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**Vancouver
British Columbia
V6Z 0B9**

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**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

Vendor/Firm Name and Address

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

Issuing Office - Bureau de distribution

Public Works and Government Services Canada -
Pacific Region

800 Burrard Street, Room 219
800, rue Burrard, pièce 219

Vancouver
British C
V6Z 0B9

Title - Sujet HVAC Unit Replacement	
Solicitation No. - N° de l'invitation EZ899-172069/A	Amendment No. - N° modif. 001
Client Reference No. - N° de référence du client	Date 2016-12-28
GETS Reference No. - N° de référence de SEAG PW-\$PWY-026-7932	
File No. - N° de dossier PWY-6-39241 (026)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-01-05	
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: Yi (PWY), Patty	Buyer Id - Id de l'acheteur pwy026
Telephone No. - N° de téléphone (778) 919-2578 ()	FAX No. - N° de FAX (604) 775-6633
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: CSC - Mission Institution - Mission, BC	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	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

Solicitation No. - N° de l'invitation

EZ899-172069/A

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

Amd. No. - N° de la modif.

001

File No. - N° du dossier

PWY-6-39241

Buyer ID - Id de l'acheteur

pwy026

CCC No./N° CCC - FMS No./N° VME

Ce document est disponible en français

Amendment 001 has been raised to incorporate Addendum 001.

Addendum 001

INSERT Division 2 Existing Condition 02 81 01 Hazardous Materials to the specification document.

All other terms and conditions remain unchanged.

Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 00 01 50 – General Instructions (CSC)
- .2 Section 01 35 33 - Health and Safety Requirements
- .3 Section 01 35 43 - Environmental Procedures

1.2 REFERENCES

- .1 Assessment Reports: See Appendix of the Project Specifications.
- .2 Definitions:
 - .1 Dangerous Goods: product, substance, or organism specifically listed or meets 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.
- .3 Reference Standards:
 - .1 Canadian Environmental Protection Act,1999 (CEPA 1999)
 - .1 Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (SOR/2005-149).
 - .2 Department of Justice Canada (Jus)
 - .1 Transportation of Dangerous Goods Act, 1992 (TDG Act), (c. 34).
 - .2 Transportation of Dangerous Goods Regulations (T-19.01-SOR/2001-286).
 - .3 Health Canada / Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
 - .4 National Research Council Canada Institute for Research in Construction (NRC-IRC)
 - .1 National Fire Code of Canada 2015.

- .5 WorkSafe BC
 - .1 British Columbia's Occupational Health and Safety Regulation (BC Reg. 296/97, including amendments to date of work)
 - .2 "Safe Work Practices for Handling Asbestos" (2012 Edition)
 - .3 "Lead-Containing Paints and Coatings; Preventing Exposure in the Construction Industry", 2011
- .6 British Columbia Hazardous Waste Regulation (BC Reg. 63/88)
- .7 The Federal Transportation of Dangerous Goods Regulation
- .8 The Federal PCB Regulations (SOR/2008-273).
- .9 The British Columbia Waste Management Act - Ozone Depleting Substances and Other Halocarbons Regulation (BC Reg. 387/99).
- .10 The Federal Halocarbons Regulation, July 2003
- .11 Canadian Construction Association
 - .1 Standard Construction Document CCA 82 "Mould Guidelines for the Canadian Construction Industry" (2004)

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 00 01 50 – General Instructions (CSC).
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for hazardous materials and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Submit two copies of WHMIS MSDS in accordance with Sections 01 35 33 - Health and Safety Requirements and 01 35 29.06 - Environmental Procedures to Departmental Representative for each hazardous material required prior to bringing hazardous material on site.
 - .3 Submit environmental exposure control plan to Departmental Representative that identifies hazardous materials, usage, location, personal protective equipment requirements, and disposal arrangements.
 - .4 Submit Provincial and/or local requirements for Notice of Project Form.

- .5 Submit proof satisfactory to Departmental Representative that suitable arrangements have been made to dispose of asbestos-containing waste in accordance with requirements of authority having jurisdiction.
- .6 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.
- .7 Construction Waste Management:
 - .1 Submit project Demolition Waste Management Plan highlighting recycling and salvage requirements.
 - .2 Submit calculations on end-of-project recycling rates, salvage rates, and landfill rates demonstrating percentage of construction wastes were recycled or salvaged
- .8 Low-Emitting Materials: submit listing of adhesives and sealants used in building, comply with VOC and chemical component limits or restrictions requirements.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Transport hazardous materials and wastes in accordance with Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.
- .4 Storage and Handling Requirements:
 - .1 Co-ordinate storage of hazardous materials with Departmental Representative 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 Keep no more than 45 litres of flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use.
 - .1 Store flammable and combustible liquids in approved safety cans bearing the Underwriters' Laboratory of Canada or Factory Mutual seal of approval.
 - .2 Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires the written approval of the Departmental Representative.
- .5 Transfer of flammable and combustible liquids is prohibited within buildings.
- .6 Transfer flammable and combustible liquids away from open flames or heat-producing devices.
- .7 Solvents or cleaning agents must be non-flammable or have flash point above 38 degrees C.
- .8 Store flammable and combustible waste liquids for disposal in approved containers located in safe, ventilated area. Keep quantities to minimum.
- .9 Observe smoking regulations, smoking is prohibited in areas where hazardous materials are stored, used, or handled.
- .10 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.

