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**Bid Receiving Public Works and Government
Services Canada/Réception des soumissions Travaux
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Government of Canada Building
101 - 22nd Street East
Suite 110
Saskatoon
Saskatchewan
S7K 0E1
Bid Fax: (306) 975-5397

**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/Réception des soumissions Travaux publics et
Services gouvernementaux Canada
Government of Canada Building
101 - 22nd Street East
Suite 110
Saskatoon
Saskatchewan
S7K 0E1

Title - Sujet Autoclave	
Solicitation No. - N° de l'invitation 01581-180721/A	Amendment No. - N° modif. 007
Client Reference No. - N° de référence du client 01581-180721	Date 2018-03-08
GETS Reference No. - N° de référence de SEAG PW-\$STN-203-5039	
File No. - N° de dossier STN-7-40036 (203)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-03-14	
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: McDonald, Shannon M.	Buyer Id - Id de l'acheteur stn203
Telephone No. - N° de téléphone (306) 251-2684 ()	FAX No. - N° de FAX (306) 975-5397
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

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

This amendment is for solicitation 01581-180721/A.

Please disregard the Annex A attached to Amendment 006.

Question 1: Annex D, item 11.2 - Pressure vessel safety features must include: Mechanical steam pressure lock to prevent an operator from opening door if pressure exists in chamber; (Supplier) manufactures our autoclaves to meet the stringent requirements of CSA and many other international Codes and Standards. For 30+ years (Supplier) has manufactured our equipment utilizing pressure and temperature transducers as door control and safety components in our equipment instead of mechanical devices. This reduces maintenance costs and improves safety. Safety is improved because wear items are no longer used in a door locking mechanism. Safety is also improved because these wear items require routine maintenance, adjustment and future replacement, all of which are potential failure items if not inspected, replaced and adjusted on an ongoing basis. (Supplier) has hundreds installations across Canada in Healthcare, Research and Government installations across Canada utilizing this design.

Will the Government accept a door safety design utilizing pressure and temperature transducers as have been routinely used in the autoclave manufacturing industry by many manufacturers?

Response Client: The unit will be located in a location where there are frequent short-term power outages. The mechanical pressure lock is to ensure that the unit cannot be opened during such an outage. The supplier does not supply enough information on how the proposed transducer system operates in cases of power outages or on the re-establishment of power. When a power outage occurs, does the transducer system operate in such a way that the system will not allow the operator to open the door? Should the outage be of short duration, does the system do any type of reset whereby there could be a period of time that the door could be opened and the operator be scalded during the reset period? The supplier must provide further information on the safety controls associated with the unit before such a system could be found acceptable.

Response Supplier: (Supplier) has had no door failures resulting in scalding or burns to operators since introduction of this door operating system. In fact this door configuration is preferred by users as it protects the operators from burn and repetitive movement injuries due to the automation. Operators are not manually operating the door during the opening process and in the vicinity of steam during the opening process.

The door design is similar to a bank vault door. It swings onto door lock pins prior to sealing.

There is no concern during a power failure since the door is 550 lbs and cannot be operated by hand alone. Door opening involves lifting the door on a swing plan which also slides the door to disengage the door pins. There is an emergency manual opening process but it involves slowly a turning threaded rod. This process cannot be carried out with pressure in the chamber. Quick power failures are covered by 60 second battery back-up in the control system so the controls are not reset. The controls maintain the cycle performance data and carry on the cycle if power is returned within one minute. On longer power failures there is a control systems boot process where

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everything is powered off till controls are fully operational. At this time the chamber pressure is reduced to zero PSIG automatically. Controls will not allow door motor to energize while in cycle or if pressure is in the chamber. We also have a float switch in drain system so door cannot be opened with water/condensate in the chamber.

“The unit will be located in a location where there are frequent short-term power outages.” If the facility experiences frequent power bumps/outages it is highly recommended that a UPS be installed regardless of manufacturer chosen

Answer 1:

Yes this door is fine. We do not experience power outages as in the past, I see no need to add UPS backup. Mandatory Spec 11.2 will be amended.

