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**LETTER OF INTEREST**

**LETTRE D'INTÉRÊT**

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du  
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Issuing Office - Bureau de distribution

Public Works and Government Services Canada - Pacific  
Region

401 - 1230 Government Street  
Victoria, B. C.

V8W 3X4

<b>Title - Sujet</b> MV Sun Sea - RFI - Vessel Disposal	
<b>Solicitation No. - N° de l'invitation</b> 47419-191404/A	<b>Date</b> 2018-05-25
<b>Client Reference No. - N° de référence du client</b> 47419-191404	<b>GETS Ref. No. - N° de réf. de SEAG</b> PW-\$XLV-211-7516
<b>File No. - N° de dossier</b> XLV-7-40242 (211)	<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 2018-06-29</b>	
<b>Time Zone</b> <b>Fuseau horaire</b> Pacific Daylight Saving Time PDT	
<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> Buchan, Torrey	<b>Buyer Id - Id de l'acheteur</b> xl211
<b>Telephone No. - N° de téléphone</b> (250) 216-2092 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> CANADA BORDER SERVICES AGENCY See herein	

Instructions: See Herein

Instructions: Voir aux présentes

<b>Delivery Required - Livraison exigée</b> See Herein	<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>

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## Request for Information (RFI)

### TITLE: MV Sun Sea - Vessel Disposal or Remediation

#### 1. Purpose and Nature of the Request for Information (RFI)

Public Works and Government Services Canada (PWGSC) is requesting Industry feedback regarding potential options for the Motor Vessel (MV) Sun Sea, which has been in Canada Border Services Agency (CBSA) custody since 2010.

The intent of this RFI is to seek feedback from industry on how best to manage the dismantling and/or disposal of the vessel and ensure that best practices are incorporated into the process. Canada is interested in input on alternative disposal methods that are environmentally sound and lower costs to Canadian taxpayers. Furthermore, Canada would like to determine regional capacity to dispose of this vessel. It should be noted by industry that due to its condition, towing of the vessel is restricted to the waters of Southern British Columbia.

There is a scheduled viewing of the vessel on June 8, 2018 at 10:00AM Pacific Daylight Time (PDT) at 100 Annacis Park Way, Delta, BC. Requests to attend the viewing must be sent to the Contracting Authority by June 6, 2018 at 10:00AM PDT by email to [Torrey.Buchan2@pwgsc-tpsgc.gc.ca](mailto:Torrey.Buchan2@pwgsc-tpsgc.gc.ca).

All participants at the vessel viewing must wear personal protective equipment (PPE) when onboard the vessel, including a hard hat and steel-toed boots with non-slip soles. Participants will be advised of any other PPE requirements prior to the viewing, and are required to provide their own PPE for the viewing.

The objectives of this RFI are two-fold:

- I. With respect to the vessel dismantling and disposal SOW provided, Canada is seeking to allow industry the opportunity to assess and comment on the adequacy and clarity of the vessel dismantling & disposal SOW, and to provide input on the following:
  - a) The level of detail required in the document;
  - b) Best practices and procedures to incorporate into the SOW;
  - c) Industry capacity to accomplish the SOW as presented;
  - d) The necessary schedule and timelines required to complete the dismantling and disposal of a vessel of this size and characteristics;
  - e) The approximate budget/cost to dismantle and dispose of the vessel;
  - f) Potential evaluation criteria that would support the SOW and add value to the Request for Proposal process.

- II. Canada is seeking input from industry on alternative methods of disposal of the vessel that may be more environmentally sound and/or reduce the costs of disposal. For proposed alternative methods, Canada is seeking information as to:
- a) Best practices and procedures;
  - b) The necessary schedule and timelines required to complete the proposed alternative method;
  - c) The approximate budget/cost of the proposed alternative method;
  - d) Potential evaluation criteria that would support the alternative method.

This RFI is neither a call for tender nor a Request for Proposal (RFP). No agreement or contract will be entered into based on this RFI. The issuance of this RFI is not to be considered in any way a commitment by the Government of Canada, nor as authority to potential respondents to undertake any work that could be charged to Canada. This RFI is not to be considered as a commitment to issue a subsequent solicitation or award contract(s) for the work described herein.

Although the information collected may be provided as commercial-in-confidence (and, if identified as such, will be treated accordingly by Canada), Canada may use the information to assist in drafting performance specifications (which are subject to change) and for budgetary purposes.

Respondents are encouraged to identify, in the information they share with Canada, any information that they feel is proprietary, third party or personal information. Please note that Canada may be obligated by law (e.g. in response to a request under the Access of Information and Privacy Act) to disclose proprietary or commercially-sensitive information concerning a respondent (for more information: <http://laws-lois.justice.gc.ca/eng/acts/a-1/>).

