

**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
Bid Receiving Public Works and Government  
Services Canada/Réception des soumissions Travaux  
publics et Services gouvernementaux Canada  
PO Box 1408, Room 100  
167 Lombard Ave.  
Winnipeg  
Manitoba  
R3C 2Z1  
Bid Fax: (204) 983-0338

**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 -  
Western Region  
PO Box 1408, Room 100  
167 Lombard Ave.  
Winnipeg  
Manitoba  
R3C 2Z1

<b>Title - Sujet</b> Mass Spectrometer, Benchtop	
<b>Solicitation No. - N° de l'invitation</b> 5K003-139983/A	<b>Amendment No. - N° modif.</b> 001
<b>Client Reference No. - N° de référence du client</b> 5K003-139983	<b>Date</b> 2012-12-05
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$WPG-070-8270	
<b>File No. - N° de dossier</b> WPG-2-35104 (070)	<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 2013-01-04</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Central Standard Time CST
<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> Barenz, Leanne	<b>Buyer Id - Id de l'acheteur</b> wpg070
<b>Telephone No. - N° de téléphone</b> (204) 983-0506 ( )	<b>FAX No. - N° de FAX</b> (204) 983-7796
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

**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>

This amendment is raised to modify solicitation #5K003-139983/A and to answer questions as follows:

Solicitation closing date will be changed from **December 7, 2012** to **January 4, 2013**.

## QUESTIONS AND ANSWERS:

### Question 1

There is an inconsistency between section 1.14 in "Annex D" and the corresponding section in the "Points Rated Scoring Grid" on page 19.

In 'Annex D', Section 1.14.1-1.14.3, I am told to show injections of 1 pg on column, 100 fg on column and 10 fg on column for the glyphosate compound. However these numbers are inconsistent with the scoring grid on page 19. The scoring grid indicates that points will be awarded for showing 10 pg, 2 pg and 1 pg on column for the glyphosate compound.

Are you able to clarify which section lists the correct values?

### Answer 1

Refer to Page 16 of 20 and amend as follows:

**Delete:** Annex D Scoring Grid in it's entirety and insert:

**Insert:**

**ANNEX "D"**  
**POINT RATED CRITERIA**

**Bids meeting all mandatory technical criteria identified in Annex C, Compliance Matrix, will be evaluated on the following point rated evaluation criteria.**

#### **1.13 Has the ability to perform sensitive quantitative analysis of mycotoxins of interest.**

The Canadian Grain Commission will provide a test solution containing ochratoxin A (approximately 0.1 ppb) and <sup>13</sup>C<sub>20</sub>-ochratoxin A in 90:10 (v/v) 0.5% (m/v) acetic acid/acetonitrile. Final concentrations of analytes will be provided with the test solution.

Using ultra high performance liquid chromatography (ie. using a column with stationary phase particle size of < 2 µm) and ESI+, monitor the following transitions:

**Table 1. Transitions for evaluation of technical specification 1.13**

Transition	Analyte	Transition
A	OTA	m/z 404.1 → m/z 239.1
B	OTA	m/z 404.1 → m/z 358.1

C	$^{13}\text{C}_{20}\text{-OTA}$	m/z 424.2 → m/z 250.0
D	$^{13}\text{C}_{20}\text{-OTA}$	m/z 424.2 → m/z 377.2

Chromatography method details can be provided upon request.

Provide the following in an email to the Contracting Authority listed at **PART 6 - RESULTING CONTRACT CLAUSES section 5.1 CONTRACTING AUTHORITY.**

- 1.13.1** for a 500 fg on-column injection of OTA, provide a scanned copy or screen shot of the MS/MS output showing the following for each of the four transitions listed in Table 1
- signal to noise ratio, where signal is defined as the height of the chromatographic peak and noise is defined as the root mean square of a continuous section of transition chromatogram adjacent to analyte peak
  - peak height
  - root mean square noise, defined as the root mean square of a continuous section of transition chromatogram adjacent to analyte peak
  - MS/MS output showing the chromatographic conditions, column specifications, mobile phase and mass spectrometric parameters used to generate the data
- 1.13.2** for a 100 fg on-column injection of OTA, provide a scanned copy or screen shot of the MS/MS output showing the following for each of the four transitions listed in Table 1
- signal to noise ratio, where signal is defined as the height of the chromatographic peak and noise is defined as the root mean square of a continuous section of transition chromatogram adjacent to analyte peak
  - peak height
  - root mean square noise, defined as the root mean square of a continuous section of transition chromatogram adjacent to analyte peak
  - MS/MS output showing the chromatographic conditions, column specifications, mobile phase and mass spectrometric parameters used to generate the data
- 1.13.3** for a 50 fg on-column injection of OTA, provide a scanned copy or screen shot of the MS/MS output showing the following for each of the four transitions listed in Table 1
- signal to noise ratio, where signal is defined as the height of the chromatographic peak and noise is defined as the root mean square of a continuous section of transition chromatogram adjacent to analyte peak
  - peak height
  - root mean square noise, defined as the root mean square of a continuous section of transition chromatogram adjacent to analyte peak
  - MS/MS output showing the chromatographic conditions, column specifications, mobile phase and mass spectrometric parameters used to generate the data