Delete: “Annex A – Requirement” in it entirely

Insert: The attached revised “Annex A – Requirement”

Delete: “Annex D – Minimum Mandatory Performance Specifications” in its entirety

Insert: The attached revised “Annex D – Minimum Mandatory Performance Specifications”

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

ANNEX "A" - REQUIREMENT

Agriculture and Agri-Food Canada requires the supply, delivery and installation of one (1) Autoclave to the Swift Current Research and Development Centre in Swift Current, Saskatchewan.

Product must meet or exceed the following specifications:

1	Gravity steam sterilizer for dry and liquid laboratory and greenhouse materials. This unit is not for medical use.	Mandatory
2	Temperature range must be between 100°C to 135°C ± 2°C	Mandatory
3	Sterilizer must be floor mounted. Entrance level cannot be greater than 12" (305 mm) above the floor. Should the entryway be above floor level, accompanying lift equipment to raise cart to entrance level must be included.	Mandatory
4	The autoclave including steam generator and piping, etc. must fit in space that is 12 feet (3658 mm) WIDE x 8 feet (2438 mm) HIGH x 8 feet 6 inches (2591 mm) DEEP with adequate space on all sides for required servicing if needed. The front of the autoclave will have distance of 12 feet (3658 mm) for loading and unloading carts.	Mandatory
5.	Steam for autoclave must be supplied by a Carbon Steel steam generator capable of meeting temperature and pressure and time specifications for all the autoclave programs. The steam generator must state the area it requires beside the autoclave, plus service access area (diagram spec preferred), plus kw capacity. Please state water quality, temperature and water pressure requirements. We do not require clean steam for our purposes.	Mandatory
6.	Autoclave must come with appropriate stainless steel cart(s), with stainless steel shelves and stainless steel containers for loading soil and plant material that maximizes space in the pressure chamber. If chamber is more than 4 feet (1219 mm) deep, provide 2 carts (or 1 cart with 2 carriages). The shelves must be capable of supporting minimum of 100 lbs (45.36 kg) and the cart must be capable of supporting minimum of 500 lbs. (226.80 kg).	Mandatory
7.	Pressure vessel chamber must range between 1800 and 2800 liters. This must be useable space (ie. square or rectangular area that carriage fits into).	Mandatory
8.	Pressure vessel (inner and outer shell or jacket) and door must be manufactured of stainless steel minimum with a minimum 15 year warranty.	Mandatory
9.	Exterior jacket must be thermally insulated.	Mandatory
10.	Pressure vessel door must be either horizontal sliding or left hand hinged.	Mandatory
11.1	Pressure vessel safety features must include: Lock-out switch to prevent starting a cycle if door is not closed and locked;	Mandatory
11.2	Pressure vessel safety features must include: Mechanical steam pressure lock to prevent an operator from opening door if pressure exists in chamber or proven alternative that provides the same safety equivalence, even in cases where there is no power being supplied to the unit.	Mandatory
11.3	Pressure vessel safety features must include: Non-electrical visual chamber pressure gauge and temperature gauge as back-up to control	Mandatory

	display read out.	
12.	Must have microprocessor controlled system for research laboratory with gravity and liquid cycles preprogrammed and with operator adjustable exposure time, temperature and liquid cool down rate.	Mandatory
13.	Must have control system shielded to prevent exposure of electronics to steam and heat.	Mandatory
14.	Must have method of supervisory access to prevent cycle tampering via a security access code that allows individuals who have received proper training to use the equipment.	Mandatory
15.	Must have alpha numeric data (both onscreen and USB) of cycle status and adherence to performance. Paper printout not required.	Mandatory
16.	Must have audible and visual safety alarms for abnormal cycle conditions. Alarms: steam supply failure (chamber flooding); steam table deviation (+ or – 5 psi (34.5 KPa) quality control/assurance for proper sterilization); under or over temperature (informs of dangerously inadequate or excessive sterilization conditions).	Mandatory
17.	In the event of power or microprocessor failure, chamber must return safely to atmospheric pressure and have a manual method of opening door if required.	Mandatory
18.	600 volt 3 phase and 120 volt electrical readily available. 300 amps are available on the 600 volt service and 100 amps are available on the 120 volt service. Please include any conversion costs to accommodate your autoclave.	Mandatory
19.	Must be ISO 9001 certified manufacturer and sterilizer compliance with all applicable federal and provincial manufacturing codes (ASME Boiler & Pressure Codes; UL & CSA, etc.)	Mandatory
20.	Must include installation of new autoclave, startup, and stated specification performance check.	Mandatory
21.	Must include on site operator training of a minimum of 10 staff by qualified personnel within three weeks of the unit being installed.	Mandatory
22.	Must include minimum two (2) year on-site warranty from date of acceptance of equipment covering parts, labor, travel and accommodations and all related expenses.	Mandatory
23.	Contractor must provide two copies in hardcopy (English) of the operating and maintenance manuals, plumbing and wiring diagrams.	Mandatory
Additional safety and operational cost saving features:		
24.1	Digital display: Minimum 7mm text height	Mandatory
24.2	Digital Display: Minimum viewing angle of 90 degree (45 degrees off-centre)	Mandatory
24.3	Digital Display: Minimum brightness: 250 nits	Mandatory
24.4	Unit messaging: complete messages or codes.	Mandatory
24.5	Steam purge and exhaust condensate cooling to floor drain to minimize room steam;	Mandatory

