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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

**SOLICITATION AMENDMENT**  
**MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

This document contains a security requirement.

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

**Issuing Office - Bureau de distribution**

Construction Services Division/Division des services de  
construction  
11 Laurier St./11 Rue Laurier  
3C2, Place du Portage  
Phase III  
Gatineau, Québec K1A 0S5

<b>Title - Sujet</b> Cooling system upgrades /Mises à	
<b>Solicitation No. - N° de l'invitation</b> EJ192-140246/A	<b>Amendment No. - N° modif.</b> 001
<b>Client Reference No. - N° de référence du client</b> 20140246	<b>Date</b> 2013-06-12
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$FG-349-62819	
<b>File No. - N° de dossier</b> fg349.EJ192-140246	<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 2013-06-18</b>	
<b>Time Zone</b> Fuseau horaire Eastern Daylight Saving Time EDT	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> D'aoust, Jacques	<b>Buyer Id - Id de l'acheteur</b> fg349
<b>Telephone No. - N° de téléphone</b> (819) 956-0616 ( )	<b>FAX No. - N° de FAX</b> (819) 956-8335
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> Department of National Defence / Ministère de la Défense nationale Headquarters / Quartier général 101 Colonel By Drive /Promenade colonel By Ottawa, Ontario	

**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>

Solicitation No. - N° de l'invitation

EJ192-140246/A

Amd. No. - N° de la modif.

001

Buyer ID - Id de l'acheteur

fg349

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

20140246

File No. - N° du dossier

fg349EJ192-140246

CCC No./N° CCC - FMS No/ N° VME

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Cette modification est émise afin d'apporter le changement suivant à la demande d'invitation:

- Inclusion de la section 01 14 25 - Rapport sur les substances désignées à la division 01  
Exigences générales de la version en anglais:

## **PART 1 – GENERAL**

### **1.1 REGULATORY REQUIREMENTS**

.1 An investigation into the presence of designated substances for the Cooling System Upgrade Project at the Pearkes Building, 101 Colonel By Drive, Ottawa, Ontario was performed in order to meet the requirements of the Canada Labour Code under Part II, section 124 which stipulates that every employer shall ensure that the health and safety at work of every person employed by the employer is protected and those employees are made aware of every “known or foreseeable health or safety hazard” in the work environment. Also, it was performed to meet the requirements of Section 30 of the *Ontario Occupational Health and Safety Act, Revised Statutes of Ontario, 1990, Chapter 0.1*. By having a Designated Substances Report (DSR) conducted, the Departmental Representative will be able to inform his or her employees, contractors, and tenants of any designated substances that may be present and possibly disturbed throughout the duration of the project. The informed Departmental Representative will then be able to impose appropriate health and safety precautions for all applicable personnel as required.

.2 The designated substances identified in the *Occupational Health and Safety Act* and its corresponding regulations are:

- .1 **Acrylonitrile:** “Designated Substance – Acrylonitrile” *O.Reg 835* (as amended by *O.Reg 490/09*)
- .2 **Arsenic:** “Designated Substance – Arsenic” *O.Reg 836* (as amended by *O.Reg 490/09*)
- .3 **Asbestos**
  - .1 “The Regulation Respecting Asbestos” *O.Reg 837* (as amended by *O.Reg 490/09*)
  - .2 “General – Waste Management” *O.Reg 347* (as amended by *O.Reg 337/09*)
  - .3 “Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations” *O.Reg 278/05* (as amended by *O.Reg 493/09*)
  - .4 *PWGSC Departmental Policy DP 057 – “Asbestos Management”*
- .4 **Benzene:** “Designated Substance – Benzene” *O.Reg 839* (as amended by *O.Reg 490/09*)
- .5 **Coke Oven Emissions:** “Designated Substance – Coke Oven Emissions” *O.Reg 840* (as amended by *O.Reg 490/09*)

