no : R.063144.001

BA02 BUSINESS NAME AND ADDRESS OF BIDDER

Name: _____

Address: _____

Telephone: _____ Fax: _____ PBN: _____

Email address: _____

BA03 THE OFFER

The Bidder offers to Canada to perform and complete the Work for the above named project in accordance with the Bid Documents for the **TOTAL BID AMOUNT INDICATED IN APPENDIX 1.**

BA04 BID VALIDITY PERIOD

The bid shall not be withdrawn for a period of 30 days following the date of solicitation closing.

BA05 ACCEPTANCE AND CONTRACT

Upon acceptance of the Contractor's offer by Canada, a binding Contract shall be formed between Canada and the Contractor. The documents forming the Contract shall be the contract documents identified in Contract Documents (CD).

BA06 CONSTRUCTION TIME

The Contractor shall perform and complete the Work by September 15 2013.

BA07 BID SECURITY

The Bidder is enclosing bid security with its bid in accordance with GI09 - Bid Security Requirements of R2710T - General Instructions to Bidders.

BA08 SIGNATURE

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Name and title of person authorized to sign on behalf of Bidder (Type or print)

Signature

Date

APPENDIX 1 - COMBINED PRICE FORM

- 1) The prices per unit shall govern in establishing the Total Extended Amount. Any arithmetical errors in this Appendix will be corrected by Canada.
- 2) Canada may reject the bid if any of the prices submitted do not reasonably reflect the cost of performing the part of the work to which that price applies.

LUMP SUM

The Lump Sum Amount designates Work to which a Lump Sum Arrangement applies.

- a) The supplier has the opportunity to submit prices for options A and B. The choice between option A and B will be done according to the following. Should the lowest receivable bid for option B is higher no more than \$43,500, the contract will be awarded to the supplier that provided the lowest receivable bid for option B. Should the lowest receivable bid for option B is higher than \$43,500, the contract will be awarded to the supplier that provided the lowest receivable bid for option A.

Exemple :

1. Lowest receivable bid for option A : 200 000,00\$
 Lowest receivable bid for option B : 230 000,00\$
 The contract will be awarded to the supplier that provided the lowest receivable bid for option B.
2. Lowest receivable bid for option A : 200 000,00\$
 Lowest receivable bid for option B : 250 000,00\$
 The contract will be awarded to the supplier that provided the lowest receivable bid for option A.

OPTION A

Item	Description	Firm total amount
1.1	Boiler retubing	
1.1 a)	Materials for Boiler retubing	_____ \$
1.1 b)	Labour for Boiler retubing	_____ \$
1.2	Updating of boiler controls, safety equipment and burners	
1.2 a)	Materials for Updating of boiler controls, safety equipment and burners	_____ \$
1.2 b)	Labour for Updating of boiler controls, safety equipment and burners	_____ \$

1.3	Replacement of a boiler condensate tank	
1.3 a)	Materials for Replacement of a boiler condensate tank	_____ \$
1.3 b)	Labour for Replacement of a boiler condensate tank	_____ \$
LUMP SUM AMOUNT FOR OPTION A Excluding GST/PST		_____ \$

OPTION B

Item	Description	Firm total amount
1.1	Boiler retubing	
1.1 a)	Materials for Boiler retubing	_____ \$
1.1 b)	Labour for Boiler retubing	_____ \$
1.3	Replacement of a boiler condensate tank	
1.3 a)	Materials for Replacement of a boiler condensate tank	_____ \$
1.3 b)	Labour for Replacement of a boiler condensate tank	_____ \$
1.4	Replacement of burners and safety controls	
1.4 a)	Materials for Replacement of burners and safety controls	_____ \$
1.4 b)	Labour for Replacement of burners and safety controls	_____ \$
LUMP SUM AMOUNT FOR OPTION B Excluding GST/PST		_____ \$

HOURLY RATES

The following hourly rates may be used in the event that the original scope of work changes during the course of the contract. It is direct or productive labour devoted solely to work. The time is calculated from the moment the Contractor is on site. Hourly rates do not apply to meal times or travel time off the site.

