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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  
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**Issuing Office - Bureau de distribution**

Marine Emergency Response Division/Division des  
Interventions en cas d'urgence maritime  
Centennial Towers 7th Floor - 7W11  
200 Kent Street  
Ottawa  
Ontario  
K1A0S5

<b>Title - Sujet</b> Prescott Compressor	
<b>Solicitation No. - N° de l'invitation</b> F7047-180140/A	<b>Amendment No. - N° modif.</b> 001
<b>Client Reference No. - N° de référence du client</b> F7047-180140	<b>Date</b> 2019-01-28
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$ERD-005-27169	
<b>File No. - N° de dossier</b> 005erd.F7047-180140	<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 2019-03-05</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> Khan, Shazia	<b>Buyer Id - Id de l'acheteur</b> 005erd
<b>Telephone No. - N° de téléphone</b> (613) 614-2383 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<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>
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<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/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

## **Amendment 001**

This amendment is raised to revise the solicitation.

### **Revision 1**

At the title of the Solicitation document:

**Delete:** EREP: Prescott Compressor

**Insert:** Prescott Compressor

\*Please note that this solicitation is not part of the Environmental Response Equipment Program (EREP).

### **Revision 2**

At part 2.6 Mandatory Site Visit:

**Delete:** February 13, 2019

**Insert:** February 14, 2019

### **Revision 3**

**Delete:** Annex A Technical Statement of Requirements in its entirety and replace with the attached Annex A Technical Statement of Requirements.

**ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED**



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Canadian  
Coast Guard

Garde côtière  
canadienne

EKME# \*\*\*\*\*

## Integrated Technical Services



Safety First, Service Always



# Prescott Paint Shop Equipment

## *Annex A*

### *Technical Specification of Requirements*

Published under the Authority of:  
Integrated Technical Services Directorate  
Fisheries and Oceans Canada  
Canadian Coast Guard  
Ottawa Ontario, K1A 0E6

<http://intra.coast-guard.ca/ITS/Home>

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#### Record of Amendments

#	Date	Description	Initials
0		Initial Issue	

#### Approvals

Approval Signatures will be added here once scanned.

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**Background Information**

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**Section 1**

**BACKGROUND INFORMATION**

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This document outlines the Canadian Coast Guard's (CCG) specifications for the acquisition, installation and commissioning of new equipment related to the steel buoy painting activities at the Prescott Marine Base.

The CCG operates a paint shop facility located on its marine base in Prescott, Ontario. The facility is used for the refurbishment, sandblasting and painting of its steel buoys deployed in the Central and Arctic (C&A) Region.

Much of the equipment, used for buoy sandblasting and painting activities, is over 35 years old and is in need of replacing. The air compressor, which supplies air to the sandblasting booth and the breathing air purifier, has reached the end of its expected life cycle of 20 to 30 years and requires continual maintenance.

The equipment to be removed and installed within this specification, is located on the mezzanine between the sandblasting booth and the painting booth. Workers can access the mezzanine via temporary stairs on the west side of the mezzanine. The Contractor is responsible for supplying its own lifting equipment to raise the new mechanical equipment onto the mezzanine. The Contractor is responsible for ensuring its workers are adequately licensed and trained to operate the lifting equipment.

The CCG Prescott Base is located at:  
401 King Street West  
Prescott, Ontario  
K0E 1T0

**List of Acronyms**

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**Section 2****LIST OF ACRONYMS**

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The following is a list of acronyms used throughout this document.

A	Amp
CCG	Canadian Coast Guard
CSA	Canadian Standards Association
C	Celsius
F	Fahrenheit
Hp	Horsepower
Hz	Hertz
L	Litre
lbs	Pounds
kg	Kilogram
kW	Kilowatt
kPag	Kilopascal (gauge)
m	Metre
mg	Milligram
mm	Millimetre
MPa	Megapascal
PPE	Personal Protective Equipment
ppm	Parts per million
psi	Pound per square inch
psig	Pound per square inch (gauge)
s	Second
scfm	Standard cubic feet per minute
TSSA	Technical Standards and Safety Act
V	Volt

**Applicable documents**

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## **Section 3**

## **APPLICABLE DOCUMENTS**

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The documents listed in this section form an integral part of the CCG requirements to the extent they are referenced in this Performance Specification.

