

**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
Bid Receiving Public Works & Government  
Services Canada/Réception des soumissions Travaux  
publics et Services gouvernementaux Canada  
1713 Bedford Row  
Halifax, N.S./Halifax, (N.E.)  
B3J 1T3  
Halifax  
Bid Fax: (902) 496-5016

**Request For a Standing Offer**  
**Demande d'offre à commandes**

National Master Standing Offer (NMSO)  
Offre à commandes principale et nationale (OCPN)

Canada, as represented by the Minister of Public Works and  
Government Services Canada, hereby requests a Standing Offer  
on behalf of the Identified Users herein.

Le Canada, représenté par le ministre des Travaux Publics et  
Services Gouvernementaux Canada, autorise par la présente,  
une offre à commandes au nom des utilisateurs identifiés  
énumérés ci-après.

**Comments - Commentaires**

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

**Issuing Office - Bureau de distribution**  
Real Property Contracting  
1713 Bedford Row  
P.O. Box 2247/C.P.2247  
Halifax, N.S./Halifax, (N.E.)  
B3J 3C9  
Halifax

<b>Title - Sujet</b> ASBESTOS ABATEMENT	
<b>Solicitation No. - N° de l'invitation</b> W010C-14C001/A	<b>Date</b> 2014-03-13
<b>Client Reference No. - N° de référence du client</b> W010C-14-C001	<b>GETS Ref. No. - N° de réf. de SEAG</b> PW-\$PWA-121-5071
<b>File No. - N° de dossier</b> PWA-3-70098 (121)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2014-04-24</b>	
<b>Delivery Required - Livraison exigée</b> SEE HEREIN	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Russell (PWA), Alex	<b>Buyer Id - Id de l'acheteur</b> pwa121
<b>Telephone No. - N° de téléphone</b> (902)496-5168 ( )	<b>FAX No. - N° de FAX</b> (902)496-5016
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> DEPARTMENT OF NATIONAL DEFENCE WILLOW PARK, BUILDING 7 STN FORCES, P.O. BOX 99000 HALIFAX NOVA SCOTIA B3K 5X5 Canada	
<b>Security - Sécurité</b> This request for a Standing Offer does not include provisions for security. Cette Demande d'offre à commandes ne comprend pas des dispositions en matière de sécurité.	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b>	<b>Facsimile No. - N° de télécopieur</b>
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b> <b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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W010C-14C001/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

pwa121

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

W010C-14-C001

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PWA-3-70098

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## **PART 1 - GENERAL INFORMATION**

### **1. Introduction**

The Request for Standing Offers (RFSO) is divided into seven parts plus attachments and annexes, as follows:

Part 1 General Information: provides a general description of the requirement;

Part 2 Offeror Instructions: provides the instructions applicable to the clauses and conditions of the RFSO;

Part 3 Offer Preparation Instructions: provides offerors with instructions on how to prepare their offer to address the evaluation criteria specified;

Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria which must be addressed in the offer, and the basis of selection;

Part 5 Certifications: includes the certifications to be provided;

Part 6 Security, Financial and Insurance Requirements: includes specific requirements that must be addressed by offerors; and

Part 7 7A, Standing Offer, and 7B, Resulting Contract Clauses:

7A, includes the Standing Offer containing the offer from the Offeror and the applicable clauses and conditions;

7B, includes the clauses and conditions which will apply to any contract resulting from a call-up made pursuant to the Standing Offer.

The Annexes include the Statement of Work, the Basis of Payment and any other annexes.

### **2. Summary**

Work under this Standing Offer Agreement comprises the furnishings of all labour, equipment, and tools required to remove all types of asbestos containing materials and obtaining all necessary permits for transportation and disposal of asbestos waste as specified herein at various location within CFB Halifax, Department of National Defence. The period of this Standing Offer is for one year with two additional one-year options.

There is a security requirement associated with this requirement. For additional information, consult Part 6 - Security, Financial and Insurance Requirements, and Part 7A - Standing Offer. For more information on personnel and organization security screening or security clauses, offerors should refer to the Canadian Industrial Security Directorate (CISD), Industrial Security Program of Public Works and Government Services Canada (<http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>) website.

For services requirements, Offerors in receipt of a pension or a lump sum payment must provide the required information as detailed in article 3 of Part 2 of the Request for Standing Offers (RFSO).

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

### 3. Security Requirement

There is a security requirement associated with the requirement of the Standing Offer. For additional information, see Part 6 - Security, Financial and Insurance Requirements, and Part 7 - Standing Offer and Resulting Contract Clauses.

### 4. Debriefings

After issuance of a standing offer, offerors may request a debriefing on the results of the request for standing offers process. Offerors should make the request to the Standing Offer Authority within 15 working days of receipt of the results of the request for standing offers process. The debriefing may be in writing, by telephone or in person.

## PART 2 - OFFEROR INSTRUCTIONS

### 1. Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the Request for Standing Offers (RFSO) by number, date and title are set out in the Standard Acquisition Clauses and Conditions (<http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp>) Manual issued by Public Works and Government Services Canada.

Offerors who submit an offer agree to be bound by the instructions, clauses and conditions of the RFSO and accept the clauses and conditions of the Standing Offer and resulting contract(s).

The 2006 (2014-03-01) Standard Instructions - Request for Standing Offers - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the RFSO.

Subsection 5.4 of 2006, Standard Instructions - Request for Standing Offers - Goods or Services - Competitive Requirements, is amended as follows:

Delete: sixty (60) days

Insert: ninety (90) days

### 2. Submission of Offers

Offers 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 Request for Standing Offers.

### 3. Former Public Servant

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPS, offerors must provide the information required below before the issuance of a standing offer. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of offers is completed, Canada will inform the Offeror of a time frame within which to provide the information.

Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the offer non-responsive.

## Definitions

For the purposes of this clause,

"former public servant" is any former member of a department as defined in the Financial Administration Act R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the Public Service Superannuation Act (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the Supplementary Retirement Benefits Act, R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the Canadian Forces Superannuation Act, R.S., 1985, c. C-17, the Defence Services Pension Continuation Act, 1970, c. D-3, the Royal Canadian Mounted Police Pension Continuation Act, 1970, c. R-10, and the Royal Canadian Mounted Police Superannuation Act, R.S., 1985, c. R-11, the Members of Parliament Retiring Allowances Act, R.S. 1985, c. M-5, and that portion of pension payable to the Canada Pension Plan Act, R.S., 1985, c. C-8.

## Former Public Servant in Receipt of a Pension

As per the above definitions, is the Offeror a FPS in receipt of a pension? YES ( ) NO ( )

If so, the Offeror must provide the following information, for all FPS in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Offerors agree that the successful Offeror's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

## Work Force Adjustment Directive

Is the Offeror a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? YES ( ) NO ( )

If so, the Offeror must provide the following information:

- 
- a. name of former public servant;
  - b. conditions of the lump sum payment incentive;
  - c. date of termination of employment;
  - d. amount of lump sum payment;
  - e. rate of pay on which lump sum payment is based;
  - f. period of lump sum payment including start date, end date and number of weeks;
  - g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

#### **4. Enquiries - Request for Standing Offers**

All enquiries must be submitted in writing to the Standing Offer Authority no later than five (5) calendar days before the Request for Standing Offers (RFSO) closing date. Enquiries received after that time may not be answered.

Offerors should reference as accurately as possible the numbered item of the RFSO to which the enquiry relates. Care should be taken by offerors to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the questions or may request that offerors do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all offerors. Enquiries not submitted in a form that can be distributed to all offerors may not be answered by Canada.

#### **5. Applicable Laws**

The Standing Offer and any contract resulting from the Standing Offer must be interpreted and governed, and the relations between the parties determined, by the laws in force in Nova Scotia.

Offerors may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their offer, 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 offerors.

### **PART 3 - OFFER PREPARATION INSTRUCTIONS**

#### **1. Offer Preparation Instructions**

Canada requests that offerors provide their offer in separately bound sections as follows:

- Section I: Technical Offer (1 hard copy)
- Section II: Financial Offer (1 hard copy)
- Section III: Certifications (1 hard copy)

Prices must appear in the financial offer only. No prices must be indicated in any other section of the offer.

Canada requests that offerors follow the format instructions described below in the preparation of their offer.

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to that of the Request for Standing Offers.

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>). To assist Canada in reaching its objectives, offerors 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 Offer

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

### Section II: Financial Offer

Offerors must submit their financial offer in accordance with the Annex B, Basis of Payment. The total amount of Goods and Services Tax or Harmonized Sales Tax must be shown separately, if applicable.

### Payment by Credit Card

Canada requests that offerors complete one of the following:

- (a)  Government of Canada Acquisition Cards (credit cards) will be accepted for payment of call-ups against the standing offer.

The following credit card(s) are accepted:

VISA \_\_\_\_\_

Master Card \_\_\_\_\_

- (b)  Government of Canada Acquisition Cards (credit cards) will not be accepted for payment of call-ups against the standing offer.

The Offeror is not obligated to accept payment by credit card.

Acceptance of credit cards for payment of call-ups will not be considered as an evaluation criterion.

### Section III: Certifications

Offerors must submit the certifications required under Part 5.

## PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

### 1. Evaluation Procedures

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Offers will be assessed in accordance with the entire requirement of the Request for Standing Offers including the technical and financial evaluation criteria.

### **1.1. Technical Evaluation**

Bidder must demonstrate 5 years experience in the removal and disposal of hazardous materials identified in Annex A. Provide details of projects (client, type of material, annual cost, dates) for each year.

Bidder must provide 2 references with contact info in good order for removal and disposal of hazardous material projects.

It is mandatory that bidders submit firm prices/rates for ALL items in the cost form, including no cost items.

### **1.2 Financial Evaluation**

The price of the offer will be evaluated in Canadian dollars, the Goods and Services Tax or the Harmonized Sales Tax excluded, FOB destination, Canadian customs duties and excise taxes included.

## **2. Basis of Selection**

An offer must comply with the requirements of the Request for Standing Offers and meet all mandatory technical evaluation criteria to be declared responsive. The responsive offer with the lowest evaluated price will be recommended for issuance of a standing offer.

## **PART 5 - CERTIFICATIONS**

Offerors must provide the required certifications and associated information to be issued a standing offer.

The certifications provided by offerors to Canada are subject to verification by Canada at all times. Canada will declare an offer non-responsive, will have the right to set-aside a standing offer, or will declare a contractor in default in carrying out any of its obligations under any resulting contracts, if any certification made by the Offeror is found to be untrue whether made knowingly or unknowingly during the offer evaluation period, during the Standing Offer period, or during the contract period.

The Standing Offer Authority will have the right to ask for additional information to verify the Offeror's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Standing Offer Authority may render the Offer non-responsive, may result in the setting aside of the Standing Offer or constitute a default under the Contract.

### **1. Certifications Required Precedent to Issuance of a Standing Offer**

#### **1.1 Integrity Provisions - Associated Information**

By submitting an offer, the Offeror certifies that the Offeror and its Affiliates are in compliance with the provisions as stated in Section 01 Integrity Provisions - Offer of Standard Instructions 2006 (OR insert 2007, as applicable). The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

#### **1.2 Federal Contractors Program for Employment Equity - Standing Offer Certification**

By submitting an offer, the Offeror certifies that the Offeror, and any of the Offeror's members if the Offeror is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list ([http://www.labour.gc.ca/eng/standards\\_equity/eq/emp/fcp/list/inelig.shtml](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)) available from Employment and Social Development Canada-Labour's website.

Canada will have the right to declare an offer non-responsive, or to set-aside a Standing Offer, if the Offeror, or any member of the Offeror if the Offeror is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of issuing of a Standing Offer or during the period of the Standing Offer.

## **2. Additional Certifications Required Precedent to Issuance of a Standing Offer**

The certifications listed below should be completed and submitted with the offer, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Standing Offer Authority will inform the Offeror of a time frame within which to provide the information. Failure to comply with the request of the Standing Offer Authority and to provide the certifications within the time frame provided will render the offer non-responsive.

### **2.1 Additional Certifications**

The Offeror must provide proof satisfactory to the Engineer that all employees have attended an asbestos abatement course, of not less than two days duration.

Confined space work may be required to be carried out during the period of the Standing Offer. The Offeror must have personnel certified in "Confined Space Work" as well as "Asbestos Abatement" and must provide proof of Certification when requested.

Before commencing work, obtain from the appropriate agency and submit to Engineer all necessary permits for transporting and disposal of asbestos waste. Ensure that dump operator is fully aware of hazardous nature of material being dumped and proper methods of disposal. Submit proof satisfactory to the Engineer that suitable arrangements have been made to receive and properly dispose of asbestos waste.

## **PART 6 - SECURITY AND INSURANCE REQUIREMENTS**

### **1. Security Requirement**

1. At the Request for Standing Offers closing date, the following conditions must be met:

- (a) the Offeror must hold a valid organization security clearance as indicated in Part 7A - Standing Offer;
- (b) the Offeror's proposed individuals requiring access to classified or protected information, assets or sensitive work site(s) must meet the security requirement as indicate in Part 7A - Standing Offer;
- (c) the Offeror must provide the name of all individuals who will require access to classified or protected information, assets or sensitive work sites;

(if there is a requirement for safeguard measures at the Offeror's location, add the following)

- (d) the Offeror's proposed location of work performance or document safeguarding must meet the security requirement as indicated in Part 7A - Standing Offer;

(e) the Offeror must provide the address(es) of proposed location(s) of work performance or document safeguarding as indicated in Part 3 - Section IV Additional Information.

2. For additional information on security requirements, offerors should refer to the Canadian Industrial Security Directorate (CISD), Industrial Security Program of Public Works and Government Services Canada (<http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>) website.

## 2. Insurance Requirements

The Offeror must provide a letter from an insurance broker or an insurance company licensed to operate in Canada stating that the Offeror, if issued a standing offer as a result of the request for standing offer, can be insured in accordance with the Insurance Requirements specified in Annex E.

If the information is not provided in the offer, the Standing Offer Authority will so inform the Offeror and provide the Offeror with a time frame within which to meet the requirement. Failure to comply with the request of the Standing Offer Authority and meet the requirement within that time period will render the offer non-responsive.

## PART 7 - STANDING OFFER AND RESULTING CONTRACT CLAUSES

### A. STANDING OFFER

#### 1. Offer

1.1 The Offeror offers to fulfill the requirement in accordance with the Requirement at Annex A.

#### 2. Security Requirement

1. The Offeror must, at all times during the performance of Standing Offer, hold a valid Designated Organization Screening (DOS), issued by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC).

2. The Offeror personnel requiring access to sensitive work site(s) must EACH hold a valid RELIABILITY STATUS, granted or approved by CISD/PWGSC. Until the security screening of the Offeror personnel required by this Standing Offer has been completed satisfactorily by the CISD, PWGSC, the Offeror personnel MAY NOT ENTER sites without an escort.

3. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of CISD/PWGSC.

4. The Offeror must comply with the provisions of the:

- (a) Security Requirements Check List and security guide (if applicable), attached at Annex C;
- (b) Industrial Security Manual (Latest Edition).

#### 3. Standard Clauses and Conditions

All clauses and conditions identified in the Standing Offer and resulting contract(s) by number, date and title are set out in the Standard Acquisition Clauses and Conditions

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(<http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp>) Manual issued by Public Works and Government Services Canada.

### **3.1 General Conditions**

2005 (2014-03-01) General Conditions - Standing Offers - Goods or Services, apply to and form part of the Standing Offer.

### **3.2 Standing Offers Reporting**

The Offeror must compile and maintain records on its provision of goods, services or both to the federal government under contracts resulting from the Standing Offer. This data must include all purchases paid for by a Government of Canada Acquisition Card.

The Offeror must provide this data in accordance with the reporting requirements detailed in Annex D. If some data is not available, the reason must be indicated. If no goods or services are provided during a given period, the Offeror must still provide a "NIL" report.

The data must be submitted on a quarterly basis to the Standing Offer Authority.

The quarterly reporting periods are defined as follows:

1st quarter: April 1 to June 30;

2nd quarter: July 1 to September 30;

3rd quarter: October 1 to December 31;

4th quarter: January 1 to March 31.

The data must be submitted to the Standing Offer Authority no later than 30 calendar days after the end of the reporting period.

## **4. Term of Standing Offer**

### **4.1 Period of the Standing Offer**

The period for making call-ups against the Standing Offer is June 1, 2014 to May 31, 2015.

### **4.2 Extension of Standing Offer**

If the Standing Offer is authorized for use beyond the initial period, the Offeror offers to extend its offer for an additional two one-year periods, under the same conditions and at the rates or prices specified in the Standing Offer, or at the rates or prices calculated in accordance with the formula specified in the Standing Offer.

The Offeror will be advised of the decision to authorize the use of the Standing Offer for an extended period by the Standing Offer Authority before the expiry date of the Standing Offer. A revision to the Standing Offer will be issued by the Standing Offer Authority.

## **5. Authorities**

### **5.1 Standing Offer Authority**

The Standing Offer Authority is:

Solicitation No. - N° de l'invitation

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Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

pwa121

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

W010C-14-C001

File No. - N° du dossier

PWA-3-70098

CCC No./N° CCC - FMS No/ N° VME

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Name: Alex Russell  
Title: Supply Specialist  
Public Works and Government Services Canada  
Real Property Contracting

Address: 1713 Bedford Row, Halifax, NS B3J 3C9

Telephone: (902) 496-5168  
Facsimile: (902) 496-5016  
E-mail address: alex.russell@pwgsc.gc.ca

The Standing Offer Authority is responsible for the establishment of the Standing Offer, its administration and its revision, if applicable. Upon the making of a call-up, as Contracting Authority, he is responsible for any contractual issues relating to individual call-ups made against the Standing Offer by any Identified User.

## 5.2 Project Authority - Determined at award

The Project Authority for the Standing Offer is:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_

Telephone: \_\_\_\_ - \_\_\_\_ - \_\_\_\_\_  
Facsimile: \_\_\_\_ - \_\_\_\_ - \_\_\_\_\_  
E-mail address: \_\_\_\_\_

The Project Authority is the representative of the department or agency for whom the Work will be carried out pursuant to a call-up under the Standing Offer and is responsible for all the technical content of the Work under the resulting Contract.

## 5.3 Offeror's Representative

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_

Telephone: \_\_\_\_ - \_\_\_\_ - \_\_\_\_\_  
Facsimile: \_\_\_\_ - \_\_\_\_ - \_\_\_\_\_  
E-mail address: \_\_\_\_\_

## 6. Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a Public Service Superannuation Act (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.

## 7. Identified Users

The Identified User authorized to make call-ups against the Standing Offer is: Base Construction Engineering, Maritime Forces Atlantic, Department of National Defence.

## 8. Call-up Instrument

The Work will be authorized or confirmed by the Identified User using form PWGSC-TPSGC 942, Call-up Against a Standing Offer or electronic document.

## 9. Limitation of Call-ups

Individual call-ups against the Standing Offer must not exceed \$40,000.00 (Goods and Services Tax or Harmonized Sales Tax included).

## 10. Financial Limitation - determined at award

The total cost to Canada resulting from call-ups against the Standing Offer must not exceed the sum of \$\_\_\_\_\_ (Goods and Services Tax or Harmonized Sales Tax excluded) unless otherwise authorized in writing by the Standing Offer Authority. The Offeror must not perform any work or services or supply any articles in response to call-ups which would cause the total cost to Canada to exceed the said sum, unless an increase is so authorized.

The Offeror must notify the Standing Offer Authority as to the adequacy of this sum when 75 percent of this amount has been committed, or before the expiry date of the Standing Offer, whichever comes first. However, if at any time, the Offeror considers that the said sum may be exceeded, the Offeror must promptly notify the Standing Offer Authority.

## 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 call up against the Standing Offer, including any annexes;
- b) the articles of the Standing Offer;
- c) the general conditions 2005 (2014-03-01), General Conditions - Standing Offers - Goods or Services
- d) the general conditions 2010C (2014-03-01); General Conditions - Services (Medium Complexity);
- e) Annex A, Statement of Requirement;
- f) Annex B, Basis of Payment;
- g) Annex C, Security Requirements Check List;
- h) Annex D, Reporting Requirements;
- i) Annex E, Insurance Requirements;
- j) the Offeror's offer \_\_\_\_\_.

## 12. Certifications

### Compliance

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Compliance with the certifications provided by the Offeror is a condition of authorization of the Standing Offer and subject to verification by Canada during the term of the Standing Offer and of any resulting contract that would continue beyond the period of the Standing Offer. In the event that the Offeror does not comply with any certification or it is determined that any certification made by the Offeror in its offer is untrue, whether made knowingly or unknowingly, Canada has the right to terminate any resulting contract for default and set aside the Standing Offer.

### **13. Applicable Laws**

The Standing Offer and any contract resulting from the Standing Offer must be interpreted and governed, and the relations between the parties determined, by the laws in force in Nova Scotia.

## **B. RESULTING CONTRACT CLAUSES**

The following clauses and conditions apply to and form part of any contract resulting from a call-up against the Standing Offer.

### **1. Statement of Requirement**

The Contractor must perform the Work described in the call-up against the Standing Offer.

### **2. Standard Clauses and Conditions**

#### **2.1 General Conditions**

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

Section 13 Interest on Overdue Accounts, of 2010C (2014-03-01), General Conditions - Services (Medium Complexity) will not apply to payments made by credit cards at point of sale.

#### **2.2 Canadian Forces Site Regulations**

The Contractor must comply with all standing orders or other regulations, instructions and directives in force on the site where the Work is performed.

### **3. Term of Contract**

#### **3.1 Period of the Contract**

The Work must be completed in accordance with the call-up against the Standing Offer.

### **4. Payment**

#### **4.1 Basis of Payment**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm unit prices, as specified in Annex B for a cost of \$ \_\_\_\_\_ (determined at time of call-up). Customs duties are excluded and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

#### 4.2 Limitation of Expenditure

1. Canada's total liability to the Contractor under the Contract must not exceed \$ \_\_\_\_\_ (the amount determined at time of call-up up to the maximum detailed in Standing Offer Part A - 8. Limitation of Call-ups). Customs duties are excluded and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

2. No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:

(a) when it is 75 percent committed, or

(b) four (4) months before the contract expiry date, or

(c) as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,

whichever comes first.