Respondents are asked to identify if their response, or any part of their response, is subject to the Controlled Goods Regulations.

Participation in this RFI is encouraged, but is not mandatory. There will be no short-listing of potential suppliers for the purposes of undertaking any future work as a result of this RFI. Similarly, participation in this RFI is not a condition or prerequisite for the participation in any potential subsequent solicitation.

Respondents will not be reimbursed for any cost incurred by participating in this RFI.

The RFI closing date published herein is not the deadline for comments or input. Comments and input will be accepted any time up to the time when/if a follow-on solicitation is published.

## **2. Potential Work Scope and Constraints:**

The Scope is as detailed in the included Annex A document and supporting Appendices. Constraints include regulatory policy concerning disposal of hazardous

material, costs of handling and disposing of hazardous material, environmental protection plans, vessel integrity, towing, berthing, mooring and project documentation.

### **3. Legislation, Trade Agreements, and Government Policies:**

The following is indicative of some of the legislation, trade agreements and government policies that could impact any follow-on solicitation(s):

- I. Canada Free Trade Agreement (CFTA)
- II. The Comprehensive and Economic Trade Agreement (CETA)
- III. North American Free Trade Agreement (NAFTA)
- IV. World Trade Organization – Agreements on Government Procurement (WTO-AGP)
- V. Industrial and Regional Benefits (IRBs)
- VI. Federal Contractors Program for Employment Equity (FCP-EE)

### **4. Schedule:**

In providing responses, the following expected schedule should be utilized as a baseline:

- I. Request for Information (RFI) – May/June 2018
- II. RFI submission review – July 2018
- III. Solicitation for contract – August 2018
- IV. Contract award – September 2018
- V. Project completion – March 2019

### **5. Important Notes to Respondents:**

Interested Respondents may submit their responses to the PWGSC Contracting Authority, identified below, preferably via email:

Name: Torrey Buchan  
Public Works and Government Services Canada  
Acquisitions Branch  
Marine Directorate  
Address: 1230 Government Street, Victoria, B.C.  
Telephone: 250-217-7138  
Facsimile: 250-363-3960  
E-mail: [Torrey.Buchan2@pwgsc-tpsgc.gc.ca](mailto:Torrey.Buchan2@pwgsc-tpsgc.gc.ca)

A point of contact for the Respondent should be included in the package.

Changes to this RFI may occur and will be advertised on the Government Electronic Tendering System. Canada asks Respondents to visit [Buyandsell.gc.ca](http://Buyandsell.gc.ca) regularly to check for changes, if any.

## **6. Closing date for the RFI:**

Responses to this RFI are to be submitted to the PWGSC Contracting Authority identified above, on or before June 29, 2018 at 2:00PM PDT.

## **7. Questions for Industry**

Please respond to the following questions as part of your response to the RFI:

- I. With respect to the Dismantling and Disposal SOW:
  - a. Do you currently have the capacity to deliver the Statement of Work?
  - b. Please provide approximate pricing and clearly identify for the requirement.
  - c. Are there any considerations which have not been addressed in the SOW?
  - d. Is there other information not provided that you consider necessary to properly provide a response such as identifying applicable standards?
  - e. Does the SOW provide sufficient clarity to enable accurate pricing and if not what information is missing that is necessary to properly quote such a project?
  - f. Are there other considerations not addressed in the SOW which would limit the contractor's ability to meet either requirement?
  - g. In terms of evaluation criteria, what requirements should the Crown consider as mandatory requirements for a firm to be considered for dismantling of such a vessel?
  - h. In terms of evaluation criteria, what requirements, if any, should the Crown consider as rated criteria (added value)?
  
- II. With respect to a proposed alternative method of disposal:
  - a. The Crown is interested in alternatives methods of disposal but would require the necessary schedule and timelines required to complete the proposed alternative method. Ideally, the alternative method of disposal would be completed prior to March 31, 2019.
  - b. What would be the approximate budget/cost of the proposed alternative method?
  - c. What are the resulting benefits of the proposed alternative method of disposal as compared to dismantling and disposal?
  - d. Is there industry capacity within the region to dispose of the vessel in this alternative fashion?
  - e. In terms of evaluation criteria, what requirements, if any, should the Crown consider as rated criteria (added value)?

## **8. Follow-up Activity**

Canada may, in its discretion, contact any respondents to follow up with additional questions or for clarification of any aspect of a response. Canada reserves the right to invite any or all respondents to present their submissions to this RFI and/or perform a product demonstration.