### **3.1 REFERENCED PUBLICATIONS, SPECIFICATIONS AND STANDARDS**

#### **3.1.1 Canadian Standards Association (CSA):**

- 3.1.1.1 CSA B51 Boiler, Pressure Vessel and Piping Code
- 3.1.1.2 CSA C22.1 Canadian Electrical Code
- 3.1.1.3 CSA CAN3-C235 Preferred Voltage Levels for AC Systems, 0 to 50 000V
- 3.1.1.4 CSA Z180.1 Compressed Breathing Air and Systems

#### **3.1.2 Technical Standards and Safety Act (TSSA)**

#### **3.1.3 The latest editions (at the time of contract award) of the above-mentioned standards must apply.**

### **3.2 ORDER OF PRECEDENCE**

#### **3.2.1 In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been made.**



## **Section 4**

## **PERFORMANCE SPECIFICATION**

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### **4.1 DESCRIPTION OF WORK**

**4.1.1** Remove and dispose of the following existing equipment:

4.1.1.1 Air compressor;

4.1.1.2 Air receiver tank; and

**4.1.2** Supply, deliver, install and commission the following new equipment:

4.1.2.1 One (1) air compressor;

4.1.2.2 One (1) coalescent filter;

4.1.2.3 One (1) oil/water separator; and

4.1.2.4 One (1) air receiver tank.

**4.1.3** Provide a demonstration and on-site training on all equipment part of this specification to the staff at the Prescott Marine Base. The demonstration must meet the following requirements:

4.1.3.1 Maximum of a day long;

4.1.3.2 For five (5) to ten (10) attendees;

4.1.3.3 In English only; and

4.1.3.4 Take place after all equipment has been installed and tested by the Contractor and prior to the site being handed over to Canada.

**Performance Specification**

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## 4.2 SPECIFICATIONS

### 4.2.1 General

#### 4.2.1.1 Deliverables

- 4.2.1.1.1 Submit detailed engineered shop drawings to indicate equipment, dimensions, extent of equipment, piping system, valves etc. Submit shop drawings for review and acceptance by the CCG prior to manufacturing and installation.
- 4.2.1.1.2 Submit manufacturer's instructions, product literature and data sheets for all equipment identified in this specification. Submit documents to Canada for review and acceptance prior to commissioning.
- 4.2.1.1.3 Submit the operating and maintenance manuals for each piece of equipment identified in this specification. Submit documents to Canada for review and acceptance prior to commissioning. The operating and maintenance manual must include as a minimum:
  - Safety instructions;
  - Description of components;
  - General arrangement drawings;
  - Technical data and dimensions;
  - Installation and setup instructions;
  - Operating instructions;
  - Troubleshooting;
  - Maintenance procedures and schedule;
  - Replacement parts; and
  - Warranty information.
- 4.2.1.1.4 Submit a complete list of manufacturer-recommended spare parts and associated prices for all equipment part of this specification.
- 4.2.1.1.5 Documentation must be provided in English.

**Performance Specification**

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**4.2.1.2 Delivery, Storage and Handling of New Equipment**

- 4.2.1.2.1 All materials, goods and equipment that form part of this contract must be new, commercial off the shelf products.
- 4.2.1.2.2 Include packing list with listing of equipment, components and quantities delivered.
- 4.2.1.2.3 All equipment and material must be adequately packaged to prevent any damage in transit and be suitable for storage until installation and commissioning.
- 4.2.1.2.4 All equipment and material must be handled in accordance with manufacturer's instructions.
- 4.2.1.2.5 Store equipment and materials in clean, dry, well ventilated area and protect equipment and material from damages prior to Canada's final acceptance.