- .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 Departmental Representative.
 - .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 containers 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 Departmental Representative.
 - .8 Track receipt of completed manifest from consignee after shipping dangerous goods. Provide photocopy of completed manifest to Departmental Representative.
 - .9 Report discharge, emission, or escape of hazardous materials immediately to Departmental Representative 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.

- .13 Report spills or accidents immediately to Departmental Representative. Submit a written spill report to Departmental Representative within 24 hours of incident.

- .5 Develop Demolition Waste Management Plan related to Work of this Section.

Part 2 Products

2.1 MATERIALS

- .1 Description:

- .1 Bring on site only quantities hazardous material required to perform Work.
- .2 Maintain MSDS in proximity to where materials are being used. Communicate this location to personnel who may have contact with hazardous materials.

Part 3 Execution

3.1 HAZARDOUS MATERIALS ABATEMENT

- .1 Scope of Abatement Activities for the project.
 - .1 Abatement shall be conducted to remove and dispose of hazardous building materials as identified in the Assessment Report(s) in accordance with applicable regulations, guidelines, standards and/or best practices for such work, where such identified hazardous building materials will be impacted (altered, damaged, removed) by the Work.
 - .2 Contractor is responsible for reviewing plans, specifications and reports such that they understand the locations and amounts of hazardous materials that will be impacted by the Work of this contract, and such that appropriate plans and budgets can be included in their overall bids.
 - .3 The listing below is a summary of the hazardous building material categories and associated removal and disposal regulations, guidelines and/or standards.
 - .1 Asbestos-Containing Materials (ACMs)
 - .1 Refer to the Assessment Report for identities and locations of ACMs that may require disturbance during the Work.

- .2 Actions that will disturb identified ACMs are to be conducted in accordance with the requirements of the 2012 WorkSafe BC publication "Safe Work Practices for Handling Asbestos", by appropriately trained personnel.
 - .3 Waste transportation to be conducted in accordance with BC Reg. 63/88 and the Federal Transportation of Dangerous Goods Regulation.
 - .4 Waste disposal to be conducted in accordance with BC Reg. 63/88.
 - .5 Notify Departmental Representative of suspected ACM discovered during Work and not apparent from drawings, specifications, or report pertaining to Work. Do not disturb such material pending instructions from DCC Representative.
 - .6 From beginning of Work until completion of cleaning operations, Departmental Representative will separately engage an Environmental Specialist to take air samples inside and outside of Asbestos Work Area enclosure[s] in accordance with British Columbia's Occupational Health and Safety Regulation and the current version of the WorkSafeBC Manual entitled "Safe Work Practices for Handling Asbestos".
 - .7 If air monitoring shows that areas outside Asbestos Work Area enclosure[s] are contaminated, enclose, maintain and clean these areas in same manner as that applicable to Asbestos Work Area, at no additional cost to the Contract
 - .8 Ensure that respiratory safety factors are not exceeded.
- .2 Lead and Lead-Containing Paints (LCPs)
- .1 Refer to the Assessment Report for identities and locations of lead-containing materials (including LCPs) that may require disturbance during the Work.
 - .2 Actions that will disturb lead-containing materials (including paints and materials coated with LCPs) are to be conducted in accordance with the requirements of the current version of the WorkSafe BC

publication "Lead-Containing Paint and Coatings: Preventing Exposure in the Construction Industry", keeping airborne exposure to lead dust to less than the 8-hour Occupational Exposure Limit (OEL) for lead of 0.05 milligram per cubic metre (mg/m³).