3. If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

#### 4.3 Single Payment

Canada will pay the Contractor upon completion and delivery of the Work in accordance with the payment provisions of the Contract if:

a) an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;

b) all such documents have been verified by Canada;

c) the Work delivered has been accepted by Canada.

#### 4.4 Payment by Credit Card

(Use this clause if more than one credit card are accepted)

The following credit cards are accepted: \_\_\_\_\_ and \_\_\_\_\_.

#### 5. Invoicing Instructions

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1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions along with the maintenance report described in the Statement of Work of the Contract.

Invoices cannot be submitted until all work identified in the invoice has been completed and that all maintenance service call reports related to the Work identified in the invoice have been received by the Project Authority.

2. The Contractor must distribute the invoices and reports as follows:

The original and two (2) copies of the invoices and maintenance reports must be forwarded to the address shown on page 1 of the Contract for certification and payment.

## **6. Discretionary Audit**

1. The following are subject to government audit before or after payment is made:

(a) The amount claimed under the Contract, as computed in accordance with the Basis of Payment, including time charged.

(b) The accuracy of the Contractor's time recording system.

(c) The estimated amount of profit in any firm-priced element, firm time rate, firm overhead rate, or firm salary multiplier, for which the Contractor has provided the appropriate certification. The purpose of the audit is to determine whether the actual profit earned on a single contract if only one exists, or the aggregate of actual profit earned by the Contractor on a series of negotiated contracts containing one or more of the prices, time rates or multipliers mentioned above, during a particular period selected, is reasonable and justifiable based on the estimated amount of profit included in earlier price or rate certification(s).

(d) Any firm-priced element, firm time rate, firm overhead rate, or firm salary multiplier for which the Contractor has provided a "most favoured customer" certification. The purpose of such audit is to determine whether the Contractor has charged anyone else, including the Contractor's most favoured customer, lower prices, rates or multipliers, for like quality and quantity of goods or services.

2. Any payments made pending completion of the audit must be regarded as interim payments only and must be adjusted to the extent necessary to reflect the results of the said audit. If there has been any overpayment, the Contractor must repay Canada the amount found to be in excess.

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**ANNEX A**

**STATEMENT OF REQUIREMENT**

Attached.

**ANNEX B****BASIS OF PAYMENT**

<b>Table 1 - Standing Offer Period - June 1, 2014 - May 31, 2015</b>				
<b>Item</b>		<b>Estimated Usage</b>	<b>Unit Price</b>	<b>Bid Price</b>
<b>1. Unit price including all labour material and equipment for the removal of asbestos pipe covering and lagging from pipe fittings, using intermediate precautions (Glove Bag) method from 0M to 6M from the floor.</b>				
<b>(A)</b> 25mm Thick Pipe Insulation or Lagging	12mm pipe - 50mm pipe	300 M	\$ _____	\$ _____
	62mm pipe - 100mm pipe	200 M	\$ _____	\$ _____
	125mm pipe - 200mm pipe	200 M	\$ _____	\$ _____
	200mm pipe and over	200M	\$ _____	\$ _____
<b>(B)</b> 50 mm Thick Pipe Insulation or Lagging	12mm pipe - 50mm pipe	300 M	\$ _____	\$ _____
	62mm pipe - 100mm pipe	200 M	\$ _____	\$ _____
	125mm pipe - 200mm pipe	200 M	\$ _____	\$ _____
	200mm pipe and over	200 M	\$ _____	\$ _____
<b>2. Unit price including all labour, material and equipment for the removal of asbestos pipe covering and lagging from pipe fittings using intermediate precautions (Glove Bag) method over 6M from the floor.</b>				
<b>(A)</b> 25mm Thick Pipe Insulation or Lagging	12mm pipe - 50mm pipe	200 M	\$ _____	\$ _____
	62mm pipe - 100mm pipe	100 M	\$ _____	\$ _____
	125mm pipe - 200mm pipe	100 M	\$ _____	\$ _____
	200mm pipe and over	100 M	\$ _____	\$ _____
<b>(B)</b> 50mm Thick Pipe Insulation or Lagging	12mm pipe - 50mm pipe	200 M	\$ _____	\$ _____
	62mm pipe - 100mm pipe	100 M	\$ _____	\$ _____
	125mm pipe - 200mm pipe	100 M	\$ _____	\$ _____
	200mm pipe and over	100 M	\$ _____	\$ _____
<b>3. Unit price per Sq Meter to remove and dispose of the following:</b>				
Asbestos siding (shingles)		500 m <sup>2</sup>	\$ _____	\$ _____
Drywall joints		300 m <sup>2</sup>	\$ _____	\$ _____

Asbestos tile c/w adhesive & sealer	200 m <sup>2</sup>	\$ _____	\$ _____
Mould Abatement	3,000 m <sup>2</sup>	\$ _____	\$ _____
Lead Based Paint	5,000 m <sup>2</sup>	\$ _____	\$ _____
<b>4. Unit price per unit to remove and dispose of the following:</b>			
PCB Containing Ballasts	100 ballasts	\$ _____	\$ _____
<b>5. Hourly rate for tradesmen to conduct incidental asbestos removal work that has not been identified above, the Contractor will be required to provide an estimate for this work.</b>			
Supervisor	500 hours	\$ _____	\$ _____
Qualified Asbestos Removal Labourer	500 hours	\$ _____	\$ _____
<b>6. An allowance will be paid at \$_____/Km to cover travel to Debert, Windsor Armories, Mill Cove and Newport Corners. The travel to all other sites will be the Contractors responsibility. A provisional cost for Shift Differential and outside core hours, when authorized by the Engineer, will be allowed at the rate of 1.5 times for the first 4 hours, 2 times for anything after the first four hours and Sundays. Anything else will be at 1.5 times.</b>			
<b>7. Material pricing for incidental work only:</b>			
Glove Bags (Safety Strip Type) for 1/2" to 2" pipe	150 bags	\$ _____	\$ _____
Glove Bags (Safety Strip Type) for 2" to 5" pipe	150 bags	\$ _____	\$ _____
Glove Bags (Safety Strip Type) for 5" to 9" pipe	150 bags	\$ _____	\$ _____
Glove Bags (Safety Strip Type) for 9" pipe and above	20 bags	\$ _____	\$ _____
Clear Disposable Bags	500 bags	\$ _____	\$ _____
Disposal Suits	500 suits	\$ _____	\$ _____
Disposal Bags c/w warning symbols French/English	500 bags	\$ _____	\$ _____
Roll of Tape	100 rolls	\$ _____	\$ _____
Spray adhesive / 20 oz can	250 cans	\$ _____	\$ _____
Warning Signs in both official languages	150 signs	\$ _____	\$ _____
Slow drying sealant/liter	200 Litres	\$ _____	\$ _____
Polyethylene Sheeting Clear .15mm thick	1,000 m <sup>2</sup>	\$ _____	\$ _____
Polyethylene Sheeting Fiber Reinforced .15mm thick	500 m <sup>2</sup>	\$ _____	\$ _____
<b>8. Disposal including the cost of obtaining all permits, Weight Bills, Tipping Fees, Transportation, etc. at \$_____/per bag.</b>			
Total Bid Price for Table 1			\$ _____

**Table 2 - Standing Offer First Option Period - June 1, 2015 - May 31, 2016**

Item	Estimated Usage	Unit Price	Bid Price
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<b>1. Unit price including all labour material and equipment for the removal of asbestos pipe covering and lagging from pipe fittings, using intermediate precautions (Glove Bag) method from 0M to 6M from the floor.</b>				
<b>(A)</b> 25mm Thick Pipe Insulation or Lagging	12mm pipe - 50mm pipe	300 M	\$ _____	\$ _____
	62mm pipe - 100mm pipe	200 M	\$ _____	\$ _____
	125mm pipe - 200mm pipe	200 M	\$ _____	\$ _____
	200mm pipe and over	200M	\$ _____	\$ _____
<b>(B)</b> 50 mm Thick Pipe Insulation or Lagging	12mm pipe - 50mm pipe	300 M	\$ _____	\$ _____
	62mm pipe - 100mm pipe	200 M	\$ _____	\$ _____
	125mm pipe - 200mm pipe	200 M	\$ _____	\$ _____
	200mm pipe and over	200 M	\$ _____	\$ _____
<b>2. Unit price including all labour, material and equipment for the removal of asbestos pipe covering and lagging from pipe fittings using intermediate precautions (Glove Bag) method over 6M from the floor.</b>				
<b>(A)</b> 25mm Thick Pipe Insulation or Lagging	12mm pipe - 50mm pipe	200 M	\$ _____	\$ _____
	62mm pipe - 100mm pipe	100 M	\$ _____	\$ _____
	125mm pipe - 200mm pipe	100 M	\$ _____	\$ _____
	200mm pipe and over	100 M	\$ _____	\$ _____
<b>(B)</b> 50mm Thick Pipe Insulation or Lagging	12mm pipe - 50mm pipe	200 M	\$ _____	\$ _____
	62mm pipe - 100mm pipe	100 M	\$ _____	\$ _____
	125mm pipe - 200mm pipe	100 M	\$ _____	\$ _____
	200mm pipe and over	100 M	\$ _____	\$ _____
<b>3. Unit price per Sq Meter to remove and dispose of the following:</b>				
Asbestos siding (shingles)		500 m <sup>2</sup>	\$ _____	\$ _____
Drywall joints		300 m <sup>2</sup>	\$ _____	\$ _____
Asbestos tile c/w adhesive & sealer		200 m <sup>2</sup>	\$ _____	\$ _____
Mould Abatement		3,000 m <sup>2</sup>	\$ _____	\$ _____
Lead Based Paint		5,000 m <sup>2</sup>	\$ _____	\$ _____
<b>4. Unit price per unit to remove and dispose of the following:</b>				
PCB Containing Ballasts		100 ballasts	\$ _____	\$ _____
<b>5. Hourly rate for tradesmen to conduct incidental asbestos removal work that has not been identified</b>				

above, the Contractor will be required to provide an estimate for this work.

Supervisor	500 hours	\$ _____	\$ _____
Qualified Asbestos Removal Labourer	500 hours	\$ _____	\$ _____
<p><b>6.</b> An allowance will be paid at \$_____/Km to cover travel to Debert, Windsor Armories, Mill Cove and Newport Corners. The travel to all other sites will be the Contractors responsibility. A provisional cost for Shift Differential and outside core hours, when authorized by the Engineer, will be allowed at the rate of 1.5 times for the first 4 hours, 2 times for anything after the first four hours and Sundays. Anything else will be at 1.5 times.</p>			
<p><b>7.</b> Material pricing for incidental work only:</p>			
Glove Bags (Safety Strip Type) for 1/2" to 2" pipe	150 bags	\$ _____	\$ _____
Glove Bags (Safety Strip Type) for 2" to 5" pipe	150 bags	\$ _____	\$ _____
Glove Bags (Safety Strip Type) for 5" to 9" pipe	150 bags	\$ _____	\$ _____
Glove Bags (Safety Strip Type) for 9" pipe and above	20 bags	\$ _____	\$ _____
Clear Disposable Bags	500 bags	\$ _____	\$ _____
Disposal Suits	500 suits	\$ _____	\$ _____
Disposal Bags c/w warning symbols French/English	500 bags	\$ _____	\$ _____
Roll of Tape	100 rolls	\$ _____	\$ _____
Spray adhesive / 20 oz can	250 cans	\$ _____	\$ _____
Warning Signs in both official languages	150 signs	\$ _____	\$ _____
Slow drying sealant/liter	200 Litres	\$ _____	\$ _____
Polyethylene Sheeting Clear .15mm thick	1,000 m <sup>2</sup>	\$ _____	\$ _____
Polyethylene Sheeting Fiber Reinforced .15mm thick	500 m <sup>2</sup>	\$ _____	\$ _____
<p><b>8.</b> Disposal including the cost of obtaining all permits, Weight Bills, Tipping Fees, Transportation, etc. at \$_____/per bag.</p>			
Total Bid Price for Table 2			\$ _____

**Table 3 - Standing Offer Second Option Period - June 1, 2016 - May 31, 2017**

Item	Estimated Usage	Unit Price	Bid Price
<p><b>1.</b> Unit price including all labour material and equipment for the removal of asbestos pipe covering and lagging from pipe fittings, using intermediate precautions (Glove Bag) method from 0M to 6M from the floor.</p>			
<b>(A)</b> 25mm Thick Pipe Insulation or Lagging	12mm pipe - 50mm pipe	300 M	\$ _____
	62mm pipe - 100mm pipe	200 M	\$ _____
	125mm pipe - 200mm pipe	200 M	\$ _____
	200mm pipe	200M	\$ _____

	and over			
<b>(B)</b> 50 mm Thick Pipe Insulation or Lagging	12mm pipe - 50mm pipe	300 M	\$ _____	\$ _____
	62mm pipe - 100mm pipe	200 M	\$ _____	\$ _____
	125mm pipe - 200mm pipe	200 M	\$ _____	\$ _____
	200mm pipe and over	200 M	\$ _____	\$ _____
<b>2. Unit price including all labour, material and equipment for the removal of asbestos pipe covering and lagging from pipe fittings using intermediate precautions (Glove Bag) method over 6M from the floor.</b>				
<b>(A)</b> 25mm Thick Pipe Insulation or Lagging	12mm pipe - 50mm pipe	200 M	\$ _____	\$ _____
	62mm pipe - 100mm pipe	100 M	\$ _____	\$ _____
	125mm pipe - 200mm pipe	100 M	\$ _____	\$ _____
	200mm pipe and over	100 M	\$ _____	\$ _____
<b>(B)</b> 50mm Thick Pipe Insulation or Lagging	12mm pipe - 50mm pipe	200 M	\$ _____	\$ _____
	62mm pipe - 100mm pipe	100 M	\$ _____	\$ _____
	125mm pipe - 200mm pipe	100 M	\$ _____	\$ _____
	200mm pipe and over	100 M	\$ _____	\$ _____
<b>3. Unit price per Sq Meter to remove and dispose of the following:</b>				
Asbestos siding (shingles)	500 m <sup>2</sup>		\$ _____	\$ _____
Drywall joints	300 m <sup>2</sup>		\$ _____	\$ _____
Asbestos tile c/w adhesive & sealer	200 m <sup>2</sup>		\$ _____	\$ _____
Mould Abatement	3,000 m <sup>2</sup>		\$ _____	\$ _____
Lead Based Paint	5,000 m <sup>2</sup>		\$ _____	\$ _____
<b>4. Unit price per unit to remove and dispose of the following:</b>				
PCB Containing Ballasts	100 ballasts		\$ _____	\$ _____
<b>5. Hourly rate for tradesmen to conduct incidental asbestos removal work that has not been identified above, the Contractor will be required to provide an estimate for this work.</b>				
Supervisor	500 hours		\$ _____	\$ _____
Qualified Asbestos Removal Labourer	500 hours		\$ _____	\$ _____
<b>6. An allowance will be paid at \$_____/Km to cover travel to Debert, Windsor Armories, Mill Cove and Newport Corners. The travel to all other sites will be the Contractors responsibility. A provisional cost for Shift Differential and outside core hours, when authorized by the Engineer, will be allowed at the rate of 1.5 times for the first 4 hours, 2 times for anything after the first four hours and Sundays. Anything else will be at 1.5 times.</b>				
<b>7. Material pricing for incidental work only:</b>				

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Glove Bags (Safety Strip Type) for 1/2" to 2" pipe	150 bags	\$ _____	\$ _____
Glove Bags (Safety Strip Type) for 2" to 5" pipe	150 bags	\$ _____	\$ _____
Glove Bags (Safety Strip Type) for 5" to 9" pipe	150 bags	\$ _____	\$ _____
Glove Bags (Safety Strip Type) for 9" pipe and above	20 bags	\$ _____	\$ _____
Clear Disposable Bags	500 bags	\$ _____	\$ _____
Disposal Suits	500 suits	\$ _____	\$ _____
Disposal Bags c/w warning symbols French/English	500 bags	\$ _____	\$ _____
Roll of Tape	100 rolls	\$ _____	\$ _____
Spray adhesive / 20 oz can	250 cans	\$ _____	\$ _____
Warning Signs in both official languages	150 signs	\$ _____	\$ _____
Slow drying sealant/liter	200 Litres	\$ _____	\$ _____
Polyethylene Sheeting Clear .15mm thick	1,000 m <sup>2</sup>	\$ _____	\$ _____
Polyethylene Sheeting Fiber Reinforced .15mm thick	500 m <sup>2</sup>	\$ _____	\$ _____
<b>8. Disposal including the cost of obtaining all permits, Weight Bills, Tipping Fees, Transportation, etc. at \$ _____/per bag.</b>			
Total Bid Price for Table 3			\$ _____

Total Bid Price for Evaluation (Sum of Tables 1, 2, 3)

Table 1 Total \$ \_\_\_\_\_

Table 2 Total \$ \_\_\_\_\_

Table 3 Total \$ \_\_\_\_\_

Total Bid Price \$ \_\_\_\_\_

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## **ANNEX C**

### **SECURITY REQUIREMENTS CHECK LIST**

Attached.

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### ANNEX D

### REPORTING REQUIREMENTS

#### Periodic Usage Report Form

As a requirement of this Request for Standing Offer, a report shall be submitted as follows: (\*\*\*)The final report is to provide a list showing items requisitioned that represent approximately the total value of call-ups.\*\*\*). **The Offeror understands that it is there responsibility to implement a system for tracking call-ups against this standing offer in order to provide usage reports and ensure that the financial limitation is not exceeded. Failure to comply may result in the setting aside of the Standing offer.**

Return to:

Public Works and Government Services Canada  
 Acquisitions  
 Real Property Contracting (NS)  
 1713 Bedford Row / PO Box 2247  
 Halifax, Nova Scotia B3J 3C9  
 ATTN: Alex Russell  
 alex.russell@pwgsc.gc.ca

Standing Offer Description:		Standing Offer Number:		Start Date of SO (DD/MM/YYYY)		End Date of SO (DD/MM/YYYY)	
Total Value to Date \$		Total Value for Reporting Period \$		Start Reporting Period (DD/MM/YYYY)		End Reporting Period (DD/MM/YYYY)	
Department requesting	Order Number on call-up	Item Description	Item Quantity	Unit of Measure (each, litre, etc.)	Date of Order of call-up	Date of Delivery Start/ completion	Value of Order (not including HST/GST)

---

## ANNEX E

### INSURANCE REQUIREMENTS

#### 1.0 Commercial General Liability Insurance

1. The Contractor must obtain Commercial General Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$2,000,000 per accident or occurrence and in the annual aggregate.

2. The Commercial General Liability policy must include the following:

(a) Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada should read as follows: Canada, as represented by Public Works and Government Services Canada.

(b) Bodily Injury and Property Damage to third parties arising out of the operations of the Contractor.

(c) Products and Completed Operations: Coverage for bodily injury or property damage arising out of goods or products manufactured, sold, handled, or distributed by the Contractor and/or arising out of operations that have been completed by the Contractor.

(d) Personal Injury: While not limited to, the coverage must include Violation of Privacy, Libel and Slander, False Arrest, Detention or Imprisonment and Defamation of Character.

(e) Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.

(f) Blanket Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.

(g) Employees and, if applicable, Volunteers must be included as Additional Insured.

(h) Employers' Liability (or confirmation that all employees are covered by Worker's compensation (WSIB) or similar program)

(i) Broad Form Property Damage including Completed Operations: Expands the Property Damage coverage to include certain losses that would otherwise be excluded by the standard care, custody or control exclusion found in a standard policy.

(j) Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of policy cancellation.

(k) If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.

(l) Owners' or Contractors' Protective Liability: Covers the damages that the Contractor becomes legally obligated to pay arising out of the operations of a subcontractor.

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(m) Non-Owned Automobile Liability - Coverage for suits against the Contractor resulting from the use of hired or non-owned vehicles.

(n) Amendment to the Watercraft Exclusion to extend to incidental repair operations on board watercraft.

(o) Sudden and Accidental Pollution Liability (minimum 120 hours): To protect the Contractor for liabilities arising from damages caused by accidental pollution incidents.

(p) Litigation Rights: Pursuant to subsection 5(d) of the Department of Justice Act, S.C. 1993, c. J-2, s.1, if a suit is instituted for or against Canada which the Insurer would, but for this clause, have the right to pursue or defend on behalf of Canada as an Additional Named Insured under the insurance policy, the Insurer must promptly contact the Attorney General of Canada to agree on the legal strategies by sending a letter, by registered mail or by courier, with an acknowledgement of receipt.

For the province of Quebec, send to:

Director Business Law Directorate,  
Quebec Regional Office (Ottawa),  
Department of Justice,  
284 Wellington Street, Room SAT-6042,  
Ottawa, Ontario, K1A 0H8

For other provinces and territories, send to:

Senior General Counsel,  
Civil Litigation Section,  
Department of Justice  
234 Wellington Street, East Tower  
Ottawa, Ontario K1A 0H8

A copy of the letter must be sent to the Contracting Authority. Canada reserves the right to co-defend any action brought against Canada. All expenses incurred by Canada to co-defend such actions will be at Canada's expense. If Canada decides to co-defend any action brought against it, and Canada does not agree to a proposed settlement agreed to by the Contractor's insurer and the plaintiff(s) that would result in the settlement or dismissal of the action against Canada, then Canada will be responsible to the Contractor's insurer for any difference between the proposed settlement amount and the amount finally awarded or paid to the plaintiffs (inclusive of costs and interest) on behalf of Canada.

## **2.0 Automobile Liability Insurance**

1. The Contractor must obtain Automobile Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$2,000,000 per accident or occurrence.

2. The policy must include the following:

- (a) Third Party Liability - \$2,000,000 Minimum Limit per Accident or Occurrence
- (b) Accident Benefits - all jurisdictional statutes
- (c) Uninsured Motorist Protection

---

(d) Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of cancellation.