**4.2.1.3 Safety**

- 4.2.1.3.1 All personnel on the Government of Canada's site must wear the appropriate Personal Protective Equipment (PPE). The Contractor is responsible for providing the required PPE to their personnel.
- 4.2.1.3.2 The Contractor must comply with all applicable federal and provincial health and safety regulations.
- 4.2.1.3.3 Submit a written site-specific Health and Safety Plan based on hazard assessment prior to beginning the work on site.

**4.2.1.4 Removal of Existing and Installation of New Equipment**

- 4.2.1.4.1 The Contractor is responsible for the decommissioning and removal of the existing equipment including:
  - 4.2.1.4.1.1 Making arrangements with and obtaining permits from authorities having jurisdiction for disposal of waste and debris.
  - 4.2.1.4.1.2 Proper disposal of all equipment and waste materials at a licensed disposal facility.
- 4.2.1.4.2 The Contractor is responsible for the installation and commissioning of all new equipment including:
  - 4.2.1.4.2.1 All electrical connections required, including supplying materials.
  - 4.2.1.4.2.2 All mechanical connections between the new equipment and the existing piping system, including supplying materials.
  - 4.2.1.4.2.3 Anchoring the new equipment to the existing concrete floor or concrete housekeeping pads.

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4.2.1.4.3 All electrical and instrumentation components must be Canadians Standards Association (CSA) approved.

4.2.1.4.4 Where the removal of the existing equipment has left holes or other blemishes in the existing concrete floor or housekeeping pads, the Contractor must repair the concrete using an appropriate cementitious repair mortar with a minimum 28 day compressive strength of 25 MPa.

**4.2.1.5 Testing**

4.2.1.5.1 The compressor must be factory tested as a completely assembled unit prior to delivery. Submit all test results to Canada for review and acceptance.

4.2.1.5.2 On completion of the entire installation, the Contractor must carry out any on-site inspections and testing deemed necessary to ensure the proper functioning of the various elements of the compressed air system. Submit all test results to Canada for review and acceptance.

4.2.1.5.3 The Contractor must carry out any necessary adjustments to ensure proper functioning of the system.

**4.2.1.6 Cleaning**

4.2.1.6.1 The Contractor is responsible for maintaining a clean work space including the removal and disposal of all packaging materials.

**4.2.1.1 Warranty**

4.2.1.1.1 The equipment must be warrantied against manufacturing and installation defects for a period of no less than 24 months.

**4.2.2 Air Compressor**

4.2.2.1 The Contractor must supply, install and commission an air compressor meeting the requirements of this section.

**Performance Specification**

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**4.2.2.2 Operating Data**

- 4.2.2.2.1 Air compressor type: Rotary screw, Variable Speed Drive.
- 4.2.2.2.2 Cooling type: Air cooled.
- 4.2.2.2.3 Flow capacity: Minimum flow capacity of 316 l/s (670 scfm).
- 4.2.2.2.4 Minimum motor power: 90 kW (125 hp).
- 4.2.2.2.5 System voltage: 600/575 Volts, 3 phases, 60 Hz in accordance with CSA CAN3-C235.
- 4.2.2.2.6 Minimum system current: 144A.
- 4.2.2.2.7 Working pressure: 400 kPag – 1248 kPag (58 psig - 181 psig).
- 4.2.2.2.8 Ambient operating temperature: 1.7°C – 48.9°C (35°F - 120°F).
- 4.2.2.2.9 The compressor must have an inlet air filter.
- 4.2.2.2.10 The compressor must have an integrated air dryer.
- 4.2.2.2.11 The maximum weight of the new air compressor must not exceed the weight of the existing compressor of 2211 kg (4875 lbs).
- 4.2.2.2.12 The footprint area dimensions of the new compressor must not exceed those of the existing compressor 1400 mm x 2400 mm.