- .3 Although LCPs and items coated with LCPs will be disturbed and/or removed for disposal during the Work, unless deemed necessary through risk assessment or cost analysis conducted by the Contractor, comprehensive removal of LCPs from items or surfaces is not expected to be required during the Work.
 - .1 Refer to the provisions of the 2012 WorkSafe BC publication "Lead-Containing Paint and Coatings: Preventing Exposure in the Construction Industry" for removal of LCPs from surfaces before any welding and torch-cutting, should the Contractor plan to use such methods to complete the Work.
 - .1 Contractor will be responsible for verification testing of surfaces where LCPs have been removed. Confirmation of acceptable results is to be provided to the Departmental Representative for review before proceeding with any welding or torch-cutting on surfaces where LCPs were present.
- .4 Waste transportation to be conducted in accordance with BC Reg. 63/88 and the Federal Transportation of Dangerous Goods Regulation.
- .5 Waste disposal to be conducted in accordance with BC Reg. 63/88.
- .3 Polychlorinated Biphenyls (PCBs)
 - .1 When decommissioned, verify the PCB content of fluorescent lamp ballasts as per the Environment Canada publication Identification of Lamp Ballasts Containing PCBs, 1991.
 - .2 Should a material suspected to contain PCBs become uncovered during renovation activities (i.e., dielectric fluids, hydraulic fluids), all work in the areas that may disturb the material should be stopped. Samples of the

suspect material should be submitted for laboratory analysis to determine if PCBs are present.

.3 PCB-containing items identified for removal and disposal should be handled, transported, stored and disposed of in accordance with the following:

.1 The transportation and disposal requirements of BC Reg. 63/88 .

.2 The transportation requirements of the Federal Transportation of Dangerous Goods Regulation.

.3 The Federal PCB Regulations (SOR/2008-273)

.4 Mould

.1 When renovation or demolition work proceeds, it is expected that mould and/or moisture impacted building materials, will be removed and disposed of during that process. Due to the actual or potential presence of mould on building materials, and if those impacted materials are to be removed by hand, workers should be notified of the potential presence of mould.

.2 Work associated with removal of mould-impacted building materials should be conducted by competent personnel, who are knowledgeable of potential hazards of mould exposure, using personal protective equipment and procedures in accordance with industry accepted practices for mould abatement (e.g. CCA 82).

.5 Mercury

.1 When mercury-containing items are removed, ensure all mercury waste is handled, stored and disposed of in accordance with the requirements the following:

.1 The transportation and disposal requirements of BC Reg. 63/88.

.2 The transportation requirements of the Federal Transportation of Dangerous Goods Regulation.

.2 Precautions should be taken if workers may potentially be exposed to mercury or mercury vapours to ensure that workers exposure levels do not exceed the occupational exposure limit of 0.025 mg/m³ as per the BC Reg. 296/97. This can be achieved by providing respiratory and skin protection applicable to the hazard and task to be completed.

.6 Ozone-Depleting Substances (ODSs)

.1 When ODS-containing equipment is to be removed, ODSs must be recovered, handled, recycled, stored, and/or disposed of in accordance with the requirements of the following:

- .1 British Columbia Waste Management Act— Ozone Depleting Substances and Other Halocarbons Regulation (BC Reg. 387/99 as amended by BC Reg. 109/2002).
- .2 The transportation requirements of the Federal Transportation of Dangerous Goods Regulation.
- .3 The Federal Halocarbons Regulations.

.7 Silica

.1 When silica-containing materials are to be disturbed and/or removed (e.g., coring through concrete slabs, demolition of masonry or concrete units), ensure dust control measures are employed such that airborne silica dust concentrations do not exceed the exposure limit as stipulated by BC Reg. 296/97 (Cristobalite and Quartz – each 0.025 mg/m³). This would include, but not be limited to, the following:

- .1 Providing workers with respiratory protection
- .2 Wetting the surface of the materials, use of water or dust suppressing agents to prevent dust emissions
- .3 Providing workers with facilities to properly wash prior to exiting the work area.

3.2 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 00 01 50 – General Instructions (CSC). 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 00 01 50 – General Instructions (CSC).
- .3 Waste Management: separate waste materials for reuse and recycling in accordance with Section 00 01 50 – General Instructions (CSC).
 - .1 Dispose of hazardous waste materials in accordance with applicable federal and provincial acts, regulations, and guidelines.
 - .2 Recycle hazardous wastes for which there is approved, cost effective recycling process available.
 - .3 Send hazardous wastes to authorized hazardous waste disposal or treatment facilities.
 - .4 Burning, diluting, or mixing hazardous wastes for purpose of disposal is prohibited.
 - .5 Disposal of hazardous materials in waterways, storm or sanitary sewers, or in municipal solid waste landfills is prohibited.
 - .6 Dispose of hazardous wastes in timely fashion in accordance with applicable federal and provincial regulations.
 - .7 Minimize generation of hazardous waste to maximum extent practicable. Take necessary precautions to avoid mixing clean and contaminated wastes.
 - .8 Identify and evaluate recycling and reclamation options as alternatives to land disposal, such as:
 - .1 Hazardous wastes recycled in manner constituting disposal.
 - .2 Hazardous waste burned for energy recovery.
 - .3 Lead-acid battery recycling.
 - .4 Hazardous wastes with economically recoverable precious metals.

END OF SECTION