**1.14 Has the ability to perform sensitive quantitative analysis of pesticides of interest.**

The Canadian Grain Commission will provide a test solution containing the 9-fluorenylmethyl chloroformate derivative of glyphosate (approximately 3 ppb) and the 9-fluorenylmethyl chloroformate derivative of  $^{13}\text{C}_2$ -glyphosate in ultra-pure water. Final concentrations of analytes will be provided with the test solution.

Using ultra high performance liquid chromatography (ie. using a column with stationary phase particle size of  $< 2 \mu\text{m}$ ) and ESI-, monitor the following transitions:

## Table 2. Transitions for evaluation of technical specification 1.14

**Transition Analyte**  
 TransitionAGLY<sup>a</sup>  $m/z$  390.0  $\rightarrow$   $m/z$  167.9BGLY  $m/z$  390.0  $\rightarrow$   $m/z$  149.8  
 $^{13}\text{C}_2$ -GLY<sup>b</sup>  $m/z$  392.2  $\rightarrow$   $m/z$  169.9D  $^{13}\text{C}_2$ -GLY  $m/z$  392.2  $\rightarrow$   $m/z$  151.9  
 chloroformate derivative of glyphosate 9-fluorenylmethyl

<sup>b</sup>9-fluorenylmethyl chloroformate derivative of  $^{13}\text{C}_2$ -glyphosate

Chromatography method details can be provided upon request.

Provide the following in an email to the Contracting Authority listed at **PART 6 - RESULTING CONTRACT CLAUSES section 5.1 CONTRACTING AUTHORITY**.

- 1.14.1 for a 10 pg on-column injection of GLY, provide a scanned copy or screen shot of the MS/MS output showing the following for each of the four transitions listed in Table 2
  - a. signal to noise ratio, where signal is defined as the height of the chromatographic peak and noise is defined as the root mean square of a continuous section of transition chromatogram adjacent to analyte peak
  - b. peak height
  - c. root mean square noise, defined as the root mean square of a continuous section of transition chromatogram adjacent to analyte peak
  - d. MS/MS output showing the chromatographic conditions, column specifications, mobile phase and mass spectrometric parameters used to generate the data
- 1.14.2 for a 2 pg on-column injection of GLY, provide a scanned copy or screen shot of the MS/MS output showing the following for each of the four transitions listed in Table 2
  - a. signal to noise ratio, where signal is defined as the height of the chromatographic peak and noise is defined as the root mean square of a continuous section of transition chromatogram adjacent to analyte peak
  - b. peak height
  - c. root mean square noise, defined as the root mean square of a continuous section of transition chromatogram adjacent to analyte peak
  - d. MS/MS output showing the chromatographic conditions, column specifications, mobile phase and mass spectrometric parameters used to generate the data

- 1.14.3 for a 1 pg on-column injection of GLY, provide a scanned copy or screen shot of the MS/MS output showing the following for each of the four transitions listed in Table 2
- signal to noise ratio, where signal is defined as the height of the chromatographic peak and noise is defined as the root mean square of a continuous section of transition chromatogram adjacent to analyte peak
  - peak height
  - root mean square noise, defined as the root mean square of a continuous section of transition chromatogram adjacent to analyte peak
  - MS/MS output showing the chromatographic conditions, column specifications, mobile phase and mass spectrometric parameters used to generate the data

### 1.15 Has the ability to perform sensitive analyses with good precision.

Within 15 business days of receiving the test solution from the Canadian Grain Commission, Provide the following in an email to the Contracting Authority listed at **PART 6 - RESULTING CONTRACT CLAUSES section 5.1 CONTRACTING AUTHORITY**.