(e) OPCF/SEF/QEF #6a - Permission to Carry Passengers for Compensation or Hire

### 3.0 Environmental Impairment Liability Insurance

1. The Contractor must obtain Type 2: Contractors Pollution Liability insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$1,000,000 per accident or occurrence and in the annual aggregate.

2. If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.

3. The Type 2: Contractors Pollution Liability policy must include the following:

(a) Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada as additional insured should read as follows: Canada, represented by Public Works and Government Services Canada.

(b) Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of policy cancellation.

(c) Separation of Insureds: The policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.

(d) Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.

(e) Incidental Transit Extension: The policy must extend to losses arising from any waste, products or materials transported, shipped, or delivered via any transportation mode to a location beyond the boundaries of a site at which the Contractor or any entity for which the Contractor is legally liable is performing or has performed the operations described in the contract.

(f) the Pollution Liability insurance policy which can provide coverage for Asbestos /Lead and Mould Abatement, PCB material removal and disposal (contractor to request the coverage specific to this contract).

Department of National Defence



Specification

Standing Offer Agreement

**Hazardous Material Abatement  
Various Locations**

CFB Halifax, NS

Job No.W010C-14-C001

2013-09-27

<u>Section</u>	<u>Title</u>	<u>Pages</u>
<u>Division 01 - General Requirements</u>		
01 11 00	General Instructions	8
01 35 30	Health and Safety Requirements	7
01 35 35	DND Fire Safety Requirements	4
01 35 36	Security, Safety and Fire Regulations CFAD Bedford	6
01 35 37	Access to DRDC Atlantic Complex	1
01 35 73	Confined Spaces Requirements	8
01 61 00	Common Product Requirements	2
<u>Division 02 - Existing Conditions</u>		
02 81 01	Hazardous Materials	5
02 82 00.01	Asbestos Abatement - Minimum Precautions	8
02 82 00.02	Asbestos Abatement - Intermediate Precautions	12
02 82 00.03	Asbestos Abatement - Maximum Precautions	21

PART 1 - GENERAL

1.1 RELATED  
SECTIONS

- .1 Section 01 35 73 Confined Spaces Requirements.
- .2 Section 02 81 01 Hazardous Materials.
- .3 Section 02 82 00.01 Asbestos Abatement Minimum Precautions.
- .4 Section 02 82 00.02 Asbestos Abatement Intermediate Precautions.
- .5 Section 02 82 00.03 Asbestos Abatement Maximum Precautions.

1.2 ENGINEER

- .1 All reference to the Engineer in this specification, who is the Contract Inspector which is representing the Base Construction Engineering Officer(BCEO).
- .2 The Engineer will provide the Contractor with a list of his/her authorized representatives at the pre-job meeting.

1.3 DESCRIPTION OF  
WORK

- .1 Work under this Contract comprises the furnishing of all labour, material, tools, and equipment required to remove and dispose all types of asbestos containing materials and obtaining all necessary permits for transportation and disposal of asbestos waste as specified herein and as shown on the Contract drawings.

1.4 WORK INCLUDED

- .1 Removal of materials containing all types of asbestos materials.
- .2 Removal of lead contaminated paint and contaminated materials.
- .3 Removal of mold and mold contaminated materials.
- .4 Removal of PCB containing materials.
- .5 The construction and knock-down of all enclosures required to safely conduct the removal of hazardous materials, as specified in appropriate Section.
- .6 Removal of pigeon droppings.
- .7 The disposal of all materials containing asbestos, lead paint, mold and PCBs and other debris from the work site in accordance with the most revised copy of regulations, legislations, and standards regarding the pertinent substance.

1.4 WORK INCLUDED .8  
(Cont'd)

Clean-up.

1.5 WORK AND .1  
MATERIAL EXCLUDED

Air monitoring will be conducted by a testing agency approved by the Contract Inspector at no cost to the Contractor.

1.6 LOCATIONS OF .1  
JOB SITES

Work sites included in this Standing Offer Agreement are outlined as follows:

- .1 Stadacona - Halifax, NS;
- .2 Windsor Park - Halifax, NS;
- .3 Halifax Armoury - Halifax, NS;
- .4 Royal Artillery Park(RA) - Halifax, NS;
- .5 Damage Control Division - Purcell's Cove, NS;
- .6 Ferguson's Cove - Ferguson Cove, NS;
- .7 HMC Dockyard - Halifax, NS;
- .8 Dockyard Annex(NAD) - Dartmouth, NS;
- .9 DRDC Atlantic - Dartmouth, NS;
- .10 Shannon Park - Dartmouth, NS;
- .11 12 Wing Shearwater - Eastern Passage, NS;
- .12 Osbourne Head Gunnery Range - Cow Bay, NS;
- .13 Hartlen Point Golf Course - Cow Bay, NS;
- .14 Wright's Cove Degaussing Range - Dartmouth, NS;
- .15 CFAD Bedford - Bedford, NS;
- .16 Bedford Rifle Range - Bedford, NS;
- .17 NRS Mill Cove - Mill Cove, NS;
- .18 NRS Newport Corner - Newport Corner, NS;
- .19 Windsor Armoury - Windsor, NS;
- .20 Victoria Park, Sydney, NS;

1.6 LOCATIONS OF  
JOB SITES  
(Cont'd)

- .1 (Cont'd)
- .21 Glace Bay Armoury, Glace Bay, NS;
  - .22 Sydney Rifle Range off Highway 125;
  - .23 Truro Armoury, Truro, NS;
  - .24 Pictou Armoury, Pictou, NS; and
  - .25 New Glasgow Armoury, New Glasgow, NS.

1.7 SITE ACCESS

- .1 Access to the site is under the direction of the Department of National Defence. All visitors entering areas issuing a daily pass will be aware of the requirement for search as a condition of issue.
- .2 While within the confines of CFB Halifax all employees and representatives of the Contractor must comply with all of the Standing Orders as promulgated by Base Authorities.

1.8 PRE-JOB  
MEETING

- .1 Immediately upon receipt of award of Standing Offer Agreement, the successful Contractor will contact the Engineer to arrange a pre-job meeting prior to commencement of any work.

1.9 CONTRACTOR  
QUALIFICATIONS

- .1 The Contractor must satisfy the Engineer that he/she has adequate and qualified staff to perform the service expected. This includes all service calls within an acceptable time period and having adequate parts on hand to meet the requirements of the job, both during silent and normal working hours.
- .2 Whenever the Contractor uses sub-contractors, they too must perform to and comply with all requirements of this Standing Offer Agreement.

1.10 WORKMANSHIP

- .1 Workmanship must be the best quality executed by workers experienced and skilled in the respective duties for which they are employed.
- .2 Do not employ any unfit person or anyone unskilled in their required duties. The Engineer reserves the right to require the dismissal from the site, workers deemed incompetent, careless, insubordinate or otherwise objectionable.
- .3 Decisions as to the quality or fitness of workmanship in cases of dispute rest solely with the Engineer whose decision is final.

- 
- 1.10 WORKMANSHIP (Cont'd) .4 The Contractor will employ a competent and experienced supervisor with the authority to speak on his behalf on day-to-day routine matters.
- 1.11 CONTRACTOR'S USE OF SITE .1 Contractor will be briefed on use of site by the Engineer.
- .2 Do not unreasonably encumber site with materials or equipment.
- .3 Move stored products or equipment which interferes with operations of Engineer or other Contractors.
- .4 The Engineer will brief the Contractor on access to restricted areas.
- 1.12 PARKING .1 One parking space will be made available on site for company vehicles and equipment only. Maintain and administer this space as directed.
- 1.13 NORMAL WORKING HOURS .1 Normal working hours will be 0730 to 1600 hours, Monday to Friday. Any work carried out other than normal working hours must be authorized by the Engineer.
- 1.14 CODES AND STANDARDS .1 Perform work in accordance with the latest edition of National Building Code of Canada(NBC), Canadian Electrical Code Part I, Canada Labour Code Part II, National Fire Code of Canada, NS Fall Protection and Scaffolding regulations, and any other provincial or municipal regulations and by-laws provided that in any case of conflict or discrepancy, the more stringent requirements will apply.
- .2 Meet or exceed requirements of Standing Offer documents, specified standards, codes and referenced documents.
- 1.15 PROTECTION OF EXISTING FACILITIES .1 The Contractor must take all necessary precautions to ensure against damage to existing facilities. Any damage to such facilities as a result of the Contractor's operations must be repaired or replaced by the Contractor at his own expense, as soon as is reasonably possible.
- .2 Special coverings and protection must be provided to protect plants, walls, projections and adjacent work where materials are being removed, installed or hoisted.
-

1.15 PROTECTION OF  
EXISTING FACILITIES  
(Cont'd)

- .3 The Contractor must protect all occupant owned furnishings and equipment, and the building from damage during execution of the Contract.
- .4 Where the Engineer considers it necessary, provide and erect warning signs and barriers.

1.16 ALTERATIONS,  
ADDITIONS OR  
REPAIRS TO EXISTING  
BUILDING

- .1 Execute work with least possible interference or disturbance to occupants, public and normal use of premises. Arrange with Engineer to facilitate execution of work.
- .2 Where security has been reduced by work of Contract, provide temporary means to maintain security.
- .3 Provide temporary dust screens, barriers, warning signs in locations where renovation and alteration work is adjacent to areas used by public or government staff.
- .4 Use only elevators existing in building for moving workers and material.
  - .1 Protect walls of passenger elevators, to approval of Engineer prior to use.
  - .2 Accept liability for damage, safety of equipment and overloading of existing equipment.

1.17 EXISTING  
SERVICES

- .1 Where Work involves breaking into or connecting to existing services, give 48 hours notice for necessary interruption of mechanical or electrical service throughout course of work. Minimize duration of interruptions. Carry out work at times as directed by governing authorities with minimum disturbance.
- .2 Establish location and extent of service lines in area of work before starting Work. Notify Engineer of findings.
- .3 Submit schedule to and obtain approval from Engineer for any shut-down or closure of active service or facility including power and communications services. Adhere to approved schedule and provide notice to affected parties.
- .4 Provide temporary services when directed by Engineer to maintain critical building and tenant systems.
- .5 Where unknown services are encountered, immediately advise Engineer and confirm findings in writing.

1.18 POWER AND  
WATER SUPPLY

- .1 DND may provide, free of charge, temporary electric power and water for construction purposes.
- .2 Engineer will determine delivery points and quantitative limits. Engineer's written permission is required before any connection is made. Connect to existing power supply in accordance with Canadian Electrical Code.
- .3 Provide, at no cost to DND, all equipment and temporary lines to bring these services to project site.
- .4 Supply of temporary services by DND is subject to DND requirements and may be discontinued by DND site representative at any time without notice, without acceptance of any liability for damage or delay caused by such withdrawal of temporary services.
- .5 After the temporary service lines are no longer required, the Contractor must remove all lines and equipment, restore the connection points to their original condition and return the land to its original contour.

1.19 HEATING  
AND VENTILATING

- .1 Provide temporary heat and ventilation as required to:
  - .1 facilitate progress of work;
  - .2 protect work and products against dampness and cold;
  - .3 prevent moisture condensation on surfaces;
  - .4 provide ambient temperatures and humidity levels for storage, installation and curing of materials;
  - .5 provide adequate ventilation to meet health regulations for safe working environment.
- .2 Maintaining strict supervision of operation of temporary heating and ventilating equipment to:
  - .1 conform with applicable codes and standards;
  - .2 enforce safe practices;
  - .3 prevent abuse of services;
  - .4 prevent damage to finishes;
  - .5 vent direct-fired combustion units to outside.

1.20 CUTTING,  
FITTING AND  
PATCHING

- .1 Execute cutting, fitting and patching required to make work fit properly.
- .2 Where new work connects with existing and where existing work is altered, or cut, patch and make good to match existing work.
- .3 Obtain Engineer's approval before cutting, boring or sleeving load-bearing members.
- .4 Make cuts with clean, true, smooth edges. Make patches inconspicuous in final assembly.

1.21 EMERGENCY  
AND SERVICE  
CALL-UPS

- .1 The Contractor must maintain and provide the Engineer with contact numbers to be able to provide response to request for service from the Engineer or representative on a 24 hour, 7 day per week basis. If the request for service from the after hours Departmental Representative, the Contractor must, immediately upon completion of the service, report back to the Engineer describing the action taken to correct the problem. The following Work priorities and response time will apply:
  - .1 **Emergency:** A priority of "Emergency" is defined as a deficiency or breakdown that requires immediate attention to reduce the potential for danger to occupants, the general public, the environment, or the facility. Maintenance and minor construction identified with this priority must be responded to immediately and must be reported without delay to designated manager.
    - .1 Standard response times:
      - .1 Urban/rural: ASAP - Maximum 2 hours.
  - .2 **Routine:** A priority of "Routine" is defined as essential maintenance and minor construction which should be rectified at the earliest possible opportunity. It is considered as deficiencies or breakdowns that do not impair current operations or pose any danger to the occupants, the general public, the environment, or the facility.
    - .1 Standard response times:
      - .1 Urban/rural: 4 hours.
- .2 The Contractor will be advised of the personnel authorized to request emergency service. Services undertaken at the request of unauthorized persons will be done at the Contractor's risk, with regards to payment.
- .3 Report service calls executed outside normal working hours to the Engineer, immediately on the next working day.

1.22 INSPECTION .1 All work and materials covered by this specification will be subject to inspection at any time by the Engineer or his/her representative.

1.23 REPORTING IRREGULARITIES .1 The Contractor must notify the Engineer of irregularities in the work area, such as structural defects, mechanical and/or electrical problems and/or any beyond the scope of work.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

PART 1 - GENERAL

1.1 CONSTRUCTION  
SAFETY MEASURES

- .1 Observe and enforce construction safety measures by complying with the requirements of the following statutes and authorities:
    - .1 Canada Labour Code Part II and the Canada Occupational Health and Safety Regulations.
    - .2 The Nova Scotia Occupational Health and Safety Act and supporting Occupational General Safety Regulations as amended from time to time.
    - .3 Most recent amendments to the National Building Code of Canada, Part 8 and National Fire Code of Canada.
  - .2 Refer to Section 01 35 35, DND Fire Safety Requirements.
  - .3 Engineer will provide a copy of any relevant special written instructions to be followed.
  - .4 **Before Work Begins**
    - .1 Bidder/Tender to provide documentation if requested by the Crown, indicating all safety training attained for each person who will be involved with the Standing Offer Agreement.
  - .5 The following disciplinary measures will be taken for any violations of safety under this Standing Offer Agreement:
    - .1 **First Violation:** Verbal warning issued to the Contractor for the first violation of a safety regulation(Violation will be documented on Standing Offer file, copy to Contractor, DCC or PWGSC).
    - .2 **Second Violation:** Written warning to Contractor for second violation of a safety regulation(Violation will be documented on Standing Offer file, copy to Contractor, DCC or PWGSC).
    - .3 **Third Violation:** A third violation of a safety regulation may result in the termination of the Standing Offer with a recommendation to the Contracting Authority that the Contractor be denied access to Base Construction Engineering contracts(Documented to Standing Offer file, copies to Contractor, DCC or PWGSC).
    - .4 **Serious Violation:** For a serious violation of a safety regulation as deemed by a regulator, project manager or safety officer a recommendation will be made to the Contracting Authority to immediately terminate the Contract/Standing Offer(Violation documented on Standing Offer file, copies to Contractor, DCC or PWGSC).
-

1.1 CONSTRUCTION SAFETY MEASURES  
(Cont'd)

.5 (Cont'd)

.5 **Charges Laid or Guilty Determination by Courts:**  
Infractions of safety regulations that result in charges being laid by a regulator against the Contractor or the Contractor being found guilty by the courts may result in that Contractor being denied access to Base Construction Engineering contracts.

1.2 HAZARD ASSESSMENTS

.1

Contractor must implement and carry out a health and safety hazard assessment program as part of the Work. Program to include:

.1 **Initial Hazard Assessment:** Carried out upon notification of Contract award and/or prior to commencement of Work.

.2 **On-going Hazard Assessments:** Performed during the progress of Work identifying new or potential health risks and safety hazards not previously known. As a minimum, hazards assessments must be carried out when:

.1 New sub-trade work, new sub-contractor(s) or new workers arrive at the site to commence another portion of the Work.

.2 The scope of Work has been changed.

.3 Work conducted in confined spaces.

.4 Potential hazard or weakness in current health and safety practices are identified by the Engineer.

.2 Hazard assessments will be project and site specific, based on review of Standing Offer documents and site.

.3 Each hazard assessment to be made in writing. Keep copies of all assessments on site for duration of Work. Upon request, make available to Engineer.

.4 The Contractor must notify the Engineer of suspected hazardous material during work and not apparent from drawings, specifications, or report pertaining to work(e.g. lead, asbestos etc.). Do not disturb such material pending instructions from the Engineer. The Engineer will make the necessary arrangements for testing the material as required.

1.3 ASBESTOS  
PRODUCT & ASBESTOS  
ACTIVITY

- .1 Within the confines of the Base, the provision of new products containing fibrous asbestos materials is prohibited.
- .2 Demolition or disturbance of spray or trowel-applied asbestos can be hazardous to health. Should material resembling spray or trowel-applied asbestos be encountered in course of work, stop work and notify Engineer immediately. Do not proceed until written instructions have been received from Engineer.

1.4 HAZARDOUS  
MATERIAL SPILL

- .1 The Contractor or sub-contractors must report to the DND fire hall and the Engineer for any incident or spill involving hazardous materials(HAZMAT).
- .2 In the event of a hazardous material spill, the following procedures for initial actions must be followed:
  - .1 ensure safety of all personnel;
  - .2 assess spill hazards and risks;
  - .3 ventilate area if release is indoors and remove all sources of ignition;
  - .4 stop the spill if safely possible(e.g. shut off pump, replace cap, tip drum upward, patch leaking hole etc.).
  - .5 no matter the volume is, contact the DND fire hall and provide the following information:
    - .1 time of the spill;
    - .2 location;
    - .3 special considerations:
      - .1 personal safety;
      - .2 environmental.
    - .4 type and amount of spill;
    - .5 person reporting the spill:
      - .1 name;
      - .2 company; and
      - .3 telephone number.
  - .6 contain the spill;
  - .7 isolate the area as required;

- 
- 1.4 HAZARDOUS MATERIAL SPILL (Cont'd)
- .2 (Cont'd)
  - .5 (Cont'd)
  - .8 contact the Engineer; and
  - .9 clean up minor spills using appropriate protective equipment and supplies.
- 1.5 FASTENING DEVICES EXPLOSIVE ACTUATED
- .1 Explosive actuated devices must not be used.
- 1.6 HOT WORK
- .1 All hot work activity is to take place with Engineer's approval and written permission from the Base Fire Chief(Hot work permit). Hot work permits and fire-watch requirements will be provided by the Dockyard Fire Hall at 427-3500.
  - .2 The ventilation system in the area of any hot work activity is to be isolated to prevent migration of fumes/smoke and to reduce any possible spread of fire to other areas of the facility.
  - .3 Contractor is to employ an employee trained in the use of fire extinguishers as fire watch during any hot work for a minimum of 30 minutes after activity has ceased.
- 1.7 CONFINED SPACES
- .1 All work in confined spaces will be carried out in compliance with the Canada Occupational Safety and Health Regulations, Part XI and NS Occupational Health and Safety Act, Part 12.
  - .2 The Contractor to provide and maintain all equipment as required by any person to enter and/or perform work in a safe manner, in compliance with the Canada Occupational Safety and Health Regulations, Part XI and NS Occupational Health and Safety Act, Part 12.
  - .3 The Contractor to provide and maintain training, as required by the Canada Occupational Health and Safety Regulations, Part XI and NS Occupational Health and Safety Act, Part 12.
    - .1 The Contractor and/or his employees must provide proof of training and qualifications when requested by the Engineer.
  - .4 The Contractor to provide the Engineer with a copy of an "Entry Permit" for each and every entry into the confined space to ensure compliance with the Canada Occupational Health and Safety Regulations, Part XI and NS Occupational Health and Safety Act, Part 12.
-

1.7 CONFINED SPACES .5  
(Cont'd)

The Contractor to have a hazard assessment of the confined space performed.

- .1 The Contractor to provide the Engineer with a copy of the hazard assessment.

1.8 FALL PROTECTION .1

All work carried out above the mandatory height restrictions, from unguarded structure and/or scaffolding, will be done in compliance with the Canada Occupational Health and Safety Regulations, Part XII, Section 12.10.

- .2 The components of a fall protection system must meet the standards as outlined in the Canada Occupational Health and Safety Regulations, Part XII, Section 12.10(2).
- .3 The Contractor is to ensure fall protection equipment is maintained, inspected and tested by a qualified technician as required by the Canada Occupational Health and Safety Regulations, Part XII, Section 12.3.

1.9 ARC FLASH .1

The Contractor is to ensure all electrical equipment such as switchboards, panel boards, motor control centres and meter socket enclosures be marked to warn persons of potential electric shock and arc flash hazards. This labeling is required for all new & modified installations.

- .2 The warning label must also include information regarding "arc flash hazard category(0 to 4)" and the "Flash Protection Boundary" as defined in NFPA 70E. All projects specifications must include short circuit study and flash hazard analysis.
- .3 In accordance with the new CSA Standards Z462-08 para 4.3.3.3 Electrical Contractors are now required to perform a shock and flash hazard analysis to select the appropriate PPE to wear. Electrical Contractors are now required Arc-rated personal protective equipment while troubleshooting and diagnostic testing that cannot be performed unless the electrical conductor or circuit part is energized. All Contractor work practices must protect each employee from arc flash and from contact with live parts directly with any part of the body or indirectly through some other conductive object.

1.10 SAFETY .1

The Contractor must perform site hazard assessments to establish site specific safe work practice procedures for the safety and well being of his/her employees. Copies must be made available to Department of National Defence upon request.