Occupation	\$ per hour
Welder	_____ \$
Plumber/pipefitter	_____ \$
Electrician/controls	_____ \$
Stationary Engineers and Auxiliary Equipment Operators	_____ \$

MATERIALS

The following mark-up may be used in the event that the original scope of work changes during the course of the contract.

1. Materials according to the detailed estimate prepared by the Contractor and approved by the Engineer.
2. Each item shall be billed at the cost price plus a mark-up percentage to cover expenses and profit. Provide supporting documentation for the cost price. A mark-up percentage must be submitted.

Mark-up : _____%

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APPENDIX 2 - COMPLETE LIST OF EACH INDIVIDUAL WHO ARE CURRENTLY DIRECTORS OF THE BIDDER

NOTE TO BIDDERS

WRITE DIRECTOR'S SURNAMES AND GIVEN NAMES IN BLOCK LETTERS

<i>SURNAME</i>	<i>NAME</i>	<i>TITLE</i>
<hr/>	<hr/>	<hr/>
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Statement of Work

The statement of work constitutes the specifications within the meaning of the general conditions of this call for tenders and the resulting contract.

1.0 Description of work required

Performance of the work on site in the boiler room located in Building 400, 101 Champlain Blvd., Quebec City. Supply of the labour and materials to carry out complete retubing of two Volcano Model ME-1250C-12 boilers (#1 and #3), as well as complete updating of the safety controls and panel, including recertification of the entire system. The supplier has the opportunity to submit prices for options A and B. Option A includes items 1.1, 1.2 and 1.3. Option B includes items 1.1, 1.3 and 1.4.

1.1 Boiler retubing

Work shall include, but is not necessarily limited to:

- Complete removal of all the tubes;
- Removing all refractory materials in the boiler;
- Supplying and installing all the new tubes, of the same diameter as the existing tubes, bent in accordance with the manufacturer's original specifications;
- Preparing the boiler for performance of a hydrostatic pressure test;
- Installing all the requisite new refractory materials, in accordance with the manufacturer's original specifications;
- Repairing and painting the boiler's external panels;
- Replacing and installing the external thermal insulation;
- Performing the hydrostatic pressure test and providing the attestations of certification of the boiler;
- Performing all other related work required to carry out the work described above, but not specifically listed;
- Taking the necessary measures for dismantling of materials containing asbestos; consult the applicable standards: Safety Code for the Construction Industry, section 3.23;
- Disposal off site of all components removed in accordance with environmental standards, and clean-up of the site during and after the work.

1.2 Option A - Updating of boiler controls, safety equipment and burners

Following replacement of the boiler tubes (boilers #1 and 3), the boiler controls and burners must be updated in accordance with the applicable codes and standards. The system must be re-started and each component must be tested in order to ensure safe and optimal boiler operation; recertification is required.



Work shall include, but is not necessarily limited to:

- Removing all control wiring from the two boilers and burners;
- Removing all the control components of the two boilers and burners;
- Supplying and installing all the necessary control and safety components;
- Supplying and installing all necessary wiring;
- Replacing any defective components;
- Testing all the control and safety components of the two boilers;
- Producing a complete wiring diagram and posting it on the control panel, in addition to providing a copy in PDF format;
- Providing certification and proof of re-commissioning for each boiler;
- Disposal off site of all components removed in accordance with environmental standards, and clean-up of the site during and after the work.

All defective parts and wiring shall be replaced by new components of the same quality as the original, following the manufacturer's recommendations and plans and approved by the PWGSC Representative.

1.3 Replacement of the boilers' condensate tank

The boilers' condensate tank has reached the end of its useful life and must be replaced.

Work shall include, but is not necessarily limited to:

- Disconnecting the condensate tank components (injector, water inlet valve, water level gauge, etc.) and setting them aside;
- Removing and disposing of the insulation wool;
- Removing and disposing of the condensate tank;
- Providing and installing a new stainless steel condensate tank of the same capacity with an access door;
- Connecting the existing components to the new tank and adjusting the levels;
- Leak testing of the tank and tank connections;
- Following the leak test, insulating the tank in accordance with standards;
- Replacing the insulation and the existing tubing that must be modified or that is not recoverable;
- Taking the necessary measures for dismantling of materials containing asbestos; consult the applicable standards: Safety Code for the Construction Industry, section 3.23;
- Disposal off site of all components removed in accordance with environmental standards, and clean-up of the site during and after the work.