- 1.15.1 On days 1, 3, 5, 8, and 12 perform three consecutive (ie. one right after the other) replicate injections of 100 fg OTA on-column, and provide a scanned copy or screen shot of the MS/MS output for all three replicate injections showing the following for each of the four transitions listed in Table 1
- peak shape
  - peak height
  - peak area
  - MS/MS output showing the chromatographic conditions, column specifications, time of injection, mobile phase and mass spectrometric parameters used to generate the data

### POINT RATED SCORING GRID:

Evaluation Criteria	1 point each	5 points each	10 points each
<b>TECHNICAL SPECIFICATION 1.13</b> Has the ability to perform sensitive quantitative analysis of mycotoxins of interest.	signal to noise ratio = (greater than or equal to) 10 for 500 fg OTA <sup>a</sup> on-column for both transitions	signal to noise ratio = (greater than or equal to) 10 for 100 fg OTA on-column for both transitions	signal to noise ratio = (greater than or equal to) 10 for 50 fg OTA on-column for both transitions

<b>TECHNICAL SPECIFICATION 1.14</b> Has the ability to perform sensitive quantitative analysis of pesticides of interest.	signal to noise ratio = (greater than or equal to) 10 for 10 pg GLY <sup>b</sup> on-column for both transitions	signal to noise ratio = (greater than or equal to) 10 for 2 pg GLY on-column for both transitions	signal to noise ratio = (greater than or equal to) 10 for 1 pg GLY on-column for both transitions
<b>TECHNICAL SPECIFICATION 1.15</b> Has the ability to perform sensitive analyses with good precision.	a) intraday percent relative standard deviation of peak area for each of the 5 sets of triplicate injections = (less than or equal to) 15% (for all transitions listed in Table 1)  b) interday percent relative standard deviation of peak area for all injections = (less than or equal to) 20% (for all transitions listed in Table 1)	a) intraday percent relative standard deviation of peak area for each of the 5 sets of triplicate injections = (less than or equal to) 10 % (for all transitions listed in Table 1)  b) interday percent relative standard deviation of peak area for all injections = (less than or equal to) 10% (for all transitions listed in Table 1)	a) intraday percent relative standard deviation of peak area for each of the 5 sets of triplicate injections = (less than or equal to) 5% (for all transitions listed in Table 1)  b) interday percent relative standard deviation of peak area for all injections = (less than or equal to) 5% (for all transitions listed in Table 1)

<sup>a</sup>ochratoxin A; <sup>a</sup>9-fluorenylmethyl chloroformate derivative of glyphosate

Bids not obtaining a minimum one (1) point in each of the three technical specifications of 1.13, 1.14, and 1.15 will be declared non-responsive.

For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating as follows:

- 1) The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 65% for the technical merit and 35% for the price.
- 2) To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 65%.
- 3) To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 35%.
- 4) For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
- 5) Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

The table below illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 65/35 ratio of technical merit and price, respectively. The total available points equals 30 and the lowest evaluated price is \$250,000.00.

**Basis of Selection - Highest Combined Rating Technical Merit (65%) and Price (35%)**

	Bidder 1	Bidder 2	Bidder 3
Overall Technical Score	25/30	15/30	20/30
Bid Evaluated Price	\$300,000.00	\$275,000.00	\$250,000.00
Calculations	25/30 x 65 = 54.17	15/30 x 65 = 32.50	20/30 x 65 = 43.33
Technical Merit Score			
Price Score	250/300 x 35 = 29.17	250/275 x 35 = 31.82	250/250 x 35 = 35.00
Combined Rating	83.34	64.32	78.33
Overall Rating	1st	3rd	2nd

**Question 2**

Page 3, Part 1, section 2:....Mass Spectrometer system connect to a Waters Acquity ultra performance liquid chromatograph.... This RFP is requesting a mass spectrometer only or are you requesting a proposal to include Waters Acquity UPLC?

**Answer 2**

The RFP is requesting a tandem quadrupole mass spectrometer only. But the mass spectrometer must absolutely be compatible with a Waters Acquity UPLC.

**Question 3**

Page 13, Annex "A" Delivery on or before Dec 31, 2012 or March 31, 2013?

**Answer 3**

Annex A specifies that the delivery is "requested on or before December 31, 2012"; this is an ideal situation. The absolute latest delivery is before March 31, 2013. The vendor is asked to specify their best delivery date.

**\*\*\*All other terms and conditions remain the same\*\*\***