1.10 SAFETY  
(Cont'd)

- .2 All copies of the formal Hazard Assessments conducted by the Contractor throughout the duration of the work will be retained and made available to the Engineer immediately upon request.
- .3 It is the Contractor's responsibility to be familiar with all applicable Safety Acts, Regulations, Codes and Standing Offer requirements. These must be identified and addressed in the Safety Plan, by identifying Standard Operating Procedures(SOP) and safe work practices(SWP) which incorporate clear and specific control measures, applicable rules, procedures and practices, all of which will become mandatory.
- .4 The Contractor must ensure all workers and authorized persons entering the work site are notified of and abide by the posted safety plan, safety rules, procedures, safe work practices and applicable Safety Acts, Regulations, and codes. Any person not complying with these will not be permitted on the site.
- .5 Contractor must ensure that all applicable personal protective equipment(PPE) is used.
  - .1 All personnel are required to wear hard hats, in accordance with CSA Z94.1-05.
  - .2 All personnel are required to wear safety footwear, in accordance with CSA Z195-09.
  - .3 All personnel are required to wear eye & face protection, in accordance with CSA Z94.3.1-09.
  - .4 When and where noise level is above 85 decibels; all personnel are required to wear hearing protection, in accordance with CAN/CSA Z94.2-02(R2007).
  - .5 Where toxic or noxious gas fumes, or oxygen deficiency or excessive dust may occur, so as to create a hazard to life, safety or health; all personnel are required to wear respiratory protection, in accordance with CAN/CSA Z94.4-02(R2007).
- .6 The Engineer will coordinate arrangements for the Contractor to be briefed on site safety within fourteen(14) days of award of Standing Offer Agreement.

1.11 SITE SIGNS  
AND NOTICES

- .1 Safety and instruction signs and notices:
  - .1 Signs and notices for safety and instruction must be in both official languages. Graphic symbols must conform to CAN/CSA Z321-96(R2006).

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

PART 1 - GENERAL

1.1 EMERGENCY REPORTING

- .1 Telephone numbers:
- .1 Base phone: dial 9-1-1;
  - .2 cell phone: 427-3333.

1.2 FIRE SAFETY ENFORCEMENT

- .1 Within the confines of the Base, the prescription and enforcement of mandatory fire safety measures will be exercised under the authority of the Base Fire Chief.
- .2 Comply with and enforce compliance by all Contractor personnel with all requirements of this specification section, and with the most recent edition of the National Building Code of Canada(NBC) and the National Fire Code of Canada(NFC),including all subsequent revisions issued by the National Research Council of Canada.
- .3 The Engineer reserves the right to require the dismissal from site of persons deemed careless or otherwise in violation of the fire safety requirements.

1.3 FIRE SAFETY BRIEFING

- .1 Prior to commencement of work under this Contract, the Engineer will arrange a meeting of all parties concerned to review and clarify requirements for fire safety measures. This may involve a briefing by the Base Fire Chief.
- .2 The Engineer will provide direction for reporting of fire including the emergency telephone number for fire reporting and location of fire alarms within or adjacent to work area.

1.4 FIRE WATCH

- .1 For hot work activity, the Contractor will provide the service of fire watch persons on a scale and schedule as prescribed by the Dockyard fire hall at the time of issuance of the hot work permit.

1.5 FIRE EXTINGUISHERS

- .1 Provide and maintain in operational condition fire extinguishers as prescribed by the Base Fire Chief.
-

1.6 SMOKING  
PRECAUTIONS

- .1 In accordance with these fire safety requirements particular to the work area and site, the Engineer and Base Fire Chief will designate hazardous areas as well as non-restricted areas where smoking may be permitted.
- .2 Smoking is prohibited in all buildings.
- .3 In all other areas, exercise care and comply with written or oral directives of the Engineer for the use of smoking materials.

1.7 REPORTING FIRE  
INCIDENTS

- .1 Report immediately all fire incidents as follows:
  - .1 activate nearest fire alarm;
  - .2 dial 9-1-1 or designated number given at the time of briefing; and
  - .3 telephone Engineer.
- .2 Persons activating fire alarm must remain at the alarm to direct the Fire Department to the scene of the fire.
- .3 When reporting a fire by telephone, give location of fire, name and number of building and be prepared to direct the Fire Department to the scene of the fire.

1.8 INTERIOR AND  
EXTERIOR FIRE  
PROTECTION AND  
ALARM SYSTEM

- .1 Notify Base Fire Chief at least 48 hours prior to scheduling any work that may require fire alarm and/or protection systems to be:
  - .1 obstructed in any way;
  - .2 shut-off;
  - .3 left inactive at the end of a working day or shift.
- .2 Do not commence any such work until Engineer confirms approval and direction by the Base Fire Chief.
- .3 Fire hydrants, standpipes and hose systems must not be used for other than fire fighting purposes unless authorized by the Engineer and the Base Fire Chief.

1.9 BLOCKAGE OF  
ACCESS FOR FIRE  
FIGHTING APPARATUS

- .1 Obtain approval of the Engineer and Base Fire Chief 24 hours prior to commencing any work such as digging trenches or erecting scaffolds or barricades so as to impede access for fire fighting apparatus. Immediately notify the Engineer of any infringement on minimum vertical or horizontal clearances either inside or outside buildings, as prescribed by the Base Fire Chief.

1.10 RUBBISH AND  
WASTE MATERIALS

- .1 Storage:
  - .1 Where it is necessary to store oily waste in work areas exercise extreme care to ensure maximum possible safety and cleanliness.
  - .2 Greasy or oily rags or materials subject to spontaneous combustion must be deposited and kept in a receptacle approved by the Base Fire Chief and removed as directed by the Engineer.
- .2 The burning of rubbish is prohibited.
- .3 Removal:
  - .1 All rubbish must be removed from the work site at the end of the work day or shift or as directed by the Engineer.

1.11 FLAMMABLE  
LIQUIDS

- .1 The handling, storage and use of flammable liquids are to be governed and guided by the requirements established by the Base Fire Chief and in accordance with the approved fire safety plan.
- .2 Indoor storage of flammable liquids must not exceed thirty(30) litres provided that they are stored in areas and containers approved by the Base Fire Chief.
- .3 The Engineer reserves the right to require removal from the site any storage containers not acceptable to the Base Fire Chief.
- .4 The Engineer will not permit indoor storage of quantities of flammable liquids exceeding thirty(30) litres for on-site work purposes, without the written permission of the Base Fire Chief.
- .5 Transfer of flammable liquids within buildings is prohibited.
- .6 Transfer of flammable liquids will not be carried out in the vicinity of open flames or any type of heat producing devices.
- .7 Flammable liquids having a flash point below twenty-two(22) degrees C such as naphtha or gasoline will not be used as solvents or cleaning agents.
- .8 Flammable waste liquids, for disposal, must be stored in approved containers located in a safe ventilated area. Quantities are not to exceed thirty(30) litres. Dumping or burning of flammable liquids on site is prohibited.

1.12 HAZARDOUS  
SUBSTANCES

- .1 Exercise special precautions necessary to safeguard life and property from damage by fire or explosives.
- .2 If the work entails the use of any toxic or hazardous materials, chemicals or explosives, or otherwise creates a hazard to life, safety or health, work will be in accordance with the most recent edition of the requirements of the National Fire Code of Canada, and measures prescribed by the Base Fire Chief.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

PART 1 - GENERAL

**Contractor must ensure that all their personnel are familiar with these regulations and requirements.**

- 1.1 GENERAL .1 The following is a summary of the security, safety and fire regulations of Canadian Forces Ammunition Depot, Bedford, as promulgated by the Base Commander, CFB Halifax and administered by the Superintendent CFAD Bedford NS.
- .2 Contractor's personnel will be subject to all of the regulations while working within confines of CFAD Bedford.
- 1.2 PRE JOB SECURITY AND SAFETY MEETING .1 Prior to commencement of Work, the Contractor must meet with the site security, safety and fire safety regulations officers. In accordance with direction of Engineer and these site officers, ensure that all employees of the Contractor are given thorough instructions on security, safety and fire precautions peculiar to an Ammunition Depot and that the regulations are fully compiled with, at all times, by all Contractor personnel.
- 1.3 SECURITY PASSES .1 Contractors must report to the NCO I/C Commissionaires at building 153; submit names of all their personnel and description of all their vehicles to arrange the issue of the required temporary passes prior to proceeding to work within the the confines of the depot.
- 1.4 CONDITIONS FOR ACCESS .1 All visitors will be issued a daily pass and will be required to sign an acknowledgement that they are aware of and consent to the following conditions for access.
- .2 The person to whom this pass is issued agrees to return the pass to the security guard at the gate when the Contract or employment at CFAD Bedford expires.
- .3 All vehicles entering and leaving CFAD Bedford may be searched to ensure that no prohibited articles are taken into nor contraband articles are taken out of the Ammunition Depot.
-

1.5 FIRE SERVICE  
CFAD BEDFORD

- .1 Fire service at CFAD Bedford is provided by DND Fire Service from 0730 until 1600 hours, Monday to Friday. All Contract work will be ended by 1530 hours daily. Fire response at all other times is provided by HRM. Before any work is carried out during silent hours, the Dockyard Platoon Chief must be contacted at 427-0550, local 3500.

1.6 SEARCHES

- .1 The Canadian Corps of Commissionaires may conduct a personal search of individuals at any time within the Ammunition Depot. Vehicles entering or leaving the Depot may be searched to ensure that contraband articles are not taken into the Explosives Area and that property is not taken out without authorization.

1.7 ALARMS

- .1 **Depot Alarms:** A siren is sounded only in the event of an emergency such as a fire, explosion, thunderstorm or evacuation. A siren is also sounded to signify "All Clear".
- .2 **Fire Emergency:** A series of "Hi-Lo" sounds on the Depot Alarm System signifies an emergency in the explosive area. Contractors must cease operations and proceed in their own vehicles to the nearest exit gate out of the explosive area. If no vehicle available proceed to the nearest "Fire Assembly Point" at Buildings 169 or 143.
- .3 **Thunder and Lightning:** A series of "Beeps" on the Depot Alarm System signifies a thunder/lightning storm warning. Contractors must cease operations and proceed in their own vehicles to the nearest exit gate out of the explosive area. If no vehicle available proceed to the nearest "Fire Assembly Point" at Buildings 169 or 143.
- .4 **Evacuation:** A series of "Slow Whoops" on the Depot Alarm System signifies that evacuation in the explosive area has been ordered by the Superintendent. The evacuation could be extended to include the non-explosive area as well as so ordered by the Superintendent.
- .5 **All Clear:** A continuous blast on the Depot Alarm System signifies that the emergency situation is "All Clear".

1.8 REPORTING OF  
FIRES

- .1 All fires, regardless of whether they have been extinguished or not, must be reported immediately to the Base Fire Department.
- .2 All Contractors and employees must familiarize themselves with the locations of the nearest fire alarm box or telephone.
-

1.8 REPORTING OF FIRES  
(Cont'd)

- .3 Fires may be reported by ringing the nearest street alarm box or by telephoning 911. Persons reporting the fire must remain at the alarm box or telephone until the Fire Department arrives and be prepared to direct fire fighters to the scene of the fire.

1.9 PROHIBITED ARTICLES  
ARTICLES

- .1 The following articles are prohibited and/or controlled from being taken inside the explosive area. Permission by the Superintendent may be granted for certain articles:
- .1 matches or other flame producing equipment(including vehicle lighters);
  - .2 pipes, smoking appliances, tobacco products, or smoking materials in any form;
  - .3 explosives or chemicals;
  - .4 lights, lamps or electrical devices/tools which are not explosion proof;
  - .5 cameras;
  - .6 food and drink; and
  - .7 radio transmitting devices(i.e. mobile radios, cellular phones, remote car starters, and garage door openers, etc).
- .2 No persons will introduce, possess or consume alcoholic beverages, narcotics or any intoxicant within the confines of the Ammunition Depot.
- .3 The site security officers will seize and hold at the gate, any such materials found by search.

1.10 SAFETY AND FIRE REGULATIONS  
FIRE REGULATIONS

- .1 **Smoking:** Is strictly prohibited in explosive areas.
- .2 **Buildings:** Smoking is prohibited in all buildings.
- .3 **Safety Precautions Electrical/Electronic Equipment:** All personnel operating or maintaining electrical/electronic equipment involving the use of voltage higher than 50V must brief the site safety and fire safety officers concerning all safety rules in the operating and instructional manuals covering the equipment.
-



1.11 TRAFFIC  
REGULATIONS  
(Cont'd)

- .1 Vehicles:(Cont'd)
- .4 No one will operate a vehicle within the Depot area at a speed greater than 8 kilometers per hour at any time, while passing between blast walls and buildings.
- .5 No one will leave a vehicle unattended within 10 metres of a fire hydrant or within 30 metres of a building containing explosives.
- .6 All vehicles must be equipped with a fire extinguisher of a suitable size and type so that it may be used to extinguish any fire originating in that vehicle.
- .7 Violation of any of the above regulations will result in immediate cancellation of the offender's Vehicle Pass and expulsion from the site.
- .2 **Roadways:** In the event of a fire or emergency all roads and buildings within CFAD Bedford must be accessible at all times. Contractors required to disrupt roadways during the course of their work, must ensure that at least one lane of each roadway is passable, at all times. Vehicles not required to transport personnel to the nearest exit gate must be parked on the side of the road and away from the nearest building.
- .3 **Fueling:** Fueling of vehicles within the explosive areas is prohibited. Small equipment(lawn mowers, chainsaws, etc.) may be re-fueled, but only at sites designated by the Safety Officer and Fire Safety Officer. Comply with all safety practices pertaining to re-fueling hot equipment. Provide adequate fire extinguishers of types prescribed by the Fire Safety Officer. Only approved safety dispensing containers, as specified at sub-paragraph 1.10.6, will be permitted within the confines of the Ammunition Depot.
- .4 Violation of any of the above regulations will result in immediate cancellation of the vehicle pass and expulsion of the offender from the site.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

PART 1 - GENERAL

1.1 SITE ACCESS .1 Contractors' personnel are required to report to the main desk each morning, sign the register and obtain an identification badge which must be displayed on their person at all times. Upon leaving the Complex at the end of the day, or at lunch time, the Contractors' personnel must report to the main desk, return the badge and be signed off the register.

1.2 PARKING .1 Contractors' vehicles will be allowed into the inner compound only under the following conditions; namely, for short periods of time, to load or unload equipment and supplies and then remove to the upper parking lot adjacent to Windmill Road or to the street. The site supervisor of the contracting firm will be allowed to park his/her vehicle, for short periods of time, in one of the visitor's parking slots or, if filled, he/she will be permitted to park in the inner compound while making periodic progress visits. It is emphasized that Contractors' vehicles entering the inner compound can be subject to search by the Commissionaire on duty upon their departure. DRDC reserves the right to limit the above-mentioned parking privileges if they are being abused.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

PART 1 - GENERAL

1.1 RELATED SECTIONS

- .1 Section 01 11 00 General Instructions.
- .2 Section 02 81 01 Hazardous Materials.
- .3 Section 02 82 00.01 Asbestos Abatement Minimum Precautions.
- .4 Section 02 82 00.02 Asbestos Abatement Intermediate Precautions.
- .5 Section 02 82 00.03 Asbestos Abatement Maximum Precautions.

1.2 REFERENCES

- .1 Canada Occupational Health and Safety Regulations, Part XI (latest edition including all amendments).
- .2 Nova Scotia Occupational Health and Safety Regulations, Part 12 (latest edition including all amendments).
- .3 American Conference of Governmental Industrial Hygienists publication "Threshold Limit Values For Chemical Substances and Physical Agents and Biological Indices"(latest edition including all amendments).

1.3 DESCRIPTION

- .1 This section outlines the mandatory regulations which must be followed to ensure safe operations in and around potentially hazardous confined spaces and the emergency procedures that are to be followed.
  - .2 The safety standards in this section are applicable to Contractors and consultants, their employees(including subcontractors), materials, works and buildings throughout Canadian Forces Base Halifax.
  - .3 All personnel entering a confined space, acting as an observer, or as a rescuer will be thoroughly trained in all procedures in accordance with above reference, No.1.
  - .4 The Contractor will be responsible for and ensure compliance with the provisions of this Section and of the Standards in above reference, No.1.
-

1.4 RESTRICTIONS .1

No Contractor, Subcontractor, Consultant, or their employee must:

- .1 Be permitted to enter a hazardous confined space without receiving an evaluation, written in language which is understood by the employee/contractor, concerning the level of hazard in the confined space. Entry must be made in compliance with this Section and with the requirements in reference, No.1.
- .2 Enter a hazardous confined space without a safe entry permit posted at the site of work and a copy on file.

1.5 DEFINITIONS .1

For the purpose of this Section the following definitions will apply:

- .1 **Confined space:** A tank, process vessel, underground vault, tunnel or other enclosure not designed or intended for human occupancy, except for the purpose of performing work:
  - .1 That has limited number of openings for entry and exit;
  - .2 That has poor natural ventilation;
  - .3 In which there may be an oxygen deficient atmosphere; or
  - .4 In which there may be an airborne dangerous substance.
- .2 **Dangerous substance:** A hazardous substance or a chemical, physical or biological agent that, because of a property it possesses, is hazardous to the safety or health of a person exposed to it.
- .3 **Qualified person:** In respect to a specified duty, a person who, because of their knowledge, training and experience is qualified to perform that duty safely and properly.
- .4 **Class of confined space:** A group of at least two confined spaces that are likely, by reason of their similarity, to present the same hazards to persons entering, exiting or occupying them. Confined spaces are identified as Class A, B, or C by DND depending on hazard assessment.
  - .1 **Class A - Hazardous confined space:** Any confined space that cannot be made safe by ventilation and maintained in this safe condition even when lock-out, blank and bleed, and all other actions have been taken.

1.5 DEFINITIONS .1  
(Cont'd)

(Cont'd)

- .4 Class of confined space:(Cont'd)
  - .2 **Class B - Confined space:** Hazards exist but can be eliminated by ventilation, lock-out, and blank and bleed.
  - .3 **Class C - Considered confined space:** Conditions could arise to make the area a confined space.

1.6 COMMON HAZARDS. .1

Hazards common to confined spaces that Contractors must watch for are:

- .1 toxic vapours from sludge or leakage into the space;
- .2 flammable gases and vapours with potential fire or explosion hazards;
- .3 oxygen below 19.5% or over 23%(normal 20.9%);
- .4 electric shock from tools, lights or other electrical equipment;
- .5 chemical burns from corrosives or injury from dermatitis producing materials;
- .6 burns from high pressure steam, hot water or fuel oil;
- .7 high pressure air;
- .8 physical hazards from slips, falls, protruding objects or falling objects; and
- .9 excess corrosion on metal components.

1.7 SAFE ENTRY .1  
PERMIT

Where the Contractor must enter a confined space, a Safe Entry Permit must be provided to the Engineer, completed in triplicate and returned to the Engineer before access will be permitted. One copy must be posted at site of work. Original copy must be sent to the Unit General Safety Officer.

1.8 VERIFICATIONS .1

Prior to entering a confined space the Contractor must provide a qualified person to ensure/verify:

1.8 VERIFICATIONS  
(Cont'd)

.1 (Cont'd)

- .1 That there are openings for entry and exit from the confined space of sufficient size to allow the safe passage of a person using protective equipment. This opening can be:
  - .1 a manhole; or
  - .2 other clear opening.
- .2 That the entry of any liquid or free flowing solid or hazardous material has been prevented by secure means of disconnection or by blanking off the flanges from any source of these materials. In addition, that any liquid in which the person could drown, or free flowing solid in which they could be entrapped, has been removed.
- .3 That all electrical/mechanical equipment which may present a hazard to the person has been disconnected from it's power source, either real or residue, and has been locked out in the off position by the person entering the space. Note: The key must be held by the person who locked out the equipment until such time as the work is complete and the lock out is removed by the individual. As well, the removal of fuses is encouraged.
- .4 Tests for oxygen levels, combustibility, and toxicity of hazardous substances(in that order) are conducted and evaluated(e.g. oxygen, explosive gases or vapours, hydrogen sulfide, and then carbon monoxide).
  - .1 Tests for oxygen levels and combustibility and toxicity must be made with a probe at the point of entry to the confined space with cover in place. If no hazard is detected the cover will then be removed.
  - .2 If oxygen deficient, combustible atmosphere, or toxic substances are detected, the space must not be entered until such time as the space is rendered safe through appropriate purging and ventilation.
  - .3 The entire space will then be tested for oxygen deficiency, combustibility and toxicity. Note: In the event the possibility exists for oxygen deficiency, combustible atmosphere or the presence of hazardous substances which could exceed allowable limits, despite purging and ventilation, these tests will only be conducted by a person who is wearing the required Personal Protective Equipment(PPE) such as air supplied respirator, gloves/hand protection, harness, etc.(if tests are to be done in the confined space).

1.8 VERIFICATIONS .1  
(Cont'd)

(Cont'd)

- .5 That verification, by means of tests, is conducted to ensure that the following specifications can be achieved and maintained during the duration of time the person will be in the confined space, namely:
- .1 The concentration of any chemical agent, or combination of chemical agents in the confined space to which the person is likely to be exposed:
    - .1 Will not result in a value exceeding the value for that chemical agent, or for any chemical agent in the combination of chemical agents, other than grain dust, as prescribed by reference No.2.
    - .2 Will not result in an airborne grain dust, respirable and non respirable, in excess of 10 mg/m<sup>3</sup>, subject to para. 1.8.1.5.2; and
    - .3 Is less than 50 percent of the lower explosive limit of the chemical agent or combination of chemical agents, subject to para. 1.8.1.5.2.
  - .2 Where a source of ignition exists the concentration does not exceed 10 percent of the lower explosive limit of the airborne chemical agent or combination of airborne chemical agents.
  - .3 The concentration of airborne hazardous substances, other than chemical agents, in the confined space is not hazardous to the safety or health of the person.
  - .4 The percentage of oxygen in the air in the confined space is not less than 19.5 percent by volume and not more than 23 percent by volume, at normal temperature.
  - .6 The space has been purged and ventilated to provide and continue to provide a safe working atmosphere, and that in the event of ventilation equipment failure there is:
    - .1 Sufficient time available for the employee to escape the confined space hazard before contamination of the atmosphere.
    - .2 The ventilation equipment is either equipped with an approved alarm or monitored by an employee who is in constant attendance on the ventilation equipment and in constant contact with the worker(s) in the confined space.