1.4 Option B - Replacement of the boiler burners and safety controls

Following replacement of the tubes in the two boilers, the burners and controls of the two boilers must be replaced in accordance with the applicable codes and standards. The system must be re-started and each component must be tested in order to ensure safe and optimal boiler operation; recertification is required. This option takes into consideration that the work in Part 1.2:



Updating of boiler controls, safety equipment and burners, is included in option 1: Replacement of the burners and safety controls.

Work shall include, but is not necessarily limited to:

- Removing all the control wiring from the two boilers and burners;
- Removing all the control components of the two boilers and burners;
- Removing and disposing of the burner and all its components;
- Removing and disposing of the burner tubing, wiring, etc.;
- Supplying and installing a new 600-volt modulating 100% natural gas burner: such as Weishaupt WM-GL20/2-A.ZM-T or equivalent;
- Supplying and installing all the necessary wiring;
- Supplying and installing all the necessary components (tubing, valve, etc.);
- Supplying and installing all the necessary control and safety components;
- Testing all the control, safety and burner components of each boiler;
- Producing a complete wiring diagram and posting it on the control panel, in addition to providing a copy in PDF format;
- Providing complete manuals for the burners;
- Providing certification and proof of re-commissioning of the system;
- Disposal off site of all components removed in accordance with environmental standards, and clean-up of the site during and after the work.

2.0 Temporary external boiler

Supplying and installing an external boiler

In the event of a delay in completion of the work, the Contractor shall provide a boiler with a capacity of 125 HP with all the necessary equipment for steam distribution in the existing system. This boiler will be installed outside the building next to the boiler room.

Work shall include, but is not necessarily limited to:

- Supplying a complete and fully operational external boiler with a capacity of at least 125 HP;
- Supplying and connecting all the services necessary for its operation (gas, steam, condensate, water, electricity, etc.).
- Start-up of the system.
- Dismantling of the boiler and service connections (gas, steam, condensate, water, electricity, etc.) at the end of the use period.



General

- Contractor will be granted access to the site between 7:30 am and 4:00 pm weekdays, excluding holidays (June 24, July 1 and September 2).
- Contractor must register at the gate house on entering and exiting the site.
- Duration of the work: 8 weeks.
- Operational objectives: the boiler room is to be functional by mid-September.
- Provide training to PWGSC maintenance technicians.
- Provide full commissioning as well as complete technical documentation of all new equipment added or updated (three hard copies and one electronic copy).

HEALTH AND SAFETY - GENERAL

1. The contractor must manage his activities such that the health and safety of his personnel, the occupants of the building or installation, and the public, as well



as environmental protection, always take precedence over issues of cost or work scheduling.

In addition, the contractor must respect the whole of the requirements of this specification, in particular:

2. Respect at all times the provisions of the Act Respecting Occupational Health and Safety, the Regulation respecting Occupational Health and Safety, and the Safety Code for the Construction Industry, where applicable.
3. Acknowledge and assume all the tasks and obligations which customarily devolve upon a principal Contractor under the terms of the Act Respecting Occupational Health and Safety (R.S.Q., chapter S-2.1) and the Construction Safety Code (S-2.1, r.6).
4. Provide the Departmental Representative with a work safety plan specific to the whole of the activities that can be realized in the building at least 10 days before the beginning of work. The contractor must update his program thereafter if the work differ from the initial forecasts. The Departmental Representative can, according to the reception of the program and constantly during the contract, to require that the program be modified or supplemented for better reflecting the reality of the work environment. The contractor must then make the necessary corrections before the beginning of work.

The work safety program must be based on the hazards identified and must take account of all information and requirements of this specification. The program must be applied throughout the contract and must fulfill the following requirements.

- a) identifies the risks for each category of task to be carried out under the contract and the corresponding preventive measures based on regulatory requirements.
- b) identifies the person responsible for applying the preventive measures.
- c) considers the risks that could affect the health and safety of the workers, the occupants of the building or installation, and the public.
- d) includes a procedure in the event of accident.
- e) includes an inspection schedule for the work site based on your risk identification.
- f) identifies repair tasks that could possibly be assigned under this contract.