## **ANNEX A – STATEMENT OF WORK**

# **CANADIAN BORDER SERVICES AGENCY**

## **DECONSTRUCTION AND DISPOSAL OF THE**

### **MV SUN SEA**

**SPEC Number: CBSA-01**

**Rev: 0**

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## STATEMENT OF WORK

### 1. INTRODUCTION

#### 1.1 OVERVIEW

This contract is for the Ship Breaking of the MV Sun Sea. The Contractor is to ship break the vessel in an efficient and environmentally responsible manner in accordance with Canadian Laws and the terms of this contract. Once mutilated compartment by compartment, the vessel including all contents, becomes the property of the contractor as waste. No part of the vessel or equipment must be retained by Canada. The vessel is considered destroyed once all the vessel and its content are destroyed and recycled (as applicable) as witnessed by the Technical Authority.

The Contractor must refer to Appendix "B" and be familiar with the acronyms and definitions herein.

#### 1.2 OBJECTIVE

The Canada Border Services Agency (CBSA) currently has a requirement for the dismantling and disposal of one vessel named MV Sun Sea.

The Contractor is to prepare the vessel for transfer, transfer it to the Approved Site and dismantle (dispose/recycle) the vessel in an efficient and environmentally responsible manner that is conforming to Canadian Laws and the terms of the contract.

#### 1.3 BACKGROUND

The MV Sun Sea was arrested in BC waters in August 2010 after having transported several hundred migrants to Canada. This vessel continues to be held at the Public Services and Procurement Canada (PSPC) Marine Base located at 100 Annacis Parkway, Delta, BC pending its final disposition.

The Government of Canada has made the determination that the MV Sun Sea must be disposed of in an environmentally sound manner, in a Canadian facility, in accordance with Canadian law.

In preparation for the Ship Breaking, the amount of Hazardous materials on board the vessel was inventoried to permit the issuance of an Inventory of Hazardous Materials (IHM). This consists of the vessel's details and the inventory of the hazardous and potentially hazardous materials on board, in accordance with Classification Society requirements. The assessment was completed in a manner set out by Classification Societies and MEPC guidelines. That report and other documentation related to the IHM is included as a reference to this SOW.



## **2. VESSEL PARTICULAR**

### **2.1 SPECIFICATIONS**

Name of Vessel	M.V. "Sun Sea"
IMO #	8017748
Year Built	1980
Type of Vessel	General Cargo
Builder	Matsuura Zosensho, Japan
Gross Tonnage	767
Net Tonnage	403
Length	52.4 m
Breadth	11.01 m
Depth	5.2 m
Construction	Steel

The dock capacity for crange: Load rating is H-20.

### **2.2 CONTROLLED WASTES**

The following Controlled waste materials are present on the ship and the appropriate mitigation measures for each must be addressed by the Contractor:

- a) Mold is present throughout the vessel;
- b) Asbestos-containing materials;
- c) Metals (including lead) in paint;
- d) Heavy metals in materials (flashing, solder, anodes etc.);
- e) Polychlorinated Biphenyl (PCB)-containing materials including PCBs in paint and cabling coating, and suspected to be in ventilation gasket; light ballasts and suspect transformers;
- f) Mercury in electronic products; gauges and fluorescent lamps;
- g) Ozone depleting substances (possible);
- h) Petroleum oil and lubricant residue;
- i) Silica – boiler brickwork;
- j) Radioactive materials within equipment (e.g. smoke detectors and navigation equipment).

### **2.3 CERTIFICATIONS**

As the vessel is out of service for an extended period of time, it should be assumed that none of the ladders, guardrails, lifting or towing points are certified.

### **2.4 WASTE MANAGEMENT**

In preparation for the disposal of the MV Sun Sea a formal and comprehensive Inventory of Hazardous Materials has been carried out on board the vessel on January 29, 2016. All environmental samplings have been verified by a third party for completeness. The report for the vessel is included as a reference to this SOW.

Waste materials that are present on the vessel and as part of the vessels intrinsic structure include but are not limited to:

- a) Hydrocarbons, fuel and oily water
- b) Garbage
- c) Black water and grey water
- d) Paints
- e) Firefighting Equipment
- f) Refrigerants/Ozone Depleting Substances
- g) Polychlorinated Biphenyls (PCBs) containing equipment and materials
- h) Other hazardous material (including asbestos, mercury and lead)

### **3. CONSTRAINTS**

#### **3.1 LOCATION OF APPROVED SITE**

As a result of a pre-tow inspection conducted by a 3<sup>rd</sup> party marine surveyor in June 2016, the vessel has been deemed safe for towing within the waters of Southern British-Columbia only. Therefore, the work must be conducted at an Approved Site within British-Columbia.