- .6 **Ethylene Oxide:** “Designated Substance – Ethylene Oxide” *O.Reg 841* (as amended by *O.Reg 490/09*)
- .7 **Isocyanates:** “Designated Substance – Isocyanates” *O.Reg 842* (as amended by *O.Reg 490/09*)
- .8 **Lead:**
  - .1 “Designated Substance – Lead” *O.Reg 843* (as amended by *O.Reg 490/09*)
  - .2 “General – Waste Management” *O.Reg 347* (as amended by *O.Reg 337/09*)
  - .3 Hazardous Products Act’s *Regulations Amending the Surface Coating Materials Regulations* SOR/2010-224
- .9 **Mercury:**
  - .1 “Designated Substance – Mercury” *O.Reg 844* (as amended by *O.Reg 490/09*)
  - .2 “General – Waste Management” *O.Reg 347* (as amended by *O.Reg 337/09*)
- .10 **Silica:** “Designated Substance – Silica” *O.Reg 845* (as amended by *O.Reg 490/09*)
- .11 **Vinyl Chloride:** “Designated Substance – Vinyl Chloride” *O.Reg 846* (as amended by *O.Reg 490/09*)

.3 All contractors requesting tenders from subcontractors shall furnish this report to subcontractors.

## 1.2 VALIDITY DATE

- .1 El Houcine Faouzi, Environmental Analyst of the Environmental Services Directorate of the Real Property Branch, PWGSC, conducted the on-site survey for this report on 2013/02/20.
- .2 The work area is located at the Pearkes Building, 101 Colonel By Drive Ottawa, Ontario. The scope of the work proposed consists of upgrading the existing cooling system component in the basement loading dock area and roof of the North Tower.
  - .1 The scope of work for this report involved a visual inspection of building materials and contents for the presence of suspected designated substances in the project area.

- .2 From the visual inspection suspect materials were sampled and analyzed, where appropriate, for the above substances. On the basis of this inspection, three (3) bulk samples of suspected lead-containing paint were collected.  
  
The samples were then submitted for analysis to the EXOVA Laboratory (an accredited CAEAL lab) located at 146 Colonnade Road, Nepean, Ontario, K2E 7Y1.  
  
The lead analysis of the paint samples was completed using Inductively Coupled Plasma – Mass Spectrometry (ICP-MS) in accordance with U.S. EPA Method 6010-C.
- .3 The visual inspection and sampling was limited to readily accessible areas. Destructive testing was not included in the investigation, but is recommended prior to any major demolition. Due to the nature of building construction, some inherent limitations exist as to the possible thoroughness of the designated substance survey. No confined space was accessed for the purpose of this report.
- .4 It is possible that the designated substances aforementioned are present in non-accessible areas and concealed spaces (i.e., wall and ceiling cavities), or confined spaces. No other areas outside the defined work boundaries have been assessed.
- .5 Prior to beginning work, it must be confirmed with the Departmental Representative that no additional designated substances have been brought to the project area.
- .6 In addition, the survey refers to PCBs and halocarbons; however, it does not refer to other substances that may be present in the day-to-day usage for specialized equipment or areas in buildings (i.e. lead shields, fume hoods, etc.).
- .7 There is a possibility that materials which could not be reasonably identified within the scope of this assessment or which were not apparent during previous site visits may exist. Should any designated substance be encountered in the course of demolition, work must be stopped, preventative measures taken, and the Departmental Representative must be notified immediately.

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## PART 2 - DESIGNATED SUBSTANCES

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### 2.1 SURVEY RESULTS

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- .1 **ACRYLONITRILE:** Not Identified
- .2 **ARSENIC:** Not Identified
- .3 **ASBESTOS:** Not Identified
- .4 **BENZENE:** Not Identified
- .5 **COKE OVEN EMISSIONS:** Not Identified
- .6 **ETHYLENE OXIDE:** Not Identified
- .7 **ISOCYANATES:** Not Identified
- .8 **LEAD: Identified**

Lead is a naturally occurring metal. It was used primarily in paint prior to the 1980's to increase the drying process. Lead in paint becomes a danger when it is old or damaged, as it creates lead dust and chips. Lead can also be found in soldered joints installed on piping up to the mid 1990s and in older cast iron bell and spigot joints.

- .1 According to the Hazard Products Act's *Regulations Amending the Surface Coating Materials Regulations* SOR/2010-224 allowable concentration of lead in surface coatings is 0.009 percent by weight (weight of lead to weight of paint), which is equivalent to 90 parts per million (ppm).
- .2 Even at very low concentrations, there may be potential for exposure to very high levels of lead depending on the activities performed that disturb the lead-containing materials. At low lead concentrations, conducting a risk assessment to assess the potential for exposure is required to determine the need to follow precautionary measures.
- .3 Representative beige paint samples, taken on 2013/02/20 from the project area, have been analyzed for lead content. Analytical results indicate that the beige paint on the pipe chase wall on the 14th floor of the North Tower and the green paint on the condenser water supply piping in the project area have a lead content above the 90ppm threshold outlined in the Hazardous Products Act's *Surface Coating Materials Regulations* SOR/2005-109. The results are shown in Table 1 below.