1.8 VERIFICATIONS .1  
(Cont'd)

(Cont'd)

.7 The qualified person must, in a signed report, set out the results of the preceding sections, including any test results and a list of test equipment used and must ensure these results are given to the Engineer and Safety Officer.

PART 2 - PRODUCTS

2.1 EQUIPMENT .1

All PPE identified on the area work permit must be utilized during entry into the confined space. The appropriate PPE depends upon the nature of the exposure, and may include goggles, hardhats, safety footwear, a complete body covering or suitable breathing apparatus. It is stressed that PPE is not a substitute for proper ventilation. Where the Hazard Assessment Form deems it necessary, workers must wear an emergency five minute constant air flow self contained breathing apparatus(SKAT-PAK by SCOTT) and must have an air monitoring device with them at all times while in the confined space. Contractor will supply appropriate PPE for their employees.

.2 A safety harness with an attached lifeline must be worn by all workers, entering a confined space: with only one manhole or opening at the top or where rescue may be difficult; or where dangerous gases, vapours, mists, fumes, dusts, oxygen deficiency or extremes of temperature are likely to be present; or where respiratory protection is necessary. The free end of the lifeline attached must be secured outside the enclosed space. The lifeline must be of sufficient length to reach from an outside support to any point of work inside the confined space, and must be of sufficient strength to bear the weight of the worker. A tripod hoist and lifting device(vertical use only) must be in place prior to and during work in the confined space. Appropriate positive pressure air supplied respiratory protection must be available at the site for use in the rescue/extraction of persons working in the space. Contractor will supply all required rescue equipment.

.3 Minimum equipment requirement:

.1 **Class A confined space:** Ventilator, multi-gas detector, communication system, safety harness, retrieval system, SCBA or air line system(to be worn at all times), and duplicate equipment above kept at entrance of confined space for emergency rescue.

.2 **Class B confined space:** Ventilator, multi-gas detector, communication system, safety harness, retrieval system, and SCBA or air line system on hand at entrance of confined space for emergency rescue.

.3 **Class C confined space:** Multi-gas detector, communication system, and SCAT-PAK.

PART 3 - EXECUTION

3.1 CONDITIONS OF ENTRY

- .1 The following conditions must be met, prior to entry, so that response to any emergency can be made in the shortest time frame:
  - .1 A minimum of one person must be posted outside a confined space as an observer and must:
    - .1 Have no other tasking which would detract from his function of observing the person(s) in the space.
    - .2 Control the lifeline(s) attached to the person(s) in the space and ensure that the lifeline is attached to a solid object.
    - .3 Be equipped with a safety harness.
    - .4 Ensure continuous radio contact with the persons in the space or be able to observe the person(s) in the space(Note: radios are not to be used if combustible atmosphere is present).
    - .5 Have a means of summoning assistance (qualified personnel) in case of an emergency situation.
    - .6 Be trained in rescue procedures and Standard First Aid.
  - .2 In addition to the observer, for Class A confined spaces, an additional individual(a rescuer) must be present at the entrance to the confined space. The individual must:
    - .1 Be wearing all required PPE including harness, lifeline and positive pressure air supplied respiratory protection(where required).
    - .2 Be present at all times when person(s) are working in the confined space.
    - .3 Be trained in rescue procedures and Standard First Aid.
    - .4 Must not enter the space unless to rescue the person(s) working in the space and only after additional assistance has been summoned and all required protective equipment is worn.

3.1 CONDITIONS OF ENTRY  
(Cont'd)

- .1 (Cont'd)
- .3 In the event that the observer or the additional person (rescuer, if present) is required to leave the entrance to the space, the space must be vacated by those working in it until such time as the observer and the additional person return. Before re-entering the confined space, the conditions set out in para 1.7 and 1.8 must be followed.
- .4 The minimum number of persons present during entry into and work in a confined space must be three(3) for Class A confined spaces(worker, observer, and rescuer) and two(2) for Class B and C confined spaces(the worker and the observer). Where conditions warrant, an additional person to respond in emergencies is required.
- .5 The contact for additional assistance will be DND Fire Department at local 427-3333.
- .6 No person will enter any confined space for the purpose of rescuing an individual until they are wearing all required PPE including positive pressure air supplied respiratory protection and an observer is on site.

3.2 TESTING & MAINTENANCE OF EQUIPMENT

- .1 All testing equipment, safety harnesses, lifelines, breathing apparatus, ventilation equipment and any other equipment used in connection with entry into a confined space by the Contractor will be inspected, maintained and tested by a qualified person as frequent as is necessary to ensure that it is in safe condition for use at all times, but not less frequent than is recommended by the manufacturer or as directed in writing by the Engineer or Safety Officer.

3.3 REGULATIONS

- .1 In the event of conflict or discrepancy between this Section and the source documents(Canada Occupational Health and Safety Regulations, Part XI, and NS Health and Safety Regulations, Part 12, including all amendments) the more stringent requirements will apply.

PART 1 - GENERAL

- 1.1 REFERENCES .1 Within text of each specifications section, reference may be made to reference standards.
- .2 Conform to these reference standards, in whole or in part as specifically requested in specifications.
- 1.2 MANUFACTURER'S INSTRUCTIONS .1 Unless otherwise indicated in specifications, install or erect products in accordance with manufacturer's instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers.
- .2 Notify Engineer in writing, of conflicts between specifications and manufacturer's instructions, so that Engineer will establish course of action.
- .3 Improper installation or erection of products, due to failure in complying with these requirements, authorizes Engineer to require removal and re-installation at no increase in Contract Price or Contract Time.
- 1.3 LOCATION OF FIXTURES .1 Consider location of fixtures, outlets, and mechanical and electrical items indicated as approximate.
- .2 Inform Engineer of conflicting installation. Install as directed.
- 1.4 ACCEPTABILITY OF MATERIALS .1 After award of Work, requests for "acceptance" of materials in addition to those presently established as "acceptable" by Contract Documents need be provided to the Engineer.
- .2 Requests must be supported with sufficient product information to enable an assessment to be made for approval.
-

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

PART 1 - GENERAL

1.1 RELATED  
SECTIONS

- .1 Section 01 11 00 General Instructions.
- .2 Section 01 35 73 Confined Spaces Requirements.
- .3 Section 02 82 00.01 Asbestos Abatement Minimum Precautions.
- .4 Section 02 82 00.02 Asbestos Abatement Intermediate Precautions.
- .5 Section 02 82 00.03 Asbestos Abatement Maximum Precautions.

1.2 DEFINITIONS

- .1 **Dangerous Goods:** Product, substance, or organism that is specifically listed or meets the hazard criteria established in Transportation of Dangerous Goods Regulations.
- .2 **Hazardous Material:** Product, substance, or organism used for its original purpose; and is either dangerous goods or material that will cause adverse impact to environment or adversely affect health of persons, animals, or plant life when released into the environment.
- .3 **Hazardous Waste:** Hazardous material no longer used for its original purpose and that is intended for recycling, treatment or disposal.

1.3 REFERENCES

- .1 **Department of Justice Canada(Jus)**
  - .1 Transportation of Dangerous Goods Act(TDG Act).
  - .2 Transportation of Dangerous Goods Regulations(TDGR).
- .2 **National Research Council Canada Institute for Research in Construction(NRC-IRC)**
  - .1 National Fire Code of Canada.

1.4 SUBMITTALS

- .1 Submit hazardous materials management plan to Engineer that identifies hazardous materials, usage, location, personal protective equipment requirements, and disposal arrangements for each scope of work.
-

- 
- 1.4 SUBMITTALS  
(Cont'd)
- .2 Submit reports in the form of an electronic spreadsheet, bi-annually, that identifies all hazardous materials removed or encapsulated, type, original use, the locations hazardous materials were removed, quantities, date of removal, and final disposal arrangements.
- 1.5 DELIVERY,  
STORAGE AND  
HANDLING
- .1 Transport hazardous materials and wastes in accordance with Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.
- .2 Storage and Handling Requirements:
- .1 Co-ordinate storage of hazardous materials with Engineer and abide by internal requirements for labelling and storage of materials and wastes.
  - .2 Store and handle hazardous materials and wastes in accordance with applicable federal and provincial laws, regulations, codes, and guidelines.
  - .3 Store and handle flammable and combustible materials in accordance with National Fire Code of Canada requirements.
  - .4 Observe smoking regulations, smoking is prohibited in areas where hazardous materials are stored, used, or handled.
  - .5 Storage requirements for quantities of hazardous materials and wastes in excess of 5 kg for solids, and 5 litres for liquids:
    - .1 Store hazardous materials and wastes in closed and sealed containers.
    - .2 Label containers of hazardous materials and wastes in accordance with WHMIS.
    - .3 Store hazardous materials and wastes in containers compatible with that material or waste.
    - .4 Segregate incompatible materials and wastes.
    - .5 Ensure that different hazardous materials or hazardous wastes are stored in separate containers.
    - .6 Store hazardous materials and wastes in secure storage area with controlled access.
    - .7 Maintain clear egress from storage area.
-

1.5 DELIVERY,  
STORAGE AND  
HANDLING  
(Cont'd)

- .2 Storage and Handling Requirements:(Cont'd)
- .5 (Cont'd)
- .8 Store hazardous materials and wastes in location that will prevent them from spilling into environment.
- .9 Have appropriate emergency spill response equipment available near storage area, including personal protective equipment.
- .10 Maintain inventory of hazardous materials and wastes, including product name, quantity, and date when storage began.
- .11 When hazardous waste is generated on site:
- .1 Co-ordinate transportation and disposal with Engineer.
- .2 Comply with applicable federal, provincial and municipal laws and regulations for generators of hazardous waste.
- .3 Use licensed carrier authorized by provincial authorities to accept subject material.
- .4 Before shipping material obtain written notice from intended hazardous waste treatment or disposal facility it will accept material and it is licensed to accept this material.
- .5 Label container(s) with legible, visible safety marks as prescribed by federal and provincial regulations.
- .6 Only trained personnel handle, offer for transport, or transport dangerous goods.
- .7 Provide photocopy of shipping documents and waste manifests to Engineer.
- .8 Track receipt of completed manifest from consignee after shipping dangerous goods. Provide photocopy of completed manifest to Engineer.
- .9 Report any discharge, emission, or escape of hazardous materials immediately to Engineer and appropriate provincial authority. Take reasonable measures to control release.
- .12 Ensure personnel have been trained in accordance with Workplace Hazardous Materials Information System(WHMIS) requirements.

1.5 DELIVERY,  
STORAGE AND  
HANDLING  
(Cont'd)

- .2 Storage and Handling Requirements:(Cont'd)
  - .5 (Cont'd)
    - .13 Report spills or accidents immediately to Engineer. Submit a written spill report to Engineer within 24 hours of incident.
  - .3 Workers must follow precautions to minimize risk from disease organisms in the droppings. During the cleanup, seal heating and cooling air ducts or shut the system down. Only authorized cleanup personnel will be present. The cleanup will be done by healthy individuals. Wear a respirator that can filter particles as small as 0.3 microns. Wear disposable protective gloves, hat, coveralls and shoe coverings. Moisten the droppings with a light mist of water to keep spores from becoming airborne and keep them wet. Put droppings into sealed plastic garbage bags. The outside of the garbage bags must be rinsed off before they are placed in a disposal container. When finished and while still wearing the respirator, remove protective clothing and place it in a plastic bag. Wash or shower. Check with local government agencies to verify that disposal of the waste is permissible through standard trash pickup.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

3.1 CLEANING

- .1 **Progress Cleaning:** clean in accordance with Section 01 74 11 - Cleaning.
  - .1 Leave Work area clean at end of each day.
- .2 **Final Cleaning:** Upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
- .3 Dispose of hazardous waste materials in accordance with applicable federal and provincial acts, regulations, and guidelines.
- .4 Recycle hazardous wastes for which there is approved, cost effective recycling process available.
- .5 Send hazardous wastes to authorized hazardous waste disposal or treatment facilities.
- .6 Burning, diluting, or mixing hazardous wastes for purpose of disposal is prohibited.

3.1 CLEANING  
(Cont'd)

- .7 Disposal of hazardous materials in waterways, storm or sanitary sewers, or in municipal solid waste landfills is prohibited.
- .8 Dispose of hazardous wastes in timely fashion in accordance with applicable provincial regulations.
- .9 Minimize generation of hazardous waste to maximum extent practicable. Take necessary precautions to avoid mixing clean and contaminated wastes.

## PART 1 - GENERAL

### 1.1 RELATED SECTIONS

- .1 Section 01 11 00 General Instructions.
- .2 Section 01 35 73 Confined Spaces Requirements.
- .3 Section 02 81 01 Hazardous Materials.
- .4 Section 02 82 00.02 Asbestos Abatement Intermediate Precautions.
- .5 Section 02 82 00.03 Asbestos Abatement Maximum Precautions.

### 1.2 SUMMARY

- .1 Comply with requirements of this Section when performing following work:
  - .1 Removing ceiling tiles that are asbestos-containing material, if the tiles cover an area less than 7.5 square metres and are removed without being broken, cut, drilled, abraded, ground, sanded or vibrated.
  - .2 Removing non-friable asbestos-containing materials, other than ceiling tiles, if the material is installed or removed without being broken, cut, drilled, abraded, ground, sanded or vibrated at locations indicated by Engineer.
  - .3 Break, cut, grind, sand, drill, scrape, vibrate or abrade non-friable asbestos containing materials using non-powered hand-held tools, and the material is wetted to control the spread of dust or fibres.
  - .4 Removing less than one square metre of drywall in which joint-filling compounds that are asbestos containing materials have been used.

### 1.3 REFERENCES

- .1 Department of Justice Canada(Jus)
    - .1 Canadian Environmental Protection Act,(CEPA).
  - .2 Transport Canada(TC)
    - .1 Transportation of Dangerous Goods Act,(TDGA).
-

1.4 DEFINITIONS

- .1 **HEPA Vacuum:** High Efficiency Particulate Air filtered vacuum equipment with filter system capable of collecting and retaining fibres greater than 0.3 microns in any direction at 99.97% efficiency.
- .2 **Amended Water:** Water with nonionic surfactant wetting agent added to reduce water tension to allow thorough wetting of fibres.
- .3 **Asbestos-Containing Materials(ACMs):** Materials that contain 0.5 per cent or more asbestos by dry weight and are identified under existing conditions including fallen materials and settled dust.
- .4 **Asbestos Work Area:** Area where work takes place which will, or may, disturb ACMs.
- .5 **Authorized Visitors:** Engineer(s), Consultant(s) or designated representative(s), and representative(s) of regulatory agencies.
- .6 **Competent Worker(person):** In relation to specific work, means a worker who:
  - .1 Is qualified because of knowledge, training and experience to perform the work.
  - .2 Is familiar with the provincial, federal laws and with the provisions of the regulations that apply to the work.
  - .3 Has knowledge of all potential or actual danger to health or safety in the work.
- .7 **Friable material:** Means material that:
  - .1 when dry, can be crumbled, pulverized or powdered by hand pressure, or
  - .2 is crumbled, pulverized or powdered.
- .8 **Non-Friable Material:** Material that when dry cannot be crumbled, pulverized or powdered by hand pressure.
- .9 **Occupied Area:** Any area of the building or work site that is outside Asbestos Work Area.
- .10 **Polyethylene:** Polyethylene sheeting or rip-proof polyethylene sheeting with tape along edges, around penetrating objects, over cuts and tears, and elsewhere as required to provide protection and isolation.
- .11 **Sprayer:** Garden reservoir type sprayer or airless spray equipment capable of producing mist or fine spray. Must have appropriate capacity for work.

1.5 SUBMITTALS

- .1 Submit proof satisfactory to Engineer that suitable arrangements have been made to dispose of asbestos-containing waste in accordance with requirements of authority having jurisdiction.
- .2 Submit Provincial and/or local requirements for Notice of Project Form.
- .3 Submit proof of Contractor's Asbestos Liability Insurance.
- .4 Submit to Engineer necessary permits for transportation and disposal of asbestos-containing waste and proof that asbestos-containing waste has been received and properly disposed.
- .5 Submit proof that all asbestos workers and/or supervisor have received appropriate training and education by a competent person in the hazards of asbestos exposure, good personal hygiene and work practices while working in Asbestos Work Areas, and the use, cleaning and disposal of respirators and protective clothing.
- .6 Submit proof satisfactory to Engineer that employees have respirator fitting and testing. Workers must be fit tested (irritant smoke test) with respirator that is personally issued.

1.6 QUALITY  
ASSURANCE

- .1 **Regulatory Requirements:** Comply with Federal, Provincial and local requirements pertaining to asbestos, provided that in case of conflict among these requirements or with these specifications, more stringent requirement applies. Comply with regulations in effect at time Work is performed.
- .2 **Health and Safety:**
  - .1 **Safety Requirements:** Worker protection.
    - .1 Protective equipment and clothing to be worn by workers while in Asbestos Work Area include:

1.6 QUALITY  
ASSURANCE  
(Cont'd)

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- .2 Health and Safety:(Cont'd)
  - .1 Safety Requirements:(Cont'd)
    - .1 (Cont'd)
      - .1 Air purifying half-maskrespirator with N-100, R-100 or P-100 particulate filter, personally issued to worker and marked as to efficiency and purpose, suitable for protection against asbestos and acceptable to Provincial Authority having jurisdiction. The respirator to be fitted so that there is an effective seal between the respirator and the worker's face, unless the respirator is equipped with a hood or helmet. The respirator to be cleaned, disinfected and inspected after use on each shift, or more often if necessary, when issued for the exclusive use of one worker, or after each use when used by more than one worker. The respirator to have damaged or deteriorated parts replaced prior to being used by a worker; and, when not in use, to be stored in a convenient, clean and sanitary location. The employer to establish written procedures regarding the selection, use and care of respirators, and a copy of the procedures to be provided to and reviewed with each worker who is required to wear a respirator. A worker not to be assigned to an operation requiring the use of a respirator unless he or she is physically able to perform the operation while using the respirator.
      - .2 Disposable-type protective clothing that does not readily retain or permit penetration of asbestos fibres. Protective clothing to be provided by the employer and worn by every worker who enters the work area, and the protective clothing shall consist of a head covering and full body covering that fits snugly at the ankles, wrists and neck, in order to prevent asbestos fibres from reaching the garments and skin under the protective clothing to include suitable footwear, and to be repaired or replaced if torn.
      - .3 In addition, the people entering must have available:
        - .1 a bucket of water to wash down after completion of work; and
        - .2 polyethylene and tape to seal the return grills.

1.6 QUALITY  
ASSURANCE  
(Cont'd)

- .2 Health and Safety:(Cont'd)
- .1 Safety Requirements:(Cont'd)
    - .2 Eating, drinking, chewing, and smoking are not permitted in Asbestos Work Area.
    - .3 Before leaving Asbestos Work Area, the worker can decontaminate his or her protective clothing by using a vacuum equipped with a HEPA filter, or by damp wiping, before removing the protective clothing, or, if the protective clothing will not be reused, place it in a container for dust and waste. The container to be dust tight, suitable for asbestos waste, impervious to asbestos, identified as asbestos waste, cleaned with a damp cloth or a vacuum equipped with a HEPA filter immediately before removal from the work area, and removed from the work area frequently and at regular intervals.
    - .4 Facilities for washing hands and face will be provided within or close to the Asbestos Work Area.
    - .5 Ensure workers wash hands and face when leaving Asbestos Work Area. Facilities for washing will be identified by Engineer.
    - .6 Ensure that no person required to enter an Asbestos Work Area has facial hair that affects seal between respirator and face.

1.7 EXISTING  
CONDITIONS

- .1 Reports and information pertaining to ACMs to be handled, removed, or otherwise disturbed and disposed of during this project are available for inspection from Engineer.
- .2 Notify Engineer of friable material discovered during Work and not apparent from drawings, specifications, or report pertaining to Work. Do not disturb such material pending instructions from Engineer.

1.8 OWNER'S  
INSTRUCTIONS

- .1 Before beginning Work, provide Engineer satisfactory proof that every worker has had instruction and training in hazards of asbestos exposure, in personal hygiene and work practices, and in use, cleaning, and disposal of respirators and protective clothing.
- .2 Instruction and training related to respirators includes, following minimum requirements:
  - .1 fitting of equipment;
  - .2 inspection and maintenance of equipment;

- 1.8 OWNER'S INSTRUCTIONS (Cont'd)
- .2 (Cont'd)
  - .3 disinfecting of equipment; and
  - .4 limitations of equipment.
  - .3 Instruction and training must be provided by a competent, qualified person.

## PART 2 - PRODUCTS

- 2.1 MATERIALS
- .1 **Drop Sheets:**
    - .1 Polyethylene: 0.15mm thick.
    - .2 FR polyethylene: 0.15mm thick woven fibre reinforced fabric bonded both sides with polyethylene.
  - .2 **Wetting Agent:** 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with water in a concentration to provide thorough wetting of asbestos-containing material.
  - .3 **Waste Containers:** Contain waste in two separate containers.
    - .1 **Inner container:** 0.15mm thick sealable polyethylene waste bag.
    - .2 **Outer container:** Sealable metal or fibre type where there are sharp objects included in waste material; otherwise outer container may be sealable metal or fibre type or second 0.15mm thick sealable polyethylene bag.
    - .3 **Labelling requirements:** Affix pre-printed cautionary asbestos warning in both official languages that is visible when ready for removal to disposal site.
  - .4 **Slow - drying sealer:** Non-staining, clear, water - dispersible type that remains tacky on surface for at least 8 hours and designed for purpose of trapping residual asbestos fibres.
  - .5 **Tape:** Fibreglass - reinforced duct tape suitable for sealing polyethylene under both dry conditions and wet conditions using amended water.
- 2.2 EQUIPMENT CERTIFICATION
- .1 The HEPA vacuum and negative pressure machine must be tested with the DOP method and have a valid certification.

