

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Bid Receiving - PWGSC / Réception des
soumissions - TPSGC
11 Laurier St./ 11 rue, Laurier
Place du Portage, Phase III
Core 0A1 / Noyau 0A1
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION

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

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

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

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

Comments - Commentaires

Title - Sujet Lead Shield/Castle	
Solicitation No. - N° de l'invitation H4033-144731/A	Date 2014-10-22
Client Reference No. - N° de référence du client H4033-144731	
GETS Reference No. - N° de référence de SEAG PW-\$\$PV-941-65954	
File No. - N° de dossier pv941.H4033-144731	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2014-12-02	
Time Zone Fuseau horaire Eastern Standard Time EST	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Martins, Christina	Buyer Id - Id de l'acheteur pv941
Telephone No. - N° de téléphone (819) 956-6911 ()	FAX No. - N° de FAX (819) 956-3814
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF HEALTH RADIATION PROTECTION 2ND FL 775 BROOKFIELD RD AL/6302A1 OTTAWA Ontario K1A1C1 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

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

Issuing Office - Bureau de distribution

Scientific, Medical and Photographic Division / Division de
l'équipement scientifique, des produits photographiques et
pharmaceutiques
11 Laurier St./ 11 rue, Laurier
6B1, Place du Portage
Gatineau, Québec K1A 0S5

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

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LEAD SHIELD/CASTLE**PART 1 - GENERAL INFORMATION****1. Requirement**

The requirement is Detailed under the "Line Item Detail" and herein.

2. Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

3. Trade Agreements

The requirement is subject to the provisions of the North American Free Trade Agreement (NAFTA) and the Agreement on Internal Trade (AIT).

PART 2 - BIDDER INSTRUCTIONS**1. Standard Instructions, Clauses and Conditions**

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003(2014-09-25) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: sixty (60) days
Insert: ninety (90) days

1.1 SACC Manual Clauses

B1000T	Condition of Material	2014-06-26
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2. Submission of Bids

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

3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than ten (10) calendar days before the bid closing date. Enquiries received after that time may not be answered.

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

4. Applicable Laws

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

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid (Three (3) hard copies)
Section II: Financial Bid (One (1) hard copy)
Section III: Certifications (One (1) hard copy)

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

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

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process

Policy on Green Procurement.

(<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

1.1 Section I: Technical Bid

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

1.1.1 Drawings

One (1) complete set of engineering drawings must be supplied with the Lead Shield/Castle.

1.1.2 Product(s) Offered (BIDDER TO COMPLETE)

The Bidder must indicate the make and model number of the products offered (identify specific components which make up the system):

Name of Manufacturer: _____

Model/Part Number: _____

Literature attached: Yes (____) No (____)

1.1.3 Point of Manufacture/Shipping (BIDDER TO COMPLETE)

The Bidder must state the point of manufacture/shipping of goods or where service is to be performed:

Location: _____

Postal Code: _____

1.1.4 Contacts

Bidders are requested to provide the following: Information pertaining to Article 5.4 Contractor Representatives under Part 6, Resulting Contract Clauses.

1.2 Section II: Financial Bid

The bidder must quote a firm lot price all inclusive of supply and drawings, DDP (Ottawa, Ontario), the Goods and Services Tax (GST) and/or the Harmonized Sales Tax (HST) extra, as applicable. Freight charges to destination and all applicable Customs duties and Excise taxes must be included.

1.2.1 Exchange Rate Fluctuation

C3011T

Exchange Rate Fluctuation

2013-11-06

1.3 Section III: Certifications

Bidders must submit the certifications required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

1.1 Technical Evaluation

All proposals submitted must be completed in full and provide all of the information requested in the Request for Proposal (RFP) package to enable a full and complete evaluation. If the requirement is not addressed in the bidder's proposal, the proposal will be considered incomplete or non-responsive and will be rejected. The onus is on the bidder to provide all the information necessary to ensure a complete and accurate assessment.

