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**LETTER OF INTEREST  
LETTRE D'INTÉRÊT**

Comments - Commentaires

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

Issuing Office - Bureau de distribution  
Regional Manager/Real Property Contracting/PWGSC  
Ontario Region, Tendering Office  
12th Floor, 4900 Yonge Street  
Toronto, Ontario  
M2N 6A6  
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<b>Title - Sujet</b> Port Granby, ON, Industry Day posti	
<b>Solicitation No. - N° de l'invitation</b> EQ754-133082/A	<b>Date</b> 2013-01-31
<b>Client Reference No. - N° de référence du client</b> R.023276.201	<b>GETS Ref. No. - N° de réf. de SEAG</b> PW-\$PWL-012-1812
<b>File No. - N° de dossier</b> PWL-2-35135 (012)	<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 2013-02-27</b>	
<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Standard Time EST	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Caporusso, Mary	<b>Buyer Id - Id de l'acheteur</b> pwl012
<b>Telephone No. - N° de téléphone</b> (416) 512-5859 ( )	<b>FAX No. - N° de FAX</b> (416) 512-5862
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> PWGSC-TPSGC Joseph Shepard Building 32 4900 Yonge Street Toronto, ON M2N 6A6	

Instructions: See Herein

Instructions: Voir aux présentes

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<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>

## Port Hope Area Initiative (PHAI)

### Port Granby Project

### Remediation of Buried Low Level Radioactive Waste and Construction of a new Long Term Waste Management Facility, in Clarington, Ontario

#### Introduction

The intent of this letter is to provide interested Contractors with advance notice of an upcoming tender for a large multi-year, multi-million dollar, complex environmental remediation contract in Port Granby, Municipality of Clarington, Ontario, Canada. General Contractors are hereby invited to attend an "Industry Information Day" on the date and location provided below.

The Port Granby Project involves the cleanup of buried historic low-level radioactive waste (LLRW) and industrial waste located at Port Granby Waste Management Facility (PGWMF) and the eventual safe containment of those materials within a new engineered, aboveground long-term waste management facility (LTWMF) to be constructed as per the upcoming contract. The containment system is to be built at a distance of approximately 700 m north of the existing waste burial area, all on federal lands but separated by Lakeshore Road. There is approximately 500,000 metric tons of waste that will need to be excavated, handled, transported and appropriately placed in the new LTWMF.

Low Level Radioactive materials and associated wastes from refining radium and uranium were produced at a refinery operated in Port Hope by Eldorado Gold Mines Limited from 1930-1960. Process residues and wastes were placed at various locations throughout the community and used as a source of fill material for construction and landscaping activities. A portion of these wastes were deposited in Port Granby; and therefore remediation of this site involves the removal and safe transportation of the wastes to a newly constructed proper containment facility.

The Project is led and sponsored by Natural Resources Canada (NRCAN) who is committed to the cleanup and safe management of the waste through the Port Hope Area Initiative Management Office (PHAIMO). In 2009, the PHAIMO was formed with NRCAN, Atomic Energy of Canada Limited (AECL) and Public Works and Government Services Canada (PWGSC) to carry the project to completion.

\*For more information on the PHAI, please visit: <http://phai.ca/en/phai>

#### LTWMF and Site Remediation

The Port Granby Project has engaged AECOM for the design and construction oversight/contract administration of the major construction work. The Project is broken down into two (2) main elements of work, the construction of the new LTWMF and remediation of the existing PGWMF. The LTWMF element will create a long-term low-level radioactive waste management facility and includes the construction of an engineered containment mound, ancillary facilities, storm water management works, civil site servicing, transportation route upgrades (completed) and

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construction and operation of a new wastewater treatment plant(work will start early 2013). The PGWMF element will address the transfer of the contaminated materials to the new facility, leachate and drainage water management including runoff interception and groundwater collector system, and eventual decommissioning of the existing water treatment system. A description of work is provided below for the LTWMF and the PGWNF.

### Construction of the New LTWMF

#### Containment Mound

The containment mound will consist of two adjoining and contiguous cells of the same size. The overall mound dimensions are 410 metres by 230 metres. Each cell will have a highly engineered multilayer base of natural and composite liner system, leachate collection system and a multi-layer final cover system. The final cover will minimize moisture infiltration into waste and hence minimize leachate generation. The base liner system is a composite liner based on an 80 mil (2 mm) thick High density Polyethylene (HDPE) geomembrane on top of a 750 mm thick imported natural clay liner with a design hydraulic conductivity of not more than  $1 \times 10^{-7}$  cm/s. On top of the composite base liner system is a drainage system that will facilitate monitoring, collection, and removal of leachate.

#### Civil Site Services

The Civil Site servicing component encompasses infrastructure including the underpass at Lakeshore Road ( cast-in-place twin concrete box tunnels), new permanent and temporary on-site access roadways at the LTWMF and the PGWMF) and routing for utilities.

#### Transportation Route Upgrade

The transportation component includes site roadways designated for the haulage of waste material, clean fill and site roadways designated for traffic circulation through the LTWMF site. The Transportation component also includes the element of road work on Lakeshore Road necessary to accommodate the planned underpass structure linking the site haul roadways of the new LTWMF to the PGWMF. The pavement structure of the permanent roadways will be hard-surface treatment in order to facilitate regular maintenance activities, such as road sweeping/washing to manage debris and dust. This work is now completed.