PART 3 - EXECUTION

3.1 PROCEDURES

- .1 Before beginning Work, isolate Asbestos Work Area using, minimum, preprinted cautionary asbestos warning signs in both official languages that are visible at access routes to Asbestos Work Area.
    - .1 Remove visible dust from surfaces in the work area where dust is likely to be disturbed during course of work.
    - .2 Use HEPA vacuum or damp cloths where damp cleaning does not create a hazard and is otherwise appropriate.
    - .3 Do not use compressed air to clean up or remove dust from any surface.
  - .2 Prevent spread of dust from Asbestos Work Area using measures appropriate to work to be done.
    - .1 Use FR polyethylene drop sheets over flooring such as carpeting that absorbs dust and over flooring in Asbestos Work Area where dust and contamination cannot otherwise be safely contained. Drop sheets are not to be reused.
  - .3 Wet materials containing asbestos to be cut, ground, abraded, scraped, drilled, or otherwise disturbed unless wetting creates hazard or causes damage.
    - .1 Use garden reservoir type low - velocity fine - mist sprayer.
    - .2 Perform Work to reduce dust creation to lowest levels practicable.
    - .3 Work will be subject to visual inspection and air monitoring.
    - .4 Contamination of surrounding areas indicated by visual inspection or air monitoring will require complete enclosure and clean-up of affected areas.
  - .4 Frequently and at regular intervals during Work and immediately on completion of work:
    - .1 dust and waste to be cleaned up and removed using a vacuum equipped with a HEPA filter, or by damp mopping or wet sweeping, and placed in a waste container, and
    - .2 drop sheets to be wetted and placed in a waste container as soon as practicable.
-

3.1 PROCEDURES .5  
(Cont'd)

**Cleanup:**

- .1 Place dust and asbestos containing waste in sealed dust-tight waste bags. Treat drop sheets and disposable protective clothing as asbestos waste; wet and fold these items to contain dust, and then place in plastic bags.
- .2 Clean exterior of each waste-filled bag using damp cloths or HEPA vacuum and place in second clean waste bag immediately prior to removal from Asbestos Work Area.
- .3 Seal waste bags and remove from site. Dispose of in accordance with requirements of Provincial and Federal Authority having jurisdiction. Supervise dumping and ensure that dump operator is fully aware of hazardous nature of material to be dumped and that the appropriate guidelines and regulations for asbestos disposal are followed.
- .4 Perform final thorough clean-up of Work areas and adjacent areas affected by Work using HEPA vacuum.

3.2 INSPECTION .1

- .1 Inspection of the Asbestos Work Area will be performed to confirm compliance with the requirements of the specifications and governing authorities. Any deviations from these requirements that have not been approved in writing by the Engineer may result in a stoppage of work, at no cost to the Owner.
- .2 The Engineer is empowered to inspect adherence to specific procedures and materials, and to inspect for final cleanliness and completion. Additional labour or materials expended by the Contractor to provide performance to the level specified will be at no additional cost.
- .3 The Engineer is empowered to order a shutdown of work when a leakage of asbestos from the Asbestos Work Area has occurred or is likely to occur. Additional labour or materials expended by the Contractor to provide performance to the level specified will be at no additional cost.

PART 1 - GENERAL

1.1 RELATED  
SECTIONS

- .1 Section 01 11 00 General Instructions.
- .2 Section 01 35 73 Confined Spaces Requirements.
- .3 Section 02 81 01 Hazardous Materials.
- .4 Section 02 82 00.01 Asbestos Abatement - Minimum Precautions.
- .5 Section 02 82 00.03 Asbestos Abatement - Maximum Precautions.

1.2 SUMMARY

- .1 Comply with requirements of this Section when performing following Work:
    - .1 Removing all or part of a false ceiling to obtain access to a work area, if asbestos containing material is likely lying on the surface of the false ceiling.
    - .2 Removing more than 7.5 square metres of asbestos containing suspended ceiling tiles, as indicated.
    - .3 Removal of asbestos containing material from piping and equipment.
    - .4 Removal or disturbance of one square metre or less of friable asbestos containing material during the repair, alteration, maintenance or demolition of all or part of machinery or equipment, or of a building.
    - .5 Enclosure of friable asbestos containing material as indicated.
    - .6 Application of tape or sealant or other covering to pipe and boiler insulation containing asbestos.
    - .7 Removal all or part of a false ceiling to obtain access to a work area, if asbestos containing is likely to be lying on the surface of the false ceiling.
    - .8 Removing non-friable asbestos containing materials by breaking, cutting, drilling, abrading, grinding, sanding or vibrating at locations indicated on drawings if:
      - .1 the material is not wetted to control the spread of dust or fibres, and
-

1.2 SUMMARY  
(Cont'd)

- .1 (Cont'd)
- .8 (Cont'd)
- .2 the work is done only by means of non-powered hand-held tools.
- .9 Removing non-friable asbestos containing materials by breaking, cutting, drilling, abrading, grounding, sanding or vibrating at locations indicated on drawings if the work is done by means of power tools that are attached to dust-collecting devices equipped with HEPA filters.
- .10 Removing more than one square metre of drywall in which joint-filling compounds that are asbestos containing materials have been used.
- .11 Removing of asbestos containing material from a pipe, duct or similar structure using a glove bag.
- .12 Cleaning or removing filters used in an air handling unit in a building that has sprayed-on asbestos containing fireproofing.

1.3 REFERENCES

- .1 Department of Justice Canada(Jus)
- .1 Canadian Environmental Protection Act,(CEPA).
- .2 Health Canada/Workplace Hazardous Materials Information System(WHMIS)
- .1 Material Safety Data Sheets(MSDS).
- .3 Transport Canada(TC)
- .1 Transportation of Dangerous Goods Act,(TDGA).

1.4 DEFINITIONS

- .1 **Amended Water:** Water with nonionic surfactant wetting agent added to reduce water tension to allow wetting of fibres.
- .2 **Asbestos Containing Materials(ACMs):** Materials that contain 0.5 per cent or more asbestos by dry weight and are identified under Existing Conditions including fallen materials and settled dust.
- .3 **Asbestos Work Area:** Area where work takes place which will, or may disturb ACMs.
- .4 **Authorized Visitors:** Engineer(s), or designated representative(s), and representative(s) of regulatory agencies.
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1.4 DEFINITIONS  
(Cont'd)

- .5 **Competent Worker(person):** In relation to specific work, means a worker who:
- .1 Is qualified because of knowledge, training and experience to perform the work.
  - .2 Is familiar with the provincial, federal laws and with the provisions of the regulations that apply to the work.
  - .3 Has knowledge of all potential or actual danger to health or safety in the work.
- .6 **Friable material:** Means material that:
- .1 when dry, can be crumbled, pulverized or powdered by hand pressure, or
  - .2 is crumbled, pulverized or powdered.
- .7 **Glove Bag:** Prefabricated glove bag as follows:
- .1 Minimum thickness 0.25mm(10 mil) polyvinyl-chloride bag.
  - .2 Integral 0.25mm(10 mil) thick polyvinyl-chloride gloves and elastic ports.
  - .3 Equipped with reversible double pull double throw zipper on top and at approximately mid-section of the bag.
  - .4 Straps for sealing ends around pipe.
- .8 **HEPA Vacuum:** High Efficiency Particulate Air filtered vacuum equipment with filter system capable of collecting and retaining fibres greater than 0.3 microns in any dimension at 99.97% efficiency.
- .9 **Non-Friable Material:** Material that when dry cannot be crumbled, pulverized or powdered by hand pressure.
- .10 **Occupied Area:** Any area of building or work site that is outside Asbestos Work Area.
- .11 **Polyethylene:** Polyethylene sheeting or rip-proof polyethylene sheeting with tape along edges, around penetrating objects, over cuts and tears, and elsewhere as required to provide protection and isolation.
- .12 **Sprayer:** Garden reservoir type sprayer or airless spray equipment capable of producing mist or fine spray. Must have appropriate capacity for scope of work.

1.5 SUBMITTALS

- .1 Submit proof satisfactory to Engineer that suitable arrangements have been made to dispose of asbestos containing waste in accordance with requirements of authority having jurisdiction.
- .2 Submit Provincial and/or local requirements for Notice of Project Form.
- .3 Submit proof of Contractor's Asbestos Liability Insurance.
- .4 Submit to Engineer necessary permits for transportation and disposal of asbestos containing waste and proof that asbestos containing waste has been received and properly disposed.
- .5 Submit proof satisfactory to Engineer that all asbestos workers have received appropriate training and education by a competent person in the hazards of asbestos exposure, good personal hygiene, entry and exit from Asbestos Work Area, aspects of work procedures and protective measures while working in Asbestos Work Areas, and the use, cleaning and disposal of respirators and protective clothing.
- .6 Submit proof that supervisory personnel have attended asbestos abatement course, of not less than two days duration, approved by Engineer. Minimum of one supervisor for every ten workers.
- .7 Submit Worker's Compensation Board status and transcription of insurance.
- .8 Submit documentation including test results, fire and flammability data, and Material Safety Data Sheets(MSDS) for chemicals or materials including:
  - .1 encapsulants;
  - .2 amended water; and
  - .3 slow drying sealer.
- .9 Submit proof satisfactory to Engineer that employees have respirator fitting and testing. Workers must be fit tested(irritant smoke test) with respirator that is personally issued.

1.6 QUALITY  
ASSURANCE

- .1 **Regulatory Requirements:** Comply with Federal, Provincial and local requirements pertaining to asbestos, provided that in case of conflict among these requirements or with these specifications more stringent requirement applies. Comply with regulations in effect at the time work is performed.
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1.6 QUALITY  
ASSURANCE  
(Cont'd)

.2 **Health and Safety:**

.1 **Safety Requirements:** Worker and visitor protection.

.1 Protective equipment and clothing to be worn by workers while in Asbestos Work Area include:

.1 Air purifying half-mask respirator with N-100, R-100 or P-100 particulate filter, personally issued to worker and marked as to efficiency and purpose, suitable for protection against asbestos and acceptable to Provincial Authority having jurisdiction. The respirator to be fitted so that there is an effective seal between the respirator and the worker's face, unless the respirator is equipped with a hood or helmet. The respirator to be cleaned, disinfected and inspected after use on each shift, or more often if necessary, when issued for the exclusive use of one worker, or after each use when used by more than one worker. The respirator to have damaged or deteriorated parts replaced prior to being used by a worker; and, when not in use, to be stored in a convenient, clean and sanitary location. The employer to establish written procedures regarding the selection, use and care of respirators, and a copy of the procedures to be provided to and reviewed with each worker who is required to wear a respirator. A worker not to be assigned to an operation requiring the use of a respirator unless he or she is physically able to perform the operation while using the respirator.

.2 Disposable type protective clothing that does not readily retain or permit penetration of asbestos fibres. Protective clothing to be provided by the employer and worn by every worker who enters the work area, and the protective clothing to consist of a head covering and full body covering that fits snugly at the ankles, wrists and neck, in order to prevent asbestos fibres from reaching the garments and skin under the protective clothing. It includes suitable footwear, and it to be repaired or replaced if torn.

.2 Eating, drinking, chewing, and smoking are not permitted in Asbestos Work Area.

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1.6 QUALITY  
ASSURANCE  
(Cont'd)

- .2 Health and Safety:(Cont'd)
- .3 Before leaving Asbestos Work Area, the worker can decontaminate his or her protective clothing by using a vacuum equipped with a HEPA filter, or by damp wiping, before removing the protective clothing, or, if the protective clothing will not be reused, place it in a container for dust and waste. The container to be dust tight, suitable for asbestos waste, impervious to asbestos, identified as asbestos waste, cleaned with a damp cloth or a vacuum equipped with a HEPA filter immediately before removal from the work area, and removed from the work area frequently and at regular intervals.
- .4 Ensure workers wash hands and face when leaving Asbestos Work Area. Facilities for washing will be identified by Engineer.
- .5 Ensure that no person required to enter an Asbestos Work Area has facial hair that affects seal between respirator and face.
- .6 **Visitor Protection:**
- .1 Provide protective clothing and approved respirators to Authorized Visitors to work areas.
- .2 Instruct Authorized Visitors in the use of protective clothing, respirators and procedures.
- .3 Instruct Authorized Visitors in proper procedures to be followed in entering into and exiting from Asbestos Work Area.

1.7 EXISTING  
CONDITIONS

- .1 Reports and information pertaining to ACMS to be handled, removed, or otherwise disturbed and disposed of during this Project are available for inspection from Engineer.
- .2 Notify Engineer of friable material discovered during Work and not apparent from drawings, specifications, or report pertaining to Work. Do not disturb such material until instructed by Engineer.

1.8 OWNER'S  
INSTRUCTIONS

- .1 Before beginning Work, provide Engineer satisfactory proof that every worker has had instruction and training in hazards of asbestos exposure, in personal hygiene and work practices, in use of glove bag procedures, and in use, cleaning, and disposal of respirators and protective clothing.

1.8 OWNER'S  
INSTRUCTIONS  
(Cont'd)

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- .2 Instruction and training related to respirators includes, at minimum:
  - .1 fitting of equipment;
  - .2 inspection and maintenance of equipment;
  - .3 disinfecting of equipment; and
  - .4 limitations of equipment.
- .3 Instruction and training must be provided by competent, qualified person.

PART 2 - PRODUCTS

2.1 MATERIALS

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- .1 **Drop and Enclosure Sheets:**
    - .1 Polyethylene: 0.15mm thick.
    - .2 FR polyethylene: 0.15mm thick woven fibre reinforced fabric bonded both sides with polyethylene.
  - .2 **Wetting Agent:** 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with water in concentration to provide thorough wetting of asbestos containing material.
  - .3 **Waste Containers:** Contain waste in two separate containers.
    - .1 **Inner container:** 0.15mm thick sealable polyethylene bag or where glove bag method is used, glove bag itself.
    - .2 **Outer container:** Sealable metal or fibre type where there are sharp objects included in waste material; otherwise outer container may be sealable metal or fibre type or second 0.15mm thick sealable polyethylene bag.
    - .3 **Labelling requirements:** Affix preprinted cautionary asbestos warning, in both official languages, that is visible when ready for removal to disposal site.
  - .4 **Glove bag:**
    - .1 **Acceptable materials:** Safe-T-Strip products in configuration suitable for Work, or alternative material approved by addendum during tendering period in accordance with Instructions to Tenderers.
-

2.1 MATERIALS  
(Cont'd)

- .4 Glove bag:(Cont'd)
- .2 The glove bag to be equipped with:
- .1 sleeves and gloves that are permanently sealed to the body of the bag to allow the worker to access and deal with the insulation and maintain a sealed enclosure throughout the work period;
  - .2 valves or openings to allow insertion of a vacuum hose and the nozzle of a water sprayer while maintaining the seal to the pipe, duct or similar structure;
  - .3 a tool pouch with a drain;
  - .4 a seamless bottom and a means of sealing off the lower portion of the bag; and
  - .5 a high strength double throw zipper and removable straps, if the bag is to be moved during the removal operation.
- .5 **Tape:** Tape suitable for sealing polyethylene to surfaces under both dry and wet conditions using amended water.
- .6 **Slow - drying sealer:** Non-staining, clear, water - dispersible type that remains tacky on surface for at least 8 hours and designed for purpose of trapping residual asbestos fibres.
- .1 **Sealer:** Flame spread and smoke developed rating less than 50 and be compatible with new fireproofing.
- .7 **Encapsulant:** Surface film forming or penetrating type.

2.2 EQUIPMENT  
CERTIFICATION

- .1 The HEPA vacuum and negative pressure machine must be tested with the DOP method and have a valid certification.

PART 3 - EXECUTION

3.1 SUPERVISION

- .1 Minimum of one(1) Supervisor for every ten workers is required.
- .2 Approved Supervisor must remain within Asbestos Work Area during disturbance, removal, or other handling of asbestos-containing materials.

3.2 PROCEDURES

- .1 Before beginning Work, at each access to Asbestos Work Area, install warning signs in both official languages in upper case 'Helvetica Medium' letters reading as follows, where number in parentheses indicates font size to be used: 'CAUTION ASBESTOS HAZARD AREA (25mm) / NO UNAUTHORIZED ENTRY (19mm) / WEAR ASSIGNED PROTECTIVE EQUIPMENT (19mm) / BREATHING ASBESTOS DUST MAY CAUSE SERIOUS BODILY HARM (7mm)'.
  - .2 Before beginning Work remove visible dust from surfaces in work area where dust is likely to be disturbed during course of work.
    - .1 Use HEPA vacuum or damp cloths where damp cleaning does not create hazard and is otherwise appropriate.
    - .2 Do not use compressed air to clean up or remove dust from any surface.
  - .3 Prevent spread of dust from Asbestos Work Area using measures appropriate to work to be done.
    - .1 Use FR polyethylene drop sheets over flooring such as carpeting that absorbs dust and over flooring in work areas where dust or contamination cannot otherwise be safely contained.
    - .2 When removing suspended ceilings and walls themselves do not enclose work area and when removing asbestos containing material from piping or equipment and "glove bag" method is not used erect enclosure of polyethylene sheeting around work area, shut off mechanical ventilation system serving work area and seal ventilation ducts to and from work area.
  - .4 Before removing suspended ceilings, remove friable material on upper surfaces using HEPA vacuum equipment.
    - .1 Remove and clean surfaces of ceiling panels using HEPA vacuum, wrap clean panels in 0.10 mm thick polyethylene, and store in building as directed by Engineer.
    - .2 Clean "T" grid suspension system, disconnect, wrap in 0.10mm thick polyethylene, and store in building as directed by Engineer.
  - .5 Remove loose material by HEPA vacuum; thoroughly wet friable material containing asbestos to be removed or disturbed before and during Work unless wetting creates hazard or causes damage.
    - .1 Use garden reservoir type low - velocity sprayer or airless spray equipment capable of producing mist or fine spray.
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3.2 PROCEDURES  
(Cont'd)

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- .5 (Cont'd)
  - .2 Perform Work in a manner to reduce dust creation to lowest levels practicable.
  - .6 **Pipe Insulation Removal Using Glove Bag:**
    - .1 A glove bag not to be used to remove insulation from a pipe, duct or similar structure if:
      - .1 It may not be possible to maintain a proper seal for any reason including, without limitation:
        - .1 the condition of the insulation;
        - .2 the temperature of the pipe, duct or similar structure;
      - .2 the bag could become damaged for any reason including, without limitation:
        - .1 the type of jacketing;
        - .2 the temperature of the pipe, duct or similar structure.
    - .2 Upon installation of the glove bag, inspect bag for any damage or defects. If any damage or defects are found, the glove bag is to be repaired or replaced. The glove bag to be inspected at regular intervals for damage and defects, and repair or replaced, as appropriately. The asbestos containing contents of the damaged or defective glove bag found during removal are to be wetted and the glove bag and its contents are to be removed and disposed of in an appropriate waste disposal container. Any damaged or defective glove bags are not be reused.
    - .3 Place tools necessary to remove insulation in tool pouch. Wrap bag around pipe and close zippers. Seal bag to pipe with cloth straps.
    - .4 Place hands in gloves and use necessary tools to remove insulation. Arrange insulation in bag to obtain full capacity of bag.
    - .5 Insert nozzle of garden reservoir type sprayer into bag through valve and wash down pipe and interior of bag thoroughly. Wet surface of insulation in lower section of bag.
-

3.2 PROCEDURES  
(Cont'd)

- (Cont'd)
- .6 To remove bag after completion of stripping, wash top section and tools thoroughly. Remove air from top section through elasticized valve using a HEPA vacuum. Pull polyethylene waste container over glove bag before removing from pipe. Release one strap and remove freshly washed tools. Place tools in water. Remove second strap and zipper. Fold over into waste container and seal.
  - .7 After removal of bag ensure that pipe is free of residue. Remove residue using HEPA vacuum or wet cloths. Ensure that surfaces are free of sludge which after drying could release asbestos dust into atmosphere. Seal exposed surfaces of pipe and ends of insulation with slow drying sealer to seal in any residual fibres.
  - .8 Upon completion of Work shift, cover exposed ends of remaining pipe insulation with polyethylene taped in place.
- .7 Work is subject to visual inspection and air monitoring. Contamination of surrounding areas indicated by visual inspection or air monitoring will require complete enclosure and clean-up of affected areas.
- .8 **Cleanup:**
- .1 Frequently during Work and immediately after completion of work, clean up dust and asbestos containing waste using HEPA vacuum or by damp mopping.
  - .2 Place dust and asbestos containing waste in sealed dust tight waste bags. Treat drop sheets and disposable protective clothing as asbestos waste and wet and fold to contain dust and then place in waste bags.
  - .3 Immediately before their removal from Asbestos Work Area and disposal, clean each filled waste bag using damp cloths or HEPA vacuum and place in second clean waste bag.
  - .4 Seal and remove double bagged waste from site. Dispose of in accordance with requirements of Provincial/Territorial and Federal authority having jurisdiction. Supervise dumping and ensure that dump operator is fully aware of hazardous nature of material to be dumped and that guidelines and regulations for asbestos disposal are followed.
  - .5 Perform final thorough clean-up of Asbestos Work Areas and adjacent areas affected by Work using HEPA vacuum.

- 3.3 AIR MONITORING .1 From beginning of Work until completion of cleaning operations, testing agency to take air samples on daily basis inside and outside of Asbestos Work Area enclosures in accordance with Provincial Occupational Health and Safety Regulations.
- .2 If air monitoring shows that areas outside Asbestos Work Area enclosures are contaminated, enclose, maintain and clean these areas in same manner as that applicable to Asbestos Work Area.
- .3 Ensure that respiratory safety factors are not exceeded.
- .4 During the course of Work, to measure fibre content of air outside Work areas by means of air samples analyzed by Phase Contrast Microscopy(PCM).
- .1 Stop Work when PCM measurements exceed 0.05 f/cc and correct procedures.