Factors for Evaluation

1. **PRICING BASIS (MANDATORY):** Prices must be firm, DDP Delivered Duty Paid.

2. **ABILITY TO MEET THE TECHNICAL REQUIREMENT (MANDATORY):**

a) For Items Defined by Specifications:

supporting
to their

The bidder is required to cross reference with the exact location in the documentation the mandatory technical criteria contained herein supporting technical documentation.

b) Provision of Supporting Technical Documentation:

Supporting technical documentation for the stores offered shall be provided with the bid at time of bid closing.

Technical brochures or technical data MUST be provided to verify compliancy to the technical mandatory specifications.

3. **COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS REQUEST FOR PROPOSAL (MANDATORY)**

4. **FOR CANADIAN SUPPLIERS ONLY:** Please note that the requirements of the Federal Contractors Program for Employment Equity may apply - see herein. (MANDATORY applicable)

if

5. Vendor must include a conceptual drawing of proposed solution with bid.

1.2 Financial Evaluation

The lowest evaluated price will be established using the following criteria:

- a) prices will be evaluated in Canadian Funds including any applicable Taxes and Canadian Customs Duty (if applicable) and excluding the Goods and Services Tax (GST) or Harmonized Sales Tax (HST). For evaluation purposes, bids received in a foreign currency will be converted to Canadian funds using the appropriate rate of exchange using the rate quoted by the Bank of Canada as being in effect on date of bid closing.
- b) prices will be evaluated on a DDP (Ottawa, Ontario) basis.

2. Basis of Selection

A0031T

Basis of Selection -
Mandatory Technical Criteria Only

2010-08-16

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and associated information to be awarded a contract.

The certifications provided by bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default in carrying out any of its obligations under the Contract, if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority may render the bid non-responsive or constitute a default under the Contract.

1. Certifications Required Precedent to Contract Award and Certifications Required with the Bid

1.1 Certifications Required Precedent to Contract Award

1.1.1 Integrity Provisions - Associated Information

By submitting a bid, the Bidder certifies that the Bidder and its Affiliates are in compliance with the provisions as stated in Section 01 Integrity Provisions - Bid of Standard Instructions 2004. The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

1.1.2 Federal Contractors Program for Employment Equity - Bid Certification

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

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" list at the time of contract award.

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement

There is no security requirement applicable to this Contract.

2. Requirement

The Contractor must provide the items detailed under the Line Item Detail.

2.1 Drawings

One (1) complete set of engineering drawings must be supplied with the Lead Shield/Castle.

3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

3.1 General Conditions

2010A (2014-09-25), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

4. Term of Contract

4.1 Delivery Date

All deliverables are requested on or before 31 March 2015.

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Christina Martins
Supply Specialist
Public Works and Government Services Canada
Acquisitions Branch
Commercial and Consumer Products Directorate
Place du Portage III, 6A2
11 Laurier St. Gatineau, Quebec
K1A 0S5
Telephone: (819) 956-6911
Facsimile: (819) 956-3814
Christina.Martins@tpsgc-pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

5.2 Technical Authority (TO BE COMPLETED AT TIME OF CONTRACT AWARD)

The Technical Authority for the Contract is:

Name: _____

Title: _____

Organization: _____

Address: _____

Telephone : ___ ___ _____

Facsimile: ___ ___ _____

E-mail address: _____

The Technical Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

5.3 Procurement Authority (TO BE COMPLETED AT TIME OF CONTRACT AWARD)

The Procurement Authority for the Contract is:

Name: _____

Title: _____

Organization: _____

Address: _____

Telephone : _____

Facsimile: _____

E-mail address: _____

The Procurement Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Procurement Authority, however the Procurement Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

5.4 Contractor's Representative (PLEASE FILL IN)

General Enquiries

Name: _____

Telephone No. _____

Facsimile No. _____

E-mail address: _____

Delivery Follow-up

Name: _____

Telephone No. _____

Facsimile No. _____

E-mail address: _____

6. Payment**6.1 Basis of Payment**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm lot price as specified in the contract, DDP Delivered Duty Paid (Ottawa, Ontario) Incoterms 2000. Customs duties are included and Applicable Taxes extra, if applicable.