### Remediation of Port Granby Waste Management facility

#### Site Preparation

The utility relocation plan will involve the identification and moving of existing onsite buried utilities from within the waste burial areas prior to the commencement of waste excavation activities to allow for continued service of these lines during waste removal. Furthermore, there are 73 monitoring wells in close proximity to proposed excavation zone, which will be decommissioned in accordance with Ontario Regulation 128 (amendment to O. Reg. 903). Clearing and grubbing of deciduous and some mixed forest as well as grubbing these areas and meadow vegetation overlying existing waste will be completed in the areas proposed for waste excavation as part of site preparation activities. Clearing of vegetation will be restricted to the

area/extent necessary to achieve adequate access to LLRW and underlying marginally contaminated soils (MCS).

The Site Preparation will also include: establishment of material stockpile or lay-down areas as well as parking areas.

#### Excavation Method

The remediation at the PGWMF is envisioned to be undertaken by an overall progression of remedial excavation in an easterly direction, across the site (barring a few exceptions i.e. the East and West Reservoirs; treatment lagoons and the complexity of remedial excavation in the East Gorge Wastes that may possibly be excavated in strips oriented in the south to north direction). Depending on the type and nature of waste materials buried in specific locations of the site, it is envisioned that a pre-planning of excavation sequence will be required to avoid mixing of chemically incompatible wastes as well as restrictions related to material size or consistency (i.e. expect bulky metals, powder, toothpaste and/or peanut butter like materials).

In addition, a slope stability analysis indicated that the waste fill in the East Gorge may become unstable if cut slopes are too steep and/or too deep. The analysis provides some suggested insights regarding excavation procedures, excavation sequences and required setback distances for equipment.

#### Water Management

It is expected that a fair portion of the waste excavation will be below the local ground water table, and thus dewatering will be required throughout the excavation process. Impacted groundwater may be managed using temporary berms and submersible pumps. The contractor is responsible to ensure that all impacted groundwater entering the excavation is managed accordingly and diverted to either the collection reservoirs in the West and East gorges or the Treatment Lagoons as necessary.

The strategy for managing storm water generated within the active waste excavation areas will possibly involve diverting runoff from areas where remediation activities have been completed towards either of the perimeter ditches along the east and west boundaries.

Once the new waste water treatment plant is commissioned and licensed, the existing water treatment plant will be decommissioned as part of the site cleanup work. Decommissioning of the plant will likely involve the following four steps:

- Draining of the sedimentation and treatment lagoons
- Removal and disposal of the accumulated sludge from the lagoons;
- Removal and disposal of contaminated soils from around and beneath the lagoons(if any); and
- Demolishing and removing exiting building and equipment.

In accordance with the overall project objectives and guiding principles, the successful Contractor will be required to develop and submit a number of key plans that will be instrumental in monitoring the safe and environmentally sound performance of the work activities through out the duration of the contract. A few of these plans are outlined in the following paragraphs.

#### Environmental

Developed in accordance with the contract specifications, the overall objective of an Environmental Protection Plan (EPP) is to outline the protocols and procedures that must be implemented by the selected contractor(s) during the implementation of the Port Granby Project in order to minimise the negative impact of the project work on the environment. The EPP will be supported by follow up environmental monitoring programs and a Radiation Protection Plan.

#### Radiation

Licensed facilities are regulated by the Canadian Nuclear Safety Commission (CNSC), a regulatory government organization that controls the use of nuclear energy and materials to protect the environment. All the work will be performed in accordance with CNSC's licensing provisions and conditions. The current waste burial site is a licensed facility and the construction of the new LTWMF is to conform to licensing requirements that are already in place and the completed facility will eventually need CNSC's approval prior to receiving any waste. AECL is the licensee for the Port Granby Project. Therefore all construction/remediation work will be undertaken within the requirements of the license and AECL will be conducting the necessary monitoring/surveillance activities to satisfy the licence requirements.

As part of the conformance requirements, the contractor will be responsible for developing a Radiation Protection Plan (RPP). This plan is the basis for protection from ionizing radiation during construction/remediation work activities. The RPP provides a management framework and processes that are design to ensure that radiation exposures arising from these activities will be maintained below regulatory dose limits and kept as low as reasonably achievable (ALARA), taking economic and social factors into account.

The purpose of the RPP is to ensure that the PHAI complies with the level of radiation safety that is required by the relevant regulations pursuant to the Nuclear Safety and Control Act (NSCA). This RPP is one of the plans produced as a condition of the Port Granby Waste Nuclear Substance License issued to AECL by the CNSC.

#### Schedule

The LTWMF project is scheduled to be tendered in the spring of 2013 and awarded in early 2014. The duration of the contract work is expected to be approximately 6 years.

#### Cost

The total cost of the overall PHAI project is approximately \$1.2 Billion; and that total cost is divided between the Port Hope and Port Granby sub-projects.

### Information Sessions

PWGSC will be holding one information session for interested contractors on Wednesday, February 27, 2013 from 10:00 am to 1:00 pm at the Best Western Inn and Convention Center, 930 Burnham Street, Cobourg, ON K9A 2X9.

This is not a tender process, request for letters of interest nor a request for proposals, but is an informal invitation intended to serve as an advanced notice of the upcoming large project in Port Granby, gauge interest and available prime contracting capacity as well as provide a brief opportunity for general discussions.

Contractors interested in attending the information sessions, must confirm their attendance to:

Mary Caporusso

Real Property Contracting Services

4900 Yonge Street, 12th Floor,

Toronto, ON, M2N 6A6

Tel: 416-512-5859

E-mail: [mary.caporusso@pwgsc.tpsgc.gc.ca](mailto:mary.caporusso@pwgsc.tpsgc.gc.ca)