- 3.4 INSPECTION .1 Inspection of the Asbestos Work Area will be performed to confirm compliance with the requirements of the specifications and governing authorities. Any deviations from these requirements that have not been approved in writing by the Engineer may result in a stoppage of work, at no cost to the Owner.
- .2 The Engineer is empowered to inspect adherence to specific procedures and materials, and to inspect for final cleanliness and completion. Additional labour or materials expended by the Contractor to provide performance to the level specified will be at no additional cost.
- .3 The Engineer is empowered to order a shutdown of work when a leakage of asbestos from the Asbestos Work Area has occurred or is likely to occur. Additional labour or materials expended by the Contractor to provide performance to the level specified will be at no additional cost.

PART 1 - GENERAL

1.1 RELATED  
SECTIONS

- .1 Section 01 11 00 General Instructions.
- .2 Section 01 35 73 Confined Spaces Requirements.
- .3 Section 02 81 01 Hazardous Materials.
- .4 Section 02 82 00.01 Asbestos Abatement - Minimum Precautions.
- .5 Section 02 82 00.02 Asbestos Abatement - Intermediate Precautions.

1.2 SUMMARY

- .1 Comply with requirements of this Section when performing following Work:
  - .1 Removal or disturbance as specified of more than one square metre of friable asbestos containing material during the repair, alteration, maintenance or demolition of a building or any machinery or equipment located as indicated.
  - .2 The spray application of a sealant to friable asbestos containing material.
  - .3 Cleaning or removing air handling equipment, including rigid ducting but not including filters, in a building that has asbestos containing sprayed fireproofing.
  - .4 Repairing, altering or demolishing all or part of a kiln, metallurgical furnace or similar structure that is made in part of refractory materials that are asbestos containing materials.
  - .5 Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos containing material, if the work is done by means of power tools that are not attached to dust-collecting devices equipped with HEPA filters.
  - .6 Repairing, altering or demolishing all or part of any building in which asbestos is or was used in the manufacture of products.

1.3 REFERENCES

- .1 Department of Justice Canada(Jus)
    - .1 Canadian Environmental Protection Act(CEPA).
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1.3 REFERENCES  
(Cont'd)

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- .2 Health Canada/Workplace Hazardous Materials Information System(WHMIS)
  - .1 Material Safety Data Sheets(MSDS).
- .3 Transport Canada(TC)
  - .1 Transportation of Dangerous Goods Act(TDGA).
- .4 Underwriters' Laboratories of Canada(ULC)
- .5 U.S. Department of Health and Human Services/Centers for Disease Control and Prevention(CDC)/National Institute for Occupational Safety and Health(NIOSH)
  - .1 NIOSH 94-113-August 1994, NIOSH Manual of Analytical Methods(NMAM), 4th Edition.

1.4 DEFINITIONS

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- .1 **Airlock:** System for permitting ingress or egress without permitting air movement between contaminated area and uncontaminated area, typically consisting of two curtained doorways at least 2m apart.
  - .2 **Amended Water:** Water with a non-ionic surfactant wetting agent added to reduce water tension to allow wetting of fibres.
  - .3 **Asbestos Containing Materials(ACMs):** Materials that contain 0.5 per cent or more asbestos by dry weight and are identified under Existing Conditions including fallen materials and settled dust.
  - .4 **Asbestos Work Areas:** Area where work takes place which will, or may disturb ACMs.
  - .5 **Authorized Visitors:** Engineer or designated representative(s), and representative(s) of regulatory agencies.
  - .6 **Competent Worker(person):** In relation to specific work, means a worker who:
    - .1 Is qualified because of knowledge, training and experience to perform the work.
    - .2 Is familiar with the provincial, federal laws and with the provisions of the regulations that apply to the work.
    - .3 Has knowledge of all potential or actual danger to health or safety in the work.
-

1.4 DEFINITIONS  
(Cont'd)

- .7 **Curtained Doorway:** Arrangement of closures to allow ingress and egress from one room to another while permitting minimal air movement between rooms, typically constructed as follows:
- .1 Place two overlapping sheets of polyethylene over existing or temporarily framed doorway, secure each along top of doorway, secure vertical edge of one sheet along one vertical side of doorway, and secure vertical edge of other sheet along opposite vertical side of doorway.
  - .2 Reinforce free edges of polyethylene with duct tape and weight bottom edge to ensure proper closing.
  - .3 Overlap each polyethylene sheet at openings not less than 1.5m on each side.
- .8 **DOP Test:** Testing method used to determine integrity of Negative Pressure unit using dioctyl phthalate(DOP) HEPA-filter leak test.
- .9 **Friable Materials:** Material that when dry can be crumbled, pulverized or powdered by hand pressure and includes such material that is crumbled, pulverized or powdered.
- .10 **Glove Bag:** Prefabricated glove bag as follows:
- .1 Minimum thickness 0.25mm(10 mil) polyvinyl-chloride bag.
  - .2 Integral 0.25mm(10 mil) thick polyvinyl-chloride gloves and elastic ports.
  - .3 Equipped with reversible double pull double throw zipper on top and at approximately mid-section of the bag.
  - .4 Straps for sealing ends around pipe.
- .11 **HEPA Vacuum:** High Efficiency Particulate Air filtered vacuum equipment with a filter system capable of collecting and retaining fibres greater than 0.3 microns in any direction at 99.97% efficiency.
- .12 **Negative Pressure:** System that extracts air directly from work area, filters such extracted air through High Efficiency Particulate Air filtering system, and discharges this air directly outside work area to exterior of building.
- .1 System to maintain minimum pressure differential of 5 Pa relative to adjacent areas outside of work areas, be equipped with alarm to warn of system breakdown, and be equipped with instrument to continuously monitor and automatically record pressure differences.

- 1.4 DEFINITIONS (Cont'd)
- .13 **Non-Friable Materials:** Material that when dry cannot be crumbled, pulverized or powdered by hand pressure.
  - .14 **Occupied Areas:** Any area of building or work site that is outside Asbestos Work Area.
  - .15 **Polyethylene sheeting sealed with tape:** Polyethylene sheeting of type and thickness specified sealed with tape along edges, around penetrating objects, over cuts and tears, and elsewhere as required to provide continuous polyethylene membrane to protect underlying surfaces from water damage or damage by sealants, and to prevent escape of asbestos fibres through sheeting into clean area.
  - .16 **Sprayer:** Garden reservoir type sprayer or airless spray equipment capable of producing mist or fine spray. Must be appropriate capacity for scope of work.
- 1.5 SUBMITTALS
- .1 Before beginning work:
    - .1 Obtain from appropriate agency and submit to Engineer necessary permits for transportation and disposal of asbestos waste. Ensure that dump operator is fully aware of hazardous nature of material being dumped, and proper methods of disposal. Submit proof satisfactory to Engineer that suitable arrangements have been made to receive and properly dispose of asbestos waste.
    - .2 Submit proof satisfactory to Engineer that all asbestos workers have received appropriate training and education by a competent person on hazards of asbestos exposure, good personal hygiene, entry and exit from Asbestos Work Area, aspects of work procedures and protective measures while working in Asbestos Work Areas, and the use, cleaning and disposal of respirators and protective clothing. Submit proof of attendance in form of certificate.
    - .3 Ensure supervisory personnel have attended asbestos abatement course, of not less than two days duration, approved by Engineer. Submit proof of attendance in form of certificate. Minimum of one Supervisor for every ten workers.
    - .4 Submit layout of proposed enclosures and decontamination facilities to Engineer for review.
    - .5 Submit documentation including test results for sealer proposed for use.
    - .6 Submit Provincial and/or local requirements for Notice of Project form.
-

- 1.5 SUBMITTALS (Cont'd)
- .1 (Cont'd)
- .7 Submit proof of Contractor's Asbestos Liability Insurance.
- .8 Submit proof satisfactory to Engineer that employees have respirator fitting and testing. Workers must be fit tested (irritant smoke test) with respirator that is personally issued.
- .9 Submit documentation including test results, fire and flammability data, and Material Safety Data Sheets(MSDS) for chemicals or materials including but not limited to following:
- .1 encapsulants;
  - .2 amended water;
  - .3 slow drying sealer.
- 1.6 QUALITY ASSURANCE
- .1 **Regulatory Requirements:** Comply with Federal, Provincial and local requirements pertaining to asbestos, provided that in case of conflict among those requirements or with these specifications more stringent requirement applies. Comply with regulations in effect at time work is performed.
- .2 **Health and Safety:**
- .1 **Safety Requirements:** Worker and visitor protection.
- .1 Protective equipment and clothing to be worn by workers while in Asbestos Work Area includes:
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1.6 QUALITY  
ASSURANCE  
(Cont'd)

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- .2 Health and Safety:(Cont'd)  
.1 Safety Requirements:(Cont'd)  
.1 (Cont'd)

- .1 Powered air purifying respirator(PAPR) or supplied air respirator with N-100, R-100 or P-100 particulate filter, personally issued to worker and marked as to efficiency and purpose, suitable for protection against asbestos and acceptable to Provincial Authority having jurisdiction. The respirator to be fitted so that there is an effective seal between the respirator and the worker's face, unless the respirator is equipped with a hood or helmet. The respirator to be cleaned, disinfected and inspected after use on each shift, or more often if necessary, when issued for the exclusive use of one worker, or after each use when used by more than one worker. The respirator to have damaged or deteriorated parts replaced prior to being used by a worker; and, when not in use, to be stored in a convenient, clean and sanitary location. The employer to establish written procedures regarding the selection, use and care of respirators, and a copy of the procedures to be provided to and reviewed with each worker who is required to wear a respirator. A worker not to be assigned to an operation requiring the use of a respirator unless he or she is physically able to perform the operation while using the respirator.
- .2 Disposable type protective clothing that does not readily retain or permit penetration of asbestos fibres. Protective clothing to be provided by the employer and worn by every worker who enters the work area, and the protective clothing to consist of a head covering and full body covering that fits snugly at the ankles, wrists and neck, in order to prevent asbestos fibres from reaching the garments and skin under the protective clothing. It includes suitable footwear, and it to be repaired or replaced if torn. Requirements for each worker:
-

1.6 QUALITY  
ASSURANCE  
(Cont'd)

.2 Health and Safety:(Cont'd)  
.1 Safety Requirements:(Cont'd)  
.1 (Cont'd)

- .1 Remove street clothes in clean change room and put on respirator with new filters or reusable filters that have been tested as satisfactory, clean coveralls and head covers before entering Equipment and Access Rooms or Asbestos Work Area. Store street clothes, uncontaminated footwear, towels, and similar uncontaminated articles in clean change room.
- .2 Remove gross contamination from clothing before leaving work area then proceed to Equipment and Access Room and remove clothing except respirators. Place contaminated work suits in receptacles for disposal with other asbestos - contaminated materials. Leave reusable items except respirator in Equipment and Access Room. Still wearing the respirator proceed naked to showers. Using soap and water wash body and hair thoroughly. Clean outside of respirator with soap and water while showering; remove respirator; remove filters and wet them and dispose of filters in container provided for purpose; and wash and rinse inside of respirator. When not in use in work area, store work footwear in Equipment and Access Room. Upon completion of asbestos abatement, dispose of footwear as contaminated waste or clean thoroughly inside and out using soap and water before removing from work area or from Equipment and Access Room.
- .3 After showering and drying off, proceed to clean change room and dress in street clothes at end of each day's work, or in clean coveralls before eating, smoking, or drinking. If re-entering work area, follow procedures outlined in paragraphs above.

1.6 QUALITY  
ASSURANCE  
(Cont'd)

- .2 Health and Safety:(Cont'd)  
.1 Safety Requirements:(Cont'd)  
.1 (Cont'd)

.4 Enter unloading room from outside dressed in clean coveralls to remove waste containers and equipment from Holding Room of Container and Equipment Decontamination Enclosure system. Workers must not use this system as means to leave or enter work area.

.2 Eating, drinking, chewing, and smoking are not permitted in Asbestos Work Area.

.3 Ensure workers are fully protected with respirators and protective clothing during preparation of system of enclosures prior to commencing actual asbestos abatement.

.4 Provide and post in Clean Change Room and in Equipment and Access Room the procedures described in this Section, in both official languages.

.5 Ensure that no person required to enter an Asbestos Work Area has facial hair that affects seal between respirator and face.

.6 **Visitor Protection:**

.1 Provide protective clothing and approved respirators to Authorized Visitors to work areas.

.2 Instruct Authorized Visitors in the use of protective clothing, respirators and procedures.

.3 Instruct Authorized Visitors in proper procedures to be followed in entering into and exiting from Asbestos Work Area.

1.7 WASTE  
MANAGEMENT AND  
DISPOSAL

- .1 Place materials defined as hazardous or toxic in designated containers.

- .2 Handle and dispose of hazardous materials in accordance with the CEPA, TDGA, Regional and Municipal regulations.

1.7 WASTE  
MANAGEMENT AND  
DISPOSAL  
(Cont'd)

- .3 Disposal of asbestos waste generated by removal activities must comply with Federal, Provincial and Municipal regulations. Dispose of asbestos waste in sealed double thickness 6 ml bags or leak proof drums. Label containers with appropriate warning labels.
- .4 Provide manifests describing and listing waste created. Transport containers by approved means to licenced landfill for burial.

1.8 EXISTING  
CONDITIONS

- .1 Results of tests of asbestos containing materials to be handled, removed, or otherwise disturbed and disposed of during this Project are available for inspection from the Engineer. These are for general information only and are not necessarily representative of asbestos containing materials covered within scope of this Project.
- .2 Notify Engineer of suspect asbestos containing material discovered during Work and not apparent from drawings, specifications, or report pertaining to Work. Do not disturb such material until instructed by Engineer.

1.9 SCHEDULING

- .1 Not later than five(5) days before beginning Work on this Project notify following in writing:
    - .1 appropriate Regional or Zone Director of Medical Services Branch, Health Canada;
    - .2 Regional Office of Labour Canada;
    - .3 Provincial, Department of Labour;
    - .4 Disposal Authority.
  - .2 Inform sub-trades of presence of asbestos containing materials identified in Existing Conditions.
  - .3 Submit to Engineer copy of notifications prior to start of Work.
-

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- .1 **Polyethylene:** Minimum 0.15mm thick unless otherwise specified; in sheet size to minimize joints.
- .2 **FR Polyethylene:** Minimum 0.15mm thick, woven fibre reinforced fabric bonded both sides with polyethylene.
- .3 **Tape:** Fibreglass - reinforced duct tape suitable for sealing polyethylene under both dry conditions and wet conditions using amended water.
- .4 **Wetting Agent:** 50% polyoxyethylene ester and 50% polyoxyethylene ether, or other material approved by Engineer, mixed with water in concentration to provide adequate penetration and wetting of asbestos containing material.
- .5 **Waste Containers:** Contain waste in two separate containers.
  - .1 **Inner Container:** 0.15mm thick sealable polyethylene bag or where glove bag method is used, glove bag itself.
  - .2 **Outer Container:** Sealable metal or fibre type where there are sharp objects included in waste material; otherwise outer container may be sealable metal or fibre type or second 0.15mm thick sealable polyethylene bag.
  - .3 **Labelling Requirements:** Affix preprinted cautionary asbestos warning, in both official languages, that is visible when ready for removal to disposal site. Label containers in both official languages as follows "DANGER CONTAINS ASBESTOS MATERIAL".
- .6 **Glove Bag:**
  - .1 Acceptable materials: Safe-T-Strip products in configuration suitable for Work, or alternative material approved by addendum during tendering period in accordance with Instructions to Tenderers.
  - .2 The glove bag to be equipped with:
    - .1 Sleeves and gloves that are permanently sealed to the body of the bag to allow the worker to access and deal with the insulation and maintain a sealed enclosure throughout the work period.
    - .2 Valves or openings to allow insertion of a vacuum hose and the nozzle of a water sprayer while maintaining the seal to the pipe, duct or similar structure.

2.1 MATERIALS  
(Cont'd)

- .6 Glove Bag:(Cont'd)
- .2 (Cont'd)
- .3 A tool pouch with a drain.
- .4 A seamless bottom and a means of sealing off the lower portion of the bag.
- .5 A high strength double throw zipper and removable straps, if the bag is to be moved during the removal operation.
- .7 **Tape:** Tape suitable for sealing polyethylene to surfaces under both dry and wet conditions using amended water.
- .8 **Slow Drying Sealer:** Non-staining, clear, water - dispersible type that remains tacky on surface for at least 8 hours and designed for purpose of trapping residual asbestos fibres.
- .9 **Encapsulants:** Type 2 surface film forming or Type 1 penetrating type Class A water based conforming to CAN/CGSB-1.205 and approved by the Fire Commissioner of Canada.
- .10 **Sprayed Fireproofing:** ULC labelled and listed asbestos-free cementitious or mineral fibre to provide degree of fire or thermal protection required by current NFC standards.

2.2 EQUIPMENT  
CERTIFICATION

- .1 The HEPA vacuum and negative pressure machine must be tested with the DOP method and have a valid certification.

PART 3 - EXECUTION

3.1 PREPARATION

- .1 **Work Areas:**
- .1 Shut off and isolate air handling and ventilation systems to prevent fibre dispersal to other building areas during work phase. Conduct smoke tests to ensure that duct work is airtight. Seal and caulk joints and seams of active return air ducts within Asbestos Work Area.
- .2 Preclean moveable furniture and carpeting within proposed work areas using HEPA vacuum and remove from work areas to temporary location.
- .3 Preclean fixed casework, plant, and equipment within proposed work areas, using HEPA vacuum and cover with polyethylene sheeting sealed with tape.
- .4 Clean proposed work areas using, where practicable, HEPA vacuum cleaning equipment. If not practicable, use

3.1 PREPARATION .1  
(Cont'd)

Work Areas:(Cont'd)

.4 (Cont'd)

wet cleaning method. Do not use methods that raise dust, such as dry sweeping, or vacuuming using other than HEPA vacuum equipment.

.5 The spread of dust from the work area to be prevented by:

.1 Using enclosures of polyethylene or other suitable material that is impervious to asbestos(including, if the enclosure material is opaque, one or more transparent window areas to allow observation of the entire work area from outside the enclosure), if the work area is not enclosed by walls.

.2 Using curtains of polyethylene sheeting or other suitable material that is impervious to asbestos, fitted on each side of each entrance or exit from the work area.

.6 Put negative pressure system in operation and operate continuously from time first polyethylene is installed to seal openings until final completion of work including final cleanup. Provide continuous monitoring of pressure difference using automatic recording instrument. The system to maintain a negative air pressure of 0.02 inches of water, relative to the area outside the enclosed area. The system to be inspected and maintained by a competent person prior each use to ensure that there is no air leakage, and if the filter is found to be damaged or defective, it to be replaced before the ventilation system is used.

.7 Seal off openings such as corridors, doorways, windows, skylights, ducts, grilles, and diffusers, with polyethylene sheeting sealed with tape.

.8 Cover floor and wall surfaces with polyethylene sheeting sealed with tape. Use two layers of FR polyethylene on floors. Cover floors first so that polyethylene extends at least 300mm up walls then cover walls to overlap floor sheeting.

.9 Build airlocks at entrances to and exits from work areas so that work areas are always closed off by one curtained doorway when workers enter or exit.

.10 At each access to work areas install warning signs in both official languages in upper case "Helvetica Medium" letters reading as follows where number in parentheses indicates font size to be used: "CAUTION ASBESTOS HAZARD AREA (25mm) NO UNAUTHORIZED ENTRY (19mm) WEAR ASSIGNED PROTECTIVE EQUIPMENT

3.1 PREPARATION .1  
(Cont'd)

Work Areas:(Cont'd)

- .10 (Cont'd)  
(19mm) BREATHING ASBESTOS DUST MAY CAUSE SERIOUS BODILY HARM (7mm)".
- .11 After work area isolation, remove heating, ventilating, and air conditioning filters, pack in sealed plastic bags 0.15mm minimum thick and treat as contaminated asbestos waste. Remove ceiling - mounted objects such as lights, partitions, other fixtures not previously sealed off, and other objects that interfere with asbestos removal, as directed by Engineer. Use localized water spraying during fixture removal to reduce fibre dispersal.
- .12 Maintain emergency and fire exits from work areas, or establish alternative exits satisfactory to Fire Commissioner of Canada and Provincial Fire Marshall.
- .13 Where application of water is required for wetting asbestos containing materials, shut off electrical power, provide 24 volt safety lighting and ground fault interrupter circuits on power source for electrical tools, in accordance with applicable CSA Standard. Ensure safe installation of electrical lines and equipment.
- .14 After preparation of work areas and Decontamination Enclosure Systems, remove designated asbestos containing ceiling tiles within work areas progressively and carefully, clean using HEPA vacuum and damp sponge, wrap clean panels in 0.10mm minimum thick polyethylene, and store in building as directed by Engineer. Clean "T" grid suspension system within work areas using wet sponge, disconnect grid from hangers, wrap grid members in 0.10mm minimum thick polyethylene and store in building as directed by Engineer.
- .15 After preparation of work areas and Decontamination Enclosure Systems, remove plaster ceilings, including lath, furring, channels, hangers, wires, clips, and dispose of as contaminated waste in specified containers. Spray asbestos debris and immediate work area with amended water to reduce dust, as work progresses.
- .16 After preparation of work areas and Decontamination Enclosure Systems, for the removal of all other asbestos containing materials, remove within work area and dispose of as contaminated waste in specified containers. Spray asbestos debris and immediate work area with amended water to reduce dust, as work progresses.

.2 **Worker Decontamination Enclosure System:**

3.1 PREPARATION .2  
(Cont'd)

(Cont'd)

.1 Worker Decontamination Enclosure System includes Equipment and Access Room, Shower Room, and Clean Room, as follows:

.1 **Equipment and Access Room:** Build Equipment and Access Room between Shower Room and work areas, with two curtained doorways, one to Shower Room and one to work areas. Install portable toilet, waste receptor, and storage facilities for workers' shoes and protective clothing to be reworn in work areas. Build Equipment and Access Room large enough to accommodate specified facilities, other equipment needed, and at least one worker allowing him /her sufficient space to undress comfortably.

.2 **Shower Room:** Build Shower Room between Clean Room and Equipment and Access Room, with two curtained doorways, one to Clean Room and one to Equipment and Access Room. Provide one shower for every five workers. Provide constant supply of hot and cold or warm water. Cold and hot water source will be provided. Drains to common sewers will be provided. Provide piping and connect to water sources and drains. Pump waste water through 5 micrometre filter system acceptable to Engineer before directing into drains. Provide soap, clean towels, and appropriate containers for disposal of used respirator filters.