6.1.1 Limitation of Price

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.

6.1.2 SACC Manual Clauses

H1000C Single Payment

08/05/12

7. Invoicing Instructions

- a) The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is Completed.

FOR PROMPT PAYMENTS, ENSURE THE CONTRACT NO./P.O. NUMBER APPEARS ON ALL DOCUMENTATION.

- b) Invoices must be distributed as follows:

- (a) The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment. The Contract serial number: H4033-144731 must appear on all invoices.
- (b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

8. Certifications

8.1 Compliance

The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing co-operation in providing associated information are conditions of the Contract. Certifications are subject to verification by Canada during the entire period of the Contract. If the Contractor does not comply with any certification, fails to provide the associated information, or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

9. Applicable Laws

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

10. Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) 2010A (2013-09-25) General Conditions - Goods (Medium Complexity);
- (c) Annex A, Requirement; and
- (d) the Contractor's bid dated _____. **(insert date of bid)**

11. Shipping Instructions - Delivery at Destination

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

Solicitation No. - N° de l'invitation

H4033-144731/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

pv941

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

File No. - N° du dossier

CCC No./N° CCC - FMS No/ N° VME

H4033-144731

pv941H4033-144731

Delivered Duty Paid (DDP) (Ottawa, Ontario) Incoterms 2000 for shipments from a commercial contractor.

2. The Contractor will be responsible for all delivery charges, administration, costs and risk of transport and customs clearance, including the payment of customs duties and taxes.

**ANNEX A
REQUIREMENT
LEAD SHIELD/CASTLE**

Vendors must cross reference the mandatory technical criteria in a concise format by using page, paragraph(s) & sub-paragraphs as applicable to their supporting technical documentation.

The LEAD SHIELD/CASTLE must meet all of the following criteria.

1. The shield assembly must accommodate two opposed BEGE 5030P model (diagram 1) and support their cryostat Dewar's.

Reference in Contractors Proposal: _____

2. The detectors must be accommodated so that their top flat faces are symmetrically opposed along their axis with an adjustable gap ranging from 1mm to no less than 40mm.

Reference in Contractors Proposal: _____

Background count rate:

3. The proposed shield and detector installation must be designed to achieve:
 - (i) background counts less than 1 count per second integrated over range 20 – 2740.4 KeV; and
 - (ii) the MDA for ¹⁴⁰Ba less than 12 mBq over a 7-day counting interval as described in CTBT laboratory certification document.

Reference in Contractors Proposal: _____

Detector travel:

4. The detector/shield assembly must provide for one detector to be fixed and one detector to be movable in a smooth indexed manner without abrasion of this detector's arm in the long term or undue friction during adjustment.

Reference in Contractors Proposal: _____

5. The movable detector must maintain its symmetrically opposed relationship to the stationary detector.

Reference in Contractors Proposal: _____

6. Allowances in shield assembly design for minor adjustment and shimming must be provided. and it must be able to reliably hold its set relative position indefinitely.

Reference in Contractors Proposal: _____

7. The shield assembly design must be able to reliably hold its set relative position indefinitely.

Reference in Contractors Proposal: _____

Detector castle cavity dimensions:

8. The internal volume of the castle must be kept minimal but functional allowing sufficient tolerance for facile installation/disassembly of the two germanium detectors into the castle.

Reference in Contractors Proposal: _____

9. The cavity must be able to accommodate full travel of the movable detector, sample holding jigs and have the room to accommodate preamp/electronics of a PIPS beta detecting sample cell.

Reference in Contractors Proposal: _____

Shield penetrations:

10. Must be designed to exclude direct or scattered radiation from the castle exterior.

Reference in Contractors Proposal: _____

11. The shield must be designed to allow the installation and removal of the detectors without complete or significant disassembly of the castle.