- g) includes written commitment from all parties to comply with the prevention program.
5. Notice of site opening : before work begins, provide the Commission *de la santé et de la sécurité du travail* a Notice of site opening. A copy of such notice shall be submitted to Departmental Representative at the same time and another posted in full view at the site. During demobilization, a notice of site closing shall be submitted to the CSST, with copy to Departmental Representative.
 6. Prior to use of mechanical equipment, provide the Departmental representative with a mechanical inspection certificate for machinery used in the work, signed by a competent mechanic (e.g. lift platforms).
 7. Plans and certificates of compliance : Submit to the CSST and to Departmental Representative a copy signed and sealed by engineer of all plans and certificates of compliance required pursuant to the Construction Safety Code (S-2.1, r. 6), or by any other legislation or regulation or by any other clause in the specifications or in this contract. Copies of these documents must be on hand at the site at all times.
 8. For use of equipment for lifting persons or materials, ensure that the inspections required by the standards are met and be able to provide a copy of certificates of inspection upon request of Representative of the Ministry.
 9. Regardless of the number of workers, designate one person as responsible for health and safety at the work site, and grant him/her the authority to order a work stoppage and resumption should he/she deem it necessary for health and safety reasons.
 10. Follow first aid and first responder standards in compliance with applicable policies and regulations, as well as any other provision of this specification.
 11. Provide the Departmental Representative with copies of the training certificates required for work covered in this specification and the work safety plan (e.g. asbestos, lockout, first aid, Health and Safety on Construction Sites, etc.).
 12. At least three days prior to using controlled products at the work site, provide the Departmental Representative with material safety data sheets for these products.
 13. Make sure of the maintenance and the good condition of the material, the equipment, the tools and the protective gear used to carry out work. Equipment, tools and protective gear which cannot be installed, fitted or used without



compromising the health or safety of workers or the public shall be deemed inadequate for the work to be executed. The Departmental Representative reserves the right to prohibit to use of this material of tools considered to be dangerous, defective or not suitable.

14. Inspect the work site and give the inspection grids, pursuant to section 4e) of this document, duly filled out at least once a week to the Departmental Representative.
15. Make sure you are familiar with the emergency plan for the building or installation, and provide your workers with training and information so they are capable of implementing it.
16. Make all necessary arrangements to ensure effective communication of safety and health information at the site. As they arrive on site, all workers must be informed of their rights and obligations pertaining to the site specific safety program. The Contractor must insist on their right to refuse to perform work which they feel may threaten their own health, safety or physical integrity or that of other persons at the site. The Contractor must keep and update a written record of all information transmitted with signatures of all affected workers.
17. The following information and documents must be posted in a location readily accessible to all workers:
 1. **Notice of site opening;**
 2. **Identification of principal Contractor;**
 3. **Company OSH policy;**
 4. **Site-specific safety program;**
 5. **Emergency plan;**
 6. **Data sheets for all hazardous material used at the site;**
 7. **Minutes of site committee meetings;**
 8. **Names of site committee representatives;**
 9. **Names of those with first-aid training;**
 10. **Action reports and correction notices issued by the CSST.**
18. Advise your workers that they have the right to refuse any work that poses a danger to their health or safety.
19. Mark off the work area; control access and barricade as needed.
20. Take all necessary measures to keep the work site clean and orderly for the duration of the work, and at the end of each workday, ensure nothing at the work site represents a safety hazard.