**4.2.2.3 Installation**

- 4.2.2.3.1 The existing air compressor must be removed and the new air compressor installed within the footprint of the existing air compressor.

**4.2.3 Air Receiver Tank**

- 4.2.3.1 The Contractor must supply, install and commission an air receiver tank meeting the requirements of this section.

**4.2.3.2 Air Receiver Tank Requirements**

- 4.2.3.2.1 Type: vertical air receiver.
- 4.2.3.2.2 Minimum capacity: 1.89 m<sup>3</sup> (500 gallon).
- 4.2.3.2.3 Minimum design pressure: 1379 kPa (200 psi).
- 4.2.3.2.4 Test pressure: The minimum test pressure must be in accordance with CSA B51.
- 4.2.3.2.5 Ambient operating temperature: 1.7°C – 48.9°C (35°F - 120°F).
- 4.2.3.2.6 The air receiver tank must have a pressure safety relief valve.
- 4.2.3.2.7 The air receiver tank must be suitable for wet air storage.
- 4.2.3.2.8 The air receiver tank must be designed and constructed in accordance with CSA B51 Boiler, Pressure Vessel and Pressure Piping Code.

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4.2.3.2.9 The air receiver tank must conform to the Technical Standards and Safety Act (TSSA), and applicable regulations, codes, and standards in accordance with Section 3.

4.2.3.2.10 The air receiver tank and fittings must have a Canadian Registration Number (CRN) as specified in CSA B51.

**4.2.3.3 Display**

4.2.3.3.1 The air receiver tank must have a pressure gauge. The display must be accessible.

**4.2.4 Coalescing Filter**

4.2.4.1 The Contractor must supply, install and commission coalescing filter meeting the requirements of this section.

**4.2.4.2 Filter Requirements**

4.2.4.2.1 The Contractor must supply and install a coalescing filter downstream of the air receiver tank to protect the breathing air purifier.

4.2.4.2.2 Filter type: Oil aerosol and solid particles.

4.2.4.2.3 Maximum oil carry-over: 0.0009 mg/m<sup>3</sup>.

4.2.4.2.4 Maximum allowable wet pressure drop: 27.6 kPa (4 psi).

4.2.4.2.5 Flow rate: The coalescing filter flow rate capacity must be determined in accordance with the selected compressor's outlet flow rate.

**4.2.4.3 Replacement Parts**

4.2.4.3.1 Provide spare parts for one (1) year of normal operation per manufacturer's recommendations.

**4.2.4.4 Display**

4.2.4.4.1 The coalescing filter must have a differential pressure gauge. The display must be accessible.

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**4.2.5 Oil-Water Separator**

- 4.2.5.1 The Contractor must supply, install and commission an oil-water separator meeting the requirements of this section.

**4.2.6 Oil-Water Separator Requirements**

- 4.2.6.1.1 The Contractor must supply and install an oil-water separator to remove oil from condensate prior to being discharged into the environment.
- 4.2.6.1.2 The oil-water separator must remove oil from the air compressor, air receiver tank, coalescing filter and air dryer condensate streams.
- 4.2.6.1.3 The oil-water separator must be compatible with air compressor, air receivers, dryers and filter set-ups.
- 4.2.6.1.4 Oil-water separation must be achieved by oleophilic filters and activated carbon.
- 4.2.6.1.5 Oil content in effluent: Maximum 15 mg/l (ppm).
- 4.2.6.1.6 Flow capacity: The oil-water separator capacity must be determined based on the condensate output from the air compressor, air receiver tank, coalescing filter and air dryer.

**4.2.6.2 Replacement Parts**

- 4.2.6.2.1 Provide spare parts for one (1) year of normal operation per manufacturer's recommendations.

**4.2.6.3 Display**

- 4.2.6.3.1 Maintenance indicator identifying when filter replacement is required. The display must be accessible.