Reference in Contractors Proposal: _____

12. A port for nitrogen purge must be provided such that the purged nitrogen enters at a point likely to maximize the cavity volume purged before it exits the castle.

Reference in Contractors Proposal: _____

13. A blind conduit hole to allow running instrument cables of a PIPs beta detector cell to the interior of shield.

Reference in Contractors Proposal: _____

Multilayer passive shielding:

14. The passive shield must be designed using multiple layers to greatly reduce gamma, neutron and x-ray background and minimize and soften energy of secondary radiation generated in the shield itself. Diagram 2 illustrates shielding materials and expected dimensions.

Reference in Contractors Proposal: _____

15. Outer shield must be constructed of 4 inch thick very low background Doe Run lead (<30Bq/kg).

Reference in Contractors Proposal: _____

16. Middle neutron shield must be 2 inches of 2% Boron in polyethylene.

Reference in Contractors Proposal: _____

17. Inner lead shield must be 1 inch thick ultra low background lead (<3Bq/kg).

Reference in Contractors Proposal: _____

18. Inner X-ray absorbing/softening layers include a 1/16 OFHC copper layer and a 1/32 Tin lined layer, which are adequate for very low background tin and copper to reduce and soften x-ray background in the castle interior

Reference in Contractors Proposal: _____

Optional Active cosmic muon veto shield:

19. The vendor is encouraged to propose an external superstructure of active cosmic veto shields either to provide active veto shielding on top of the castle or the top and 4 sides of the main castle.

Reference in Contractors Proposal: _____

20. The number and dimensions of veto detectors should be selected to maximize coverage of the castle surfaces with the fewest detectors, allow ease of access for opening and closing the main castle, minimize necessary veto detector volume to minimize dead time.

Reference in Contractors Proposal: _____

Installation requirements:

21. All shield assemblies and sub assemblies supplied must fit through a standard door.

Reference in Contractors Proposal: _____

22. All shield assemblies and sub assemblies supplied must be movable by a pallet jack or vendor.

Reference in Contractors Proposal: _____

DIAGRAM 1: Detector's dimension and its schematic diagram.