21. When a worker is required to work alone in an isolated place where it is impossible for him/her to obtain help, identify the risks involved and provide the Departmental Representative with a procedure aimed at eliminating these risks and rapidly obtaining help in the event of an emergency.
22. Whenever a source of danger not defined in the specifications or identified in the preliminary site inspection arises as a result of or in the course of the work, immediately suspend work, take appropriate temporary measures to protect the workers and the public and notify Departmental Representative, both verbally and in writing. Then the Contractor must modify or update the site specific safety program in order to resume work in safe conditions.
23. Immediately take all necessary measures to correct any lapses from legislative or regulatory requirements and any hazards identified by a government inspector, by the Departmental Representative, by the site safety and health coordinator or during routine inspections.
24. Submit to Departmental Representative written confirmation of all measures taken to correct lapses and hazardous situations.
25. Without limiting the scope of previous sections, Departmental Representative may order cessation of work if, in his/her view, there is any hazard or threat to the safety or health of site personnel or the public or to the environment.
26. In the event of an unexpected incident, take all necessary measures, including imposing a work stoppage, to protect the health and safety of the workers and the public, and immediately notify the Departmental Representative.
27. Submit to Departmental Representative within 24 hours a copy of any inspection report, correction notice or recommendation issued by federal or provincial inspectors.
28. Submit to Departmental Representative within 24 hours an investigation report for any accident involving injury and any incident exposing a potential hazard.
29. Certificate of compliance delivered by the CSST: The certificate of compliance is a document delivered by the CSST confirming that the contractor is in rule with the CSST, i.e. that he had pay out all the benefits concerning this contract. This document must be delivered to Departmental Representative at the end of the work.



HEALTH AND SAFETY : LOCK OUT

1. For every work on energized equipment or equipment that may be started accidentally, the Contractor shall draw up and implement a lockout procedure and complete the Request for Electrical Isolation Form provided by the Manager in Charge of Worksite.

Although the hereunder list is not exhaustive, here are some examples for which the use of the form is obligatory:

- 1) main building power feeders
- 2) feeder supply panels and sub-panels
- 3) bus ducts
- 4) motor control centres
- 5) emergency power circuits
- 6) fire alarm and fire protection equipment
- 7) mechanical protective equipment
- 8) alarm circuit for building services, including all heating, ventilating and air conditioning equipment
- 9) circuits supplying more than one (1) piece of equipment
- 10) circuits affecting one (1) single piece of equipment used in a cooling or heating system.

After having completed the form, the Contractor, shall have it countersigned by the Manager in Charge of Worksite before starting work.

2. Notwithstanding the previous paragraphs, the Contractor shall, in emergency situation, receive an oral guarantee of isolation of the Manager in Charge of Worksite and immediately countersign the request of electrical isolation.
3. The procedure requested at paragraph 1 must comply with the principles listed in the “*Le cadenassage*” pamphlet published by the *Association paritaire pour la santé et la sécurité du travail secteur construction (ASP Construction)*.
4. Supervisors and all workers concerned must have followed ASP Construction’s “*Les techniques de cadenassage*” course [(514 355-6190 or 1 800 361-2061)] or an equivalent course given by another firm.
5. Identify every work that must absolutely be done on live equipment and establish the safety measures that will be applied, including the personal protective equipment.



HEALTH AND SAFETY : SPECIFIC CONDITIONS FOR CONFINED SPACES

In addition to the requirements of sections above, the following measures shall be strictly applied.

1. The Contractor's prevention program shall include a written procedure which identifies:

- Necessary work tools;
- Instruments, installed or to be installed in the confined space, and measures to take for their installation, use, maintenance, protection and moving;
- Pipes and conduits entering the confined space;
- Risks and security measures to be taken depending on the work to be carried out;
- Hazardous material that may be found in the confined space;
- Appropriate rescue methods and equipment as well as emergency plan.

2. For any work in a confined space, the Contractor shall obtain an Access Permit from the Departmental Representative. The permit shall be valid for the duration of a work shift and shall take into account information contained in the assessment report and special conditions related to the work to be carried out.

3. When the work to be carried out includes operations such as welding, cutting or any other activity that creates flames or sparks, the Contractor shall obtain an Hot Work Permit from the Departmental Representative.

4. All persons having access to the confined space and the safety guard shall have the following training certificates:

- Safety for work in PWGSC confined spaces (ASP Construction or equivalent training) which must include especially the following components:
 - Hazards and safety measures related to confined spaces;
 - Access procedures;
 - Use of ventilating equipment (ASP Construction or equivalent training)
 - Use of safety harness (ASP Construction or equivalent training)
- Use and maintenance of respiratory protection equipment (ASP Construction or equivalent training)
- Gas detection equipment (ASP Construction or equivalent training)



- Workplace First Aid and CPR (organization recognized by the CSST)
- When the use of air adduction respirators or autonomous respirators is planned for, thorough training in the preparation, maintenance and use of such equipment (Manufacturer, supplier or recognized organization).
- In remote areas where no local rescue and emergency intervention unit is available, the Contractor shall designate persons who are capable of carrying out rescue operations in confined spaces. First-aid attendant designated by the Contractor shall have relevant training in the use of rescue equipment.