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24.6	Utility startup/shutdown timer to reduce energy cost and increase equipment life.	Mandatory
25.1	Electrical Steam Generation: KW/100 liter capacity of pressure vessel chamber KW / 100 l must be less than 12 KW / 100 l	Mandatory

Delivery to:

FOB DESTINATION:

Swift Current Research and Development Centre
#1 Airport Road, Gate 4
Swift Current, Saskatchewan

Annex “D” - MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS

A complete list of the minimum mandatory performance specifications are detailed below in the “Compliance Matrix”. Bidders are to clearly demonstrate compliance with each mandatory specification.

1. Bidders **must** show compliance by addressing each performance specification in the Compliance Matrix, whether the product offered “meets” or “doesn’t meet”.
2. Bidders are requested to indicate how they meet each performance specification by recording this information under the Performance Specification Offered column in the Compliance Matrix.
3. It is requested that supporting technical documentation, including but not limited to, specification sheets, technical brochures, photographs or illustrations be provided with the bid at solicitation close and be cross-referenced on the Compliance Matrix for each performance specification to outline where in the supporting technical documentation it demonstrates compliance. It is the Bidders responsibility to ensure that the submitted supporting technical documentation provides detail to prove that the proposed product(s) meet the requirements of the Performance Specification. If published supporting technical document is not available, the Bidder should prepare a written narrative complete with a detailed explanation of how its bid demonstrates technical compliance.
4. If the supporting documentation referenced above has not been provided at bid closing, the Contracting Authority will notify the Bidder that they must provide supporting documentation within two (2) business days following notification. Failure to comply with the request of the Contracting Authority within that time period, will deem the bid non-responsive and the bid will be given no further consideration.
5. Bidders must address any concerns with the performance specifications in written detail to the Contracting Authority before bid closing as outlined in the Request for Proposal (RFP) document.
6. Failure to meet each mandatory performance specification will result in the bid being deemed non-responsive, and be given no further consideration.

Requirement:	Manufacturer Offered:	Model number Offered#:
Autoclave		

Item #	Performance Specification	Status (M) Mandatory	Performance Specification Met? Indicate either Yes/No	Performance Specification Offered: Bidder should indicate how they meet the performance specification by recording this information in this column	Cross Reference: In this column, Bidders should cross-reference where this performance specification is indicated in their supporting documents.
1	Gravity steam sterilizer for dry and liquid laboratory and greenhouse materials. This unit is not for medical use.	Mandatory			

2	Temperature range must be between 100°C to 135°C ± 2°C	Mandatory			
3	Sterilizer must be floor mounted. Entrance level cannot be greater than 12" (305 mm) above the floor. Should the entryway be above floor level, accompanying lift equipment to raise cart to entrance level must be included.	Mandatory			
4	The autoclave including steam generator and piping, etc. must fit in space that is 12 feet (3658 mm) WIDE x 8 feet (2438 mm) HIGH x 8 feet 6 inches (2591 mm) DEEP with adequate space on all sides for required servicing if needed. The front of the autoclave will have distance of 12 feet (3658 mm) for loading and unloading carts.	Mandatory			
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