**Table 1: Lead Sample Results**

Sample ID	Description	Location	Lead Content (ppm)
NDQHCS-Pb-1	Green paint	From condenser water supply piping, chiller room, loading dock	<140
NDQHCS-Pb-2	Beige paint	From wall, 14 <sup>th</sup> Floor pipe chase, North Tower	770
NDQHCS-Pb-3	Green paint	From condenser water supply piping, 14 <sup>th</sup> Floor Roof, North Tower	2860

.9 **MERCURY: Identified**

Mercury-containing thermometers were identified within the project area.

.10 **SILICA: Not Identified**

.11 **VINYL CHLORIDE MONOMER: Not Identified**

.12 **POLYCHLORINATED BIPHENYLS (PCBs): Not Identified**

.13 **HALOCARBONS: Not Identified**

2.2 RECOMMENDATIONS

**1. LEAD**

If lead-containing materials are disturbed (i.e. during dry sanding, grinding, polishing and sawing operations), then proper precautions, as outlined under "Designated Substances" *O.Reg 490/09*, as amended, of the Occupational Health and Safety Act, must be followed.

Under Ontario Regulation 490/09, as amended of the Occupational Health and Safety Act, regulatory limits have been established for occupational exposure limits to airborne lead that may be present in a workplace. The Time Weighted Average Exposure Values to airborne lead dust or fumes should not exceed the Ministry of Labour's 0.05 milligram per cubic metre (mg/m<sup>3</sup>) limit during the removal of paints and products containing any concentration of lead. The TWAEV represents the time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, to which it is believed that nearly all workers may be repeatedly exposed, day after day, without adverse health effects.

Contractors performing work that requires disturbance of lead-containing materials are responsible to ensure that the workers are not exposed to airborne lead dust levels in excess of the time-weighted average and Maximum Exposure Concentration for lead-containing paints. It should

be noted that the use of mechanically-powered tools or torches on lead-containing materials increases the concentration of airborne lead dust or fumes and thereby requiring more stringent respiratory protection and controlled work procedures.

.1 Ontario Ministry of Labour (MoL) has published the document entitled "*Guideline: Lead on Construction Projects*". This document classifies all disturbances of lead-containing materials as Type 1, Type 2a, Type 2b, Type 3a or Type 3b work, based on presumed airborne concentrations of lead generated during the work each of which will have defined work practices. Although this document is not a regulation, Ministry of Labour Inspectors use it as guidance during site inspections.

.2 The disposal of construction waste containing lead is controlled by "General – Waste Management" *O.Reg 347/09, as amended*, under the *Ontario Environmental Protection Act*. The classification of the waste is dependent upon the result(s) of leachate test(s). The waste can be classified as "hazardous", "non-hazardous" or "registerable solid waste", depending on the results of the leachate test.

Prior to disposal, the concentration of leachable lead must be determined for waste materials with elevated lead contents following the Toxicity Characteristic Leaching Procedure (TCLP).

## 2. **MERCURY**

.1 Mercury is governed by "Designated Substance – Mercury" *O.Reg 844* (as amended by *O.Reg 490/09*), under the Occupational Health and Safety Act. The regulation provides requirements for allowable exposure levels.

.2 In addition, mercury waste is considered a hazardous waste under "General – Waste Management" *O.Reg 347* (as amended by *O.Reg 337/09*) of the *Ontario Environmental Protection Act*.

## 3. **CONTRACTORS DUTIES**

The contractor must review the designated substance report and take the necessary precautions to protect the health and safety of the workers and the environment. As per Section 30(4) of the *Ontario Occupational Health and Safety Act*, the party hiring the contractor (i.e. Departmental Representative) shall ensure that the contractor and subcontractor (if any) for the project has received a copy of the designated substance report prior to entering a binding contract for the supply of work on

the project. As per Section 27(2) (a, b, and c) of the *Ontario Occupational Health and Safety Act*, while onsite, the contractor supervisor shall exercise every reasonable precaution for the protection of a worker. If you have any questions about the designated substance report, please contact the Departmental Representative.

**END OF SECTION**