5. All persons who must use air adduction respirators or autonomous respirators shall present a medical certificate confirming that they are fit to use this kind of equipment. This certificate shall be valid for two years.

6. Employees who are required to work in sewage collection systems or other similar systems shall be immunized against infectious diseases, in compliance with the immunization program prescribed by Health Canada, which is, against diphtheria and tetanus and for work to be done at the Correctional Service Canada, against hepatitis « B » .

7. The antidiphtheria-tetanus vaccination is strongly recommended, though it is not mandatory.

8. The Contractor shall establish emergency and rescue procedures in co-operation with municipal and ambulance services. These procedures, together with the relevant phone numbers and the whereabouts of the nearest phone shall be conspicuously posted near the work station.

9. Before entry into a confined space, and every 15 minutes thereafter, the Contractor shall take readings of oxygen concentration, flammable gases and all toxic gases likely to be present, carbon monoxide and hydrogen sulphide in particular. These readings shall be recorded in a register, unless the detecting devices are equipped with an alarm and operate on a continuous basis. Detecting devices that are used shall be calibrated and adjusted by a competent person according to the manufacturer's directives, so that the alarms comply with the limits set out on the permit. NOTE: for welding and cutting tasks, readings of concentration must be done on a continuous basis.



10. The Contractor is responsible for the provision and maintenance of gas detecting devices. The Engineer may at any time require the Contractor's equipment to be checked for accuracy by a qualified person. In the event of failure of a detecting device, work shall be suspended immediately and all workers shall leave the confined space. In these circumstances, no claim for time lost shall be accepted.

11. If a detecting device alarm is set off, all workers shall leave the confined space. The Contractor shall then find the source of contamination, neutralize it, ventilate the confined space to eliminate contaminant residues and authorize access to the confined space only when concentrations of oxygen and gas have returned to normal.

12. Compressed gas cylinders or welding equipment shall not be brought into confined spaces: this equipment shall remain outside and shall not block entrances or exits; all cylinders shall be properly secured.

13. Tools and electrical devices used to gain access to confined spaces shall be grounded and, when necessary, designed to be explosion-proof. All equipment must be connected to a ground fault interrupter outlet or to a step-down transformer. The Contractor shall, at his own cost, hire a qualified electrician to adjust power receptacles and/or circuit breakers that he intends to use which do not meet these criteria.

14. The Contractor shall provide a ventilation system to keep concentrations of contaminants below admissible limits.

15. The Contractor shall put up posters to prevent unauthorized persons from entering the confined space.

16. When it is impossible to maintain the noise level under 85 dB, the Contractor shall provide all workers with ear protection adapted to the desired level of attenuation and work to be carried out.

17. The Contractor shall ensure that all workers wear the required personal protection equipment.

18. The Contractor shall assign a competent person to assume the function of safety guard. The safety guard shall:



- Be properly informed of work procedures in a confined space.
 - Ensure constant communication with all workers in the confined space. The instructions that are applied shall be adapted to confined spaces. The Contractor shall choose means of communication according to identified risks and other relevant factors, that is the protection equipment the workers must wear, noise levels in confined spaces and surrounding areas, remoteness, lighting conditions, etc.
 - Be familiar with gas detecting devices and see to their proper functioning for the duration of the work.
 - Be familiar with auxiliary ventilation systems and see to their proper functioning for the duration of the work.
 - Be familiar with emergency procedures.
 - Ensure that:
 - All workers who enter the confined space respect the Contractor's work procedure.
 - The working conditions and the environment inside the confined space are in no way detrimental to workers' health and safety.
19. The safety guard shall, at all times, be posted at the entrance of the confined space and shall not leave his station as long as there is a worker inside the confined space.
20. The Contractor shall designate a person to be in charge of the safety of the confined space. This person shall be present at all times on the job site.
21. The same person may act as a security guard and be responsible for the safety of confined spaces, provided all requirements of both functions are met.