Reference in Contractors Proposal: _____

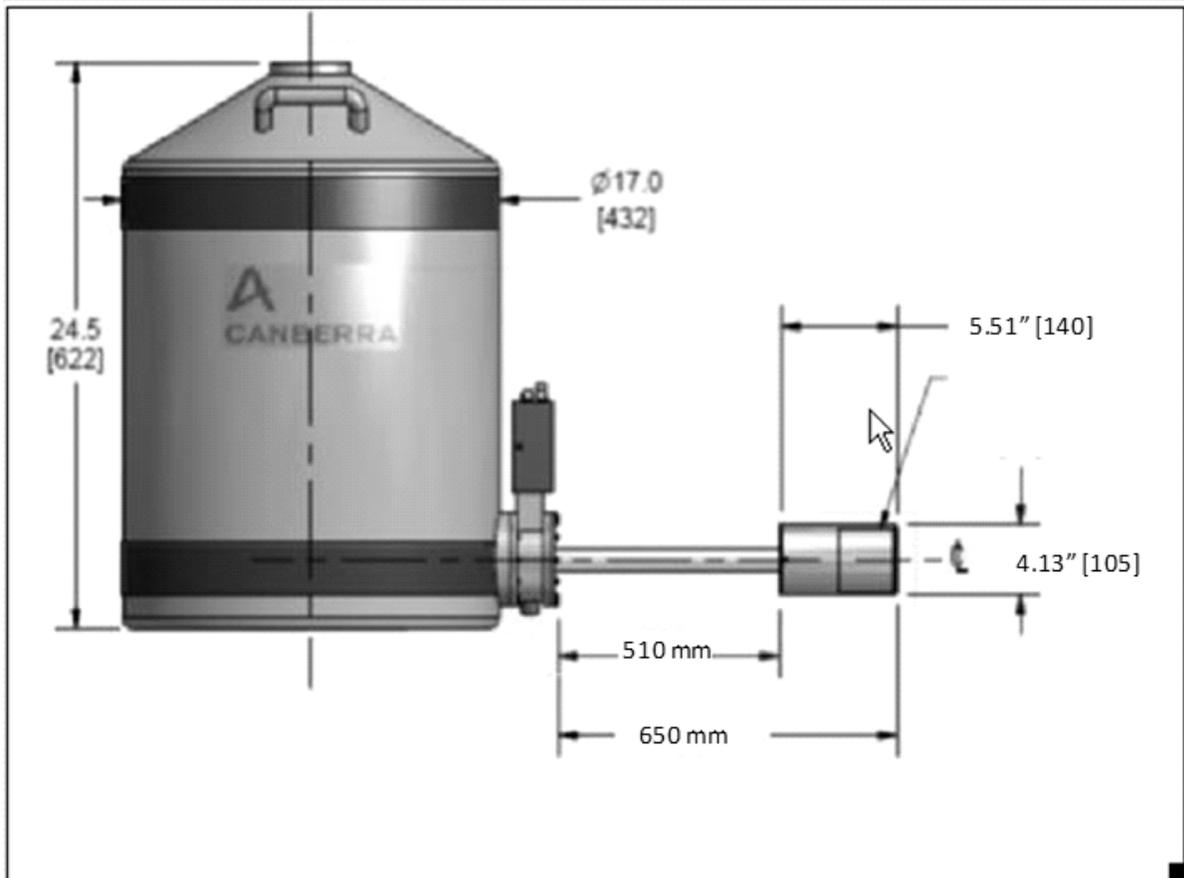
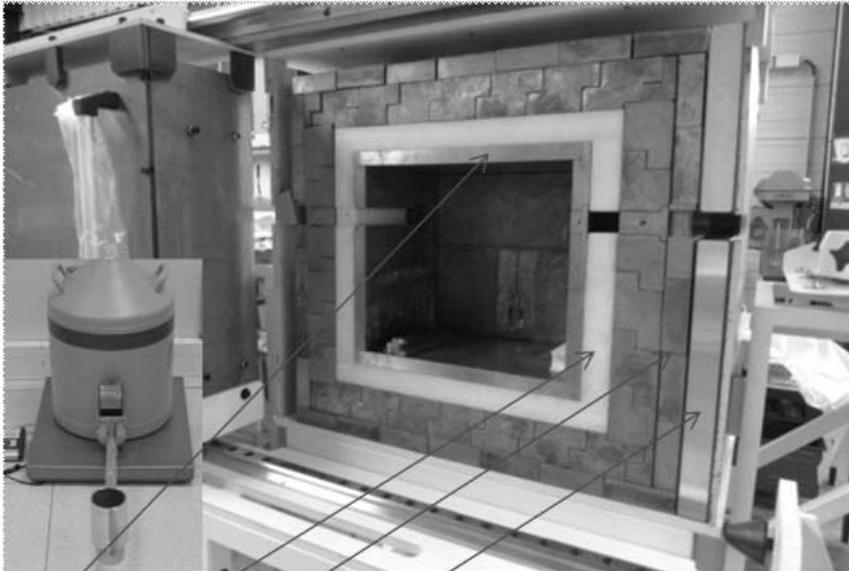


Diagram 2: Illustration of shielding materials and expected dimensions.

Reference in Contractors Proposal:

1. Écran interne 1 pouce de plomb a bruit de fond ultra bas (<3Bq/kg).
2. L'écran a neutron du milieu de 2 pouces de polyéthylène de bore a 2%
3. L'écran extérieur de 4 pouces de plomb a très bas bruit, plomb standard Département de l'énergie (<30Bq/kg)
4. Écran actif a véto cosmique de muon optionnel



- 1" inner lead shield made by ultra low background lead (< 3Bq/kg).
- 2" middle neutron shield made by 2% Boron in polyethylene.
- 4" outer shield made by very low background Doe Run lead (<30Bq/kg).
- Optional Active cosmic (muon) veto shield .