.3 **Clean Room:** Build Clean Room between Shower Room and clean areas outside of enclosures, with two curtained doorways, one to outside of enclosures and one to Shower Room. Provide lockers or hangers and hooks for workers' street clothes and personal belongings. Provide storage for clean protective clothing and respiratory equipment. Install mirror to permit workers to fit respiratory equipment properly.

.3 **Container and Equipment Decontamination Enclosure System:**

.1 Container and Equipment Decontamination Enclosure System consists of Staging Area within work area, Washroom, Holding Room, and Unloading Room. Purpose of system is to provide means to decontaminate waste containers, scaffolding, waste and material containers, vacuum and spray equipment, and other tools and equipment for which Worker Decontamination Enclosure System is not suitable.

.1 **Staging Area:** Designate Staging Area in work area for gross removal of dust and debris from waste containers and equipment, labelling and sealing of

3.1 PREPARATION .3  
(Cont'd)

(Cont'd)  
.1 (Cont'd)

waste containers, and temporary storage pending removal to Washroom. Equip Staging Area with curtained doorway to Washroom.

.2 **Washroom:** Build Washroom between Staging Area and Holding Room with two curtained doorways, one to Staging Area and one to Holding Room. Provide high - pressure low - volume sprays for washing of waste containers and equipment. Pump waste water through 5 micrometre filter system before directing into drains. Provide piping and connect to water sources and drains.

.3 **Holding Room:** Build Holding Room between Washroom and Unloading Room, with two curtained doorways, one to Washroom and one to Unloading Room. Build Holding Room sized to accommodate at least two waste containers and largest item of equipment used.

.4 **Unloading Room:** Build Unloading Room between Holding Room and outside, with two curtained doorways, one to Holding Room and one to outside.

.4 **Construction of Decontamination Enclosures:**

.1 Build suitable framing for enclosures or use existing rooms where convenient, and line with polyethylene sheeting sealed with tape. Use two layers of FR polyethylene on floors.

.2 Build curtained doorways between enclosures so that when people move through or when waste containers and equipment are moved through doorway, one of two closures comprising doorway always remains closed.

.5 **Separation of Work Areas from Occupied Areas:**

.1 Separate parts of building required to remain in use as indicated in scope of work from parts of building used for asbestos abatement by means of airtight barrier system constructed as follows:

.1 Build suitable floor to ceiling lumber or metal stud framing, cover with polyethylene sheeting sealed with tape, and apply 9mm minimum thick plywood. Seal joints between plywood sheets and between plywood and adjacent materials with surface film forming type sealer, to create airtight barrier.

3.1 PREPARATION .5  
(Cont'd)

(Cont'd)

.1 (Cont'd)

.2 Cover plywood barrier with polyethylene sealed with tape, as specified for work areas.

.6 **Maintenance of Enclosures:**

.1 Maintain enclosures in tidy condition.

.2 Ensure that barriers and polyethylene linings are effectively sealed and taped. Repair damaged barriers and remedy defects immediately upon discovery.

.3 Visually inspect enclosures at beginning of each working period.

.4 Use smoke methods to test effectiveness of barriers when directed by Engineer.

.7 **Do not begin Asbestos Abatement work until:**

.1 Arrangements have been made for disposal of waste.

.2 For wet stripping techniques, arrangements have been made for containing, filtering, and disposal of waste water.

.3 Work areas and decontamination enclosures and parts of building required to remain in use are effectively segregated.

.4 Tools, equipment, and materials waste containers are on hand.

.5 Arrangements have been made for building security.

.6 Warning signs are displayed where access to contaminated areas is possible.

.7 Notifications have been completed and other preparatory steps have been taken.

3.2 SUPERVISION .1

Minimum of one Supervisor for every ten workers is required.

.2 Approved Supervisor must remain within Asbestos Work Area during disturbance, removal, or other handling of asbestos containing materials.

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3.3 ASBESTOS  
REMOVAL

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- .1 **Before removing asbestos:**
- .1 Prepare site.
  - .2 Spray asbestos material with water containing specified wetting agent, using airless spray equipment capable of providing "mist" application to prevent release of fibres. Saturate asbestos material sufficiently to wet it to substrate without causing excess dripping. Spray asbestos material repeatedly during work process to maintain saturation and to minimize asbestos fibre dispersion.
  - .2 Remove saturated asbestos material in small sections. Do not allow saturated asbestos to dry out. As it is being removed pack material in sealable plastic bags 0.15mm minimum thick and place in labelled containers for transport.
  - .3 Seal filled containers. Clean external surfaces thoroughly by wet sponging. Remove from immediate working area to Staging Area. Clean external surfaces thoroughly again by wet sponging before moving containers to decontamination Washroom. Wash containers thoroughly in decontamination Washroom, and store in Holding Room pending removal to Unloading Room and outside. Ensure that containers are removed from Holding Room by workers who have entered from uncontaminated areas dressed in clean coveralls.
  - .4 After completion of stripping work, wire brushed and wet sponged surfaces from which asbestos has been removed to remove visible material. During this work keep surfaces wet.
  - .5 Where Engineer decides complete removal of asbestos containing material is impossible due to obstructions such as structural members or major service elements, or because asbestos containing material was originally applied to asphaltic coating, and provides written direction, encapsulate material as follows:
    - .1 Apply surface film forming type sealer to provide 0.635mm minimum dry film thickness over sprayed asbestos surfaces. Apply using airless spray equipment to avoid blowing off fibres. Apply penetrating type sealer to penetrate existing sprayed asbestos surfaces uniformly to substrate.
  - .6 After wire brushing and wet sponging to remove visible asbestos, wet clean entire work area including Equipment and Access Room, and equipment used in process. After 24 hour period to allow for dust settling, wet clean these areas and objects again. During this settling period no entry, activity, or ventilation will be permitted. After second 24 hour period under same conditions, clean these areas and objects again using HEPA vacuum followed by wet cleaning. After inspection by Engineer apply continuous coat of slow drying sealer to surfaces

3.3 ASBESTOS  
REMOVAL  
(Cont'd)

- .6 (Cont'd)  
of work area. Allow at least 16 hours with no entry, activity, ventilation, or disturbance other than operation of negative pressure units during this period.
- .7 Work is subject to visual inspection and air monitoring. Contamination of surrounding areas indicated by visual inspection or air monitoring will require complete enclosure and clean-up of affected areas.
- .8 **Cleanup:**
- .1 Frequently during Work and immediately after completion of work, clean up dust and asbestos containing waste using HEPA vacuum or by damp mopping.
- .2 Place dust and asbestos containing waste in sealed dust tight waste bags. Treat drop sheets and disposable protective clothing as asbestos waste and wet and fold to contain dust and then place in waste bags.
- .3 Immediately before their removal from Asbestos Work Area and disposal, clean each filled waste bag using damp cloths or HEPA vacuum and place in second clean waste bag.
- .4 Seal and remove double bagged waste from site. Dispose of in accordance with requirements of Provincial and Federal authority having jurisdiction. Supervise dumping and ensure that dump operator is fully aware of hazardous nature of material to be dumped and that guidelines and regulations for asbestos disposal are followed.
- .5 Perform final thorough clean-up of Asbestos Work Areas and adjacent areas affected by Work using HEPA vacuum.

3.4 FINAL CLEANUP

- .1 Following cleaning specified in appropriate section above, and when air sampling shows that asbestos levels on both sides of seals do not exceed 0.01 fibres/cc as determined by membrane filter method at 400-500X magnification phase contrast illumination, as described in NIOSH Method 94-113 or equivalent, proceed with final cleanup.
- .2 Remove polyethylene sheet by rolling it away from walls to centre of work area. Vacuum visible asbestos containing particles observed during cleanup, immediately, using HEPA vacuum equipment.
- .3 Place polyethylene seals, tape, cleaning material, clothing, and other contaminated waste in plastic bags and sealed labelled waste containers for transport.

- 
- 3.4 FINAL CLEANUP (Cont'd)
- .4 Include in clean-up Work areas, Equipment and Access Room, Washroom, Shower Room, and other contaminated enclosures.
  - .5 Include in clean-up sealed waste containers and equipment used in Work and remove from work areas, via Container and Equipment Decontamination Enclosure System, at appropriate time in cleaning sequence.
  - .6 Conduct final check to ensure that no dust or debris remains on surfaces as result of dismantling operations and carry out air monitoring again to ensure that asbestos levels in building do not exceed 0.01 fibres/cc. Repeat cleaning using HEPA vacuum equipment, or wet cleaning methods where feasible, in conjunction with sampling until levels meet this criteria.
  - .7 As work progresses, and to prevent exceeding available storage capacity on site, remove sealed and labelled containers containing asbestos waste and dispose of to authorized disposal area in accordance with requirements of disposal authority. Ensure that each shipment of containers transported to dump is accompanied by Contractor's representative to ensure that dumping is done in accordance with governing regulations.
- 3.5 RE-ESTABLISHMENT OF OBJECTS AND SYSTEMS
- .1 When cleanup is complete:
    - .1 Re-establish objects and furniture moved to temporary locations in course of Work, in their proper positions.
    - .2 Re-secure mounted objects removed in course of Work in their former positions.
    - .3 Re-establish mechanical and electrical systems in proper working order. Install new filters.
    - .4 Repair or replace objects damaged in the course of Work, as directed by Engineer.
- 3.6 AIR MONITORING
- .1 From beginning of Work until completion of cleaning operations, air monitoring will be performed on behalf of the Contractor by a testing agency approved by the Engineer on daily basis both inside and outside of work area enclosures in accordance with Health Canada recommendations.
    - .1 Contractor will be responsible for monitoring inside and outside enclosure in accordance with applicable Provincial Occupational Health and Safety Regulations.
  - .2 Use results of air monitoring inside work area to establish type of respirators to be used. Workers may be required to wear sample pumps for up to full-shift periods.
-

3.6 AIR MONITORING .2  
(Cont'd)

(Cont'd)

- .1 If fibre levels are above safety factor of respirators in use, stop abatement, apply means of dust suppression, and use higher safety factor in respiratory protection for persons inside enclosure.
- .2 If air monitoring shows that areas outside work area enclosures are contaminated, enclose, maintain and clean these areas, in same manner as that applicable to work areas.
- .3 During course of Work, testing agency to measure fibre content of air outside work areas by means air samples analyzed by Phase Contrast Microscopy(PCM).
  - .1 Stop Work when PCM measurements exceed 0.05 f/cc and correct procedures.
- .4 Final air monitoring to be conducted as follows: After Asbestos Work Area has passed visual inspection and acceptable coat of lock-down agent has been applied to surfaces within enclosure, and appropriate setting period has passed, testing agency will perform air monitoring within Asbestos Work Area by aggressive methods, where provincial regulations require.
  - .1 Final air monitoring results must show fibre levels of less than 0.01 f/cc.
  - .2 If air monitoring results show fibre levels in excess of 0.01 f/cc, re-clean work area and apply another acceptable coat of lock-down agent to surfaces.
  - .3 Repeat as necessary until fibre levels are less than 0.01 f/cc.

3.7 INSPECTION .1

- .1 Perform inspection of Asbestos Work Area to confirm compliance with specification and governing authority requirements. Deviations from these requirements that have not been approved in writing by Engineer may result in Work stoppage, at no cost to Owner.
  - .2 Engineer will inspect Work for:
    - .1 adherence to specific procedures and materials;
    - .2 final cleanliness and completion;
    - .3 no additional costs will be allowed by Contractor for additional labour or materials required to provide specified performance level.
-

3.7 INSPECTION  
(Cont'd)

- .3 When asbestos leakage from Asbestos Work Area has occurred or is likely to occur Engineer may order Work shutdown.
- .1 No additional costs will be allowed by Contractor for additional labour or materials required to provide specified performance level.



Contract Number / Numéro du contrat W010C-14-C001
Security Classification / Classification de sécurité UNCLASSIFIED

**SECURITY REQUIREMENTS CHECK LIST (SRCL)  
LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)**

PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE			
1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine		NATIONAL DEFENCE	
2. Branch or Directorate / Direction générale ou Direction		MARLANT/FCE	
3. a) Subcontract Number / Numéro du contrat de sous-traitance		3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant	
4. Brief Description of Work / Brève description du travail REMOVE AND DISPOSE OF ALL TYPES OF ASBESTOS CONTAINING MATERIALS AND OBTAINING ALL NECESSARY PERMITS FOR TRANSPORTATION AND DISPOSAL OF ASBESTOS WASTE AS PER SPECS.			
5. a) Will the supplier require access to Controlled Goods? Le fournisseur aura-t-il accès à des marchandises contrôlées?		<input checked="" type="checkbox"/> No / Non	<input type="checkbox"/> Yes / Oui
5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control Regulations? Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques?		<input checked="" type="checkbox"/> No / Non	<input type="checkbox"/> Yes / Oui
6. Indicate the type of access required / Indiquer le type d'accès requis			
6. a) Will the supplier and its employees require access to PROTECTED and/or CLASSIFIED information or assets? Le fournisseur ainsi que les employés auront-ils accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS? (Specify the level of access using the chart in Question 7. c) (Préciser le niveau d'accès en utilisant le tableau qui se trouve à la question 7. c)		<input checked="" type="checkbox"/> No / Non	<input type="checkbox"/> Yes / Oui
6. b) Will the supplier and its employees (e.g. cleaners, maintenance personnel) require access to restricted access areas? No access to PROTECTED and/or CLASSIFIED information or assets is permitted. Le fournisseur et ses employés (p. ex. nettoyeurs, personnel d'entretien) auront-ils accès à des zones d'accès restreintes? L'accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS n'est pas autorisé.		<input type="checkbox"/> No / Non	<input checked="" type="checkbox"/> Yes / Oui
6. c) Is this a commercial courier or delivery requirement with no overnight storage? S'agit-il d'un contrat de messagerie ou de livraison commerciale sans entreposage de nuit?		<input checked="" type="checkbox"/> No / Non	<input type="checkbox"/> Yes / Oui
7. a) Indicate the type of information that the supplier will be required to access / Indiquer le type d'information auquel le fournisseur devra avoir accès			
Canada <input type="checkbox"/>	NATO / OTAN <input type="checkbox"/>	Foreign / Étranger <input type="checkbox"/>	
7. b) Release restrictions / Restrictions relatives à la diffusion			
No release restrictions Aucune restriction relative à la diffusion <input type="checkbox"/>	All NATO countries Tous les pays de l'OTAN <input type="checkbox"/>	No release restrictions Aucune restriction relative à la diffusion <input type="checkbox"/>	<input type="checkbox"/>
Not releasable À ne pas diffuser <input type="checkbox"/>			
Restricted to: / Limité à: Specify country(ies): / Préciser le(s) pays: <input type="checkbox"/>	Restricted to: / Limité à: Specify country(ies): / Préciser le(s) pays: <input type="checkbox"/>	Restricted to: / Limité à: Specify country(ies): / Préciser le(s) pays: <input type="checkbox"/>	<input type="checkbox"/>
7. c) Level of information / Niveau d'information			
PROTECTED A PROTÉGÉ A <input type="checkbox"/>	NATO UNCLASSIFIED NATO NON CLASSIFIÉ <input type="checkbox"/>	PROTECTED A PROTÉGÉ A <input type="checkbox"/>	<input type="checkbox"/>
PROTECTED B PROTÉGÉ B <input type="checkbox"/>	NATO RESTRICTED NATO DIFFUSION RESTREINTE <input type="checkbox"/>	PROTECTED B PROTÉGÉ B <input type="checkbox"/>	<input type="checkbox"/>
PROTECTED C PROTÉGÉ C <input type="checkbox"/>	NATO CONFIDENTIAL NATO CONFIDENTIEL <input type="checkbox"/>	PROTECTED C PROTÉGÉ C <input type="checkbox"/>	<input type="checkbox"/>
CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/>	NATO SECRET NATO SECRET <input type="checkbox"/>	CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/>	<input type="checkbox"/>
SECRET SECRET <input type="checkbox"/>	COSMIC TOP SECRET COSMIC TRÈS SECRET <input type="checkbox"/>	SECRET SECRET <input type="checkbox"/>	<input type="checkbox"/>
TOP SECRET TRÈS SECRET <input type="checkbox"/>		TOP SECRET TRÈS SECRET <input type="checkbox"/>	<input type="checkbox"/>
TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/>		TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/>	<input type="checkbox"/>



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**PART A (continued) / PARTIE A (suite)**

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets?  
Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS?  No / Non  Yes / Oui  
If Yes, indicate the level of sensitivity:  
Dans l'affirmative, indiquer le niveau de sensibilité :

9. Will the supplier require access to extremely sensitive INFOSEC information or assets?  
Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate?  No / Non  Yes / Oui

Short Title(s) of material / Titre(s) abrégé(s) du matériel :  
Document Number / Numéro du document :

**PART B - PERSONNEL (SUPPLIER) / PARTIE B - PERSONNEL (FOURNISSEUR)**

10. a) Personnel security screening level required / Niveau de contrôle de la sécurité du personnel requis

- |   |   |   |  |
|---|---|---|--|
| <input checked="" type="checkbox"/> RELIABILITY STATUS<br>COTE DE FIABILITÉ | <input type="checkbox"/> CONFIDENTIAL<br>CONFIDENTIEL           | <input type="checkbox"/> SECRET<br>SECRET           | <input type="checkbox"/> TOP SECRET<br>TRÈS SECRET               |
| <input type="checkbox"/> TOP SECRET - SIGINT<br>TRÈS SECRET - SIGINT        | <input type="checkbox"/> NATO CONFIDENTIAL<br>NATO CONFIDENTIEL | <input type="checkbox"/> NATO SECRET<br>NATO SECRET | <input type="checkbox"/> COSMIC TOP SECRET<br>COSMIC TRÈS SECRET |
| <input type="checkbox"/> SITE ACCESS<br>ACCÈS AUX EMPLACEMENTS              |   |   |  |

Special comments:

Commentaires spéciaux : COMMISSIONAIRE WILL BE PROVIDED IF NECESSARY

NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided.

REMARQUE : Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.

10. b) May unscreened personnel be used for portions of the work?  
Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail?  No / Non  Yes / Oui  
If Yes, will unscreened personnel be escorted?  
Dans l'affirmative, le personnel en question sera-t-il escorté?  No / Non  Yes / Oui

**PART C - SAFEGUARDS (SUPPLIER) / PARTIE C - MESURES DE PROTECTION (FOURNISSEUR)**

**INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS**

11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises?  
Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS?  No / Non  Yes / Oui

11. b) Will the supplier be required to safeguard COMSEC information or assets?  
Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC?  No / Non  Yes / Oui

**PRODUCTION**

11. c) Will the production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment occur at the supplier's site or premises?  
Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ?  No / Non  Yes / Oui

**INFORMATION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)**

11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data?  
Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS?  No / Non  Yes / Oui

11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency?  
Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale?  No / Non  Yes / Oui



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**PART C - (continued) / PARTIE C - (suite)**

For users completing the form manually use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises.

Les utilisateurs qui remplissent le formulaire manuellement doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form online (via the Internet), the summary chart is automatically populated by your responses to previous questions.

Dans le cas des utilisateurs qui remplissent le formulaire en ligne (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

**SUMMARY CHART / TABLEAU RÉCAPITULATIF**

Category / Catégorie	PROTECTED / PROTÉGÉ			CLASSIFIED / CLASSIFIÉ			NATO				COMSEC						
	A	B	C	CONFIDENTIAL	SECRET	TOP SECRET	NATO RESTRICTED	NATO CONFIDENTIAL	NATO SECRET	COSMIC TOP SECRET	PROTECTED / PROTÉGÉ			CONFIDENTIAL	SECRET	TOP SECRET	
				CONFIDENTIEL	SECRET	Très SECRET	NATO DIFFUSION RESTREINTE	NATO CONFIDENTIEL	CONFIDENTIEL		A	B	C	CONFIDENTIEL	SECRET	Très SECRET	
Information / Assets / Renseignements / Biens	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Production	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
IT Media / Support TI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
IT Link / Lien Électronique	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED? / La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE?  No / Non  Yes / Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification". / Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire.

12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED? / La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE?  No / Non  Yes / Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments). / Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquez qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).



Government of Canada / Gouvernement du Canada

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**PART D - AUTHORIZATION / PARTIE D - AUTORISATION**

**13. Organization Project Authority / Chargé de projet de l'organisme**

Name (print) - Nom (en lettres moulées) WO RUSS ANSTEY	Title - Titre CONTRACTS 2IC	Signature 
Telephone No. - N° de téléphone 902-722-1811	Facsimile No. - N° de télécopieur 902-722-1847	E-mail address - Adresse courriel russell.anstey@forces.gc.ca
		Date 25 Oct 13

**14. Organization Security Authority / Responsable de la sécurité de l'organisme**

Name (print) - Nom (en lettres moulées) Dawn Murray - CF MP GP HQ - Industrial Security SRCL Team Lead	Title - Titre	Signature 
Telephone No. - N° de téléphone 902-999-1000	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel E-mail: dawn.murray@forces.gc.ca
		Date 2 December 2013

15. Are there additional instructions (e.g. Security Guide, Security Classification Guide) attached?  
Des instructions supplémentaires (p. ex. Guide de sécurité, Guide de classification de la sécurité) sont-elles jointes?

No / Non  Yes / Oui

**16. Procurement Officer / Agent d'approvisionnement**

Name (print) - Nom (en lettres moulées)	Title - Titre	Signature
Telephone No. - N° de téléphone	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel
		Date

**17. Contracting Security Authority / Autorité contractante en matière de sécurité**

Name (print) - Nom (en lettres moulées)	Title - Titre	Signature 
Telephone No. - N° de téléphone	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel
		Date Dec. 11, 2013

**Maria Mendoza**  
Contract Security Officer, Contract Security Division  
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Tel/Tél - 613-942-1618 / Fax/Télé - 613-954-4171