HEALTH AND SAFETY : ASBESTOS

Before undertaking work liable to emit asbestos dust, the contractor must :

- Provide a written procedure considering all items specified in the Safety Code for the construction industry S-2.1, r-6.
- Show that the worker has been trained of the risks, prevention methods and safe working methods (ASP Construction) (art.3.23.7).
- Show that he has under the hand all the material and the equipment necessary to the respect of the procedure and of the execution of an safety work.

HEALTH AND SAFETY : HOT WORK

Hot work means any work where a flame is used or a source of ignition may be produced, i.e., riveting, welding, cutting, grinding, burning and heating.

Before the beginning of work, the contractor must have received the “Hot Work Permit” of PWGSC (ELF 367) completed by the Manager in Charge of Worksite when the duties to be undertaken involve hot work..

Work on construction sites must be carried out in compliance with Fire Commissioner of Canada Standard CI 301, Standard for Construction Operations, June 1982. This standard is available at the following website:

http://www.hrsdc.gc.ca/eng/labour/fire_protection/policies_standards/commissioner/301/page00.shtml

A working portable fire extinguisher suitable to the fire risk shall be available and easily accessible within a 5 m radius from any flame, spark source or intense heat.

An individual shall be appointed to go on rounds (fire) for a period of 30 minutes after the end of the shift. This individual shall countersign the permit and give it to the person in charge of the work site (or the individual he/she appoints) after the 30 minutes period.

The storage of propane cylinders shall comply with the *CAN/CSA-B149.2-F00 Propane Storage and Handling Code* and meet the specific conditions outlined in this document. The cylinders shall be stored outdoors, in a safe place, away from any unauthorized handling, in a storage cabinet specially designed for this purpose. The cylinders shall be securely kept upright and locked at all times in a place where no vehicles are allowed, unless the cylinders are protected by bars or the equivalent.

All of the cylinders used or stored on the work site shall be equipped with a collar designed to protect the valve.



Filling the cylinders on the work site is forbidden, unless a procedure compliant with the *CAN/CSA B149.2* standard is approved and authorized by the Engineer.

The works must be carried out in accordance with the articles “3.13 Compressed gas supply” and “3.14 Welding and cutting” of the *Safety Code for the construction industry, S-2.1, r. 6*.

Work on construction sites must be carried out in compliance with Fire Commissioner of Canada Standard CI 302, Standard for Welding and Cutting, June 1982. This standard is available at the following website:

http://www.hrsdc.gc.ca/eng/labour/fire_protection/policies_standards/commissioner/302/page05.shtml

The welding and cutting devices are excessively dangerous with regard to the fire risk on the building work place. The following precautions must be taken at the time of this type of work :

- Store all compressed gas cylinder on a fireproof fabrics and make sure that the room is well ventilated.
- Store all oxygen cylinders more than 6 metres from a flammable gas cylinder (ex: acetylene) or a combustible such as oil or grease, unless the oxygen cylinder is separated from it by a wall made of non-combustible material as mentioned in the article 3.13.4 of the *Safety Code for the construction industry, S-2.1, r. 6*.
- Set up fireproof fabrics when work of welding is done in superposition and that there is risk of spark fall.
- Store the bottles far from all heat sources.
- Not to store the bottles close to the staircases, exits, corridors and elevators.
- Not to put acetylene in contact with metals with metals such as silver, mercury, copper and alloys of brass having more than copper 65%, to avoid the risk of an explosive reaction.
- Check that welding equipments with electric arc has the necessary tension and are grounded.
- Ensure that the conducting wire of the electric welding equipment are not damaged.
- Place the welding equipment on a flat ground away from the bad weather.
- Move away or protect the combustible materials which can be near the welding equipment.
- Prohibition to weld or cut any closed container.
- Envisage protection measures when welding or cutting is carried out near drains, tanks or other containers containing inflammable materials.
- Do not perform any cutting, welding or work with naked flame on a container, a tank, a pipe or other container containing a flammable or explosive substance unless:
 - Air Samples indicating that work can be made without danger has been taken;
or
 - Provisions to ensure the safety of the workers has been done.