#### **3.2 STANDARDS, REGULATIONS AND CODES**

While not exhaustive, the following legislative, code and standards must be in effect for this project:

- a) Environment Act of British-Columbia;
- b) Fishing and Recreational Harbours Act and Regulations;
- c) Canadian Environmental Protection Act (CEPA 1999);
- d) Canadian Environmental Assessment Act (CEEA);
- e) Basel Convention on the Control of Trans boundary Movements of Hazardous Wastes and their Disposal Export and Import of Hazardous Waste and Hazardous Recyclable Material;
- f) Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations, CEPA 1999;
- g) Canadian Transportation of Dangerous Goods Act/Regulations;
- h) Canadian Fisheries Act;
- i) Occupational Health and Safety Act and Regulations of British-Columbia;
- j) Labour Standards Code of British-Columbia;
- k) CSA Canada Shipping Act 2001;
- l) Technical Guidelines for the Environmentally Sound Management of the Full and regulations Partial Dismantling of Ships – Basel Convention 2003 (UNEP) as amended;
- m) Provincial Government, Workers' Compensation Board Municipal Statutes and Authorities;
- n) Any other Local, Municipal, Provincial and Federal Code, Standard, Regulation, Guideline, By-law or Ordinance having jurisdiction;
- o) Canada Labour Code, Part II ; and
- p) Clean-Up Standard for Ocean Disposal of Vessel, Environment Canada, December 2007  
Clean-Up Guideline for Ocean Disposal of Vessel, Environment Canada, July 2001.

#### **3.3 VESSEL ACCESS**

The vessel is located to a PSPC facility. The contractor will need to meet the occupational health and safety (OHS) regulation for accessing the vessel. (i.e. Personal Protective equipment are required). Vessel dismantling (partial or entire) at this facility is prohibited. The contractor will be allowed only to remove the gangway and vessel cable for tow away purpose.

### **3.4 WASTE MATERIALS**

In preparation for the disposal of the MV Sun Sea a formal and comprehensive Inventory of Hazardous Materials has been carried out on board the vessel on January 29, 2016. All environmental samplings have been verified by a third party for completeness. The report for the vessel is included as an appendix to this SOW.

Waste materials that are present on the vessel and as part of the vessels intrinsic structure include but are not limited to:

- i) Hydrocarbons, fuel and oily water
- j) Garbage
- k) Black water and grey water
- l) Paints
- m) Firefighting Equipment
- n) Refrigerants/Ozone Depleting Substances
- o) Polychlorinated Biphenyls (PCBs) containing equipment and materials
- p) Other hazardous material (including asbestos, mercury and lead)

### **3.5 REGIONAL STAKEHOLDER ENGAGEMENT**

The Contractor, during the dismantling/deconstruction phase, must report periodically to local Jurisdictions, such harbor authority, municipalities, etc so that they are keep aware as to how the dismantling/deconstruction is proceeding.

### **3.6 PROJECT MANAGEMENT**

The Contractor must have the personnel to draw upon to complete the project and must be required to implement a project management system for the duration of the contract.

## **4. OTHER REQUIRMENTS**

### **4.1 OCCUPATIONAL HEALTH AND SAFETY REQUIREMENTS**

#### **4.1.1 General**

The Contractor must comply with the Occupational Health and Safety Laws and Regulation in force in the province of British-Columbia. Custody of the vessel direct from Canada to the Contractor will take place at the time of transfer of Care and Custody of the Vessel to the Contractor and from that point on, the Provincial Occupational Health and Safety Laws and Regulations will take precedence over the Canada Labour Code Part II. The Canada Shipping Act requirements still apply to hazardous activities on the Vessel.

A Canada representative may do periodic checks to see if the work site is in compliance with all health and safety requirements.

#### **4.1.2 Responsibility**

The Contractor must be responsible for health and safety of persons on each site, of property and for protection of persons and public circulating adjacent to work operations to extent that they may be affected by conduct of the Work.

The Contractor must enforce compliance by all workers, subcontractors and other persons granted access to each work site with safety requirements of Contract Documents, applicable Federal, Provincial, and local statutes, regulations, and ordinances, and with the site-specific Health and Safety Plan.

#### **4.1.3 Site Control and Access**

The Contractor must:

- a) Control the work site and entry points to inspection/work areas. Maintain a log of persons entering and exiting these areas.
- b) Delineate and isolate inspection/work areas from other areas of site by use of means acceptable to applicable standards, norms, and regulations.
- c) Post notices and signage at entry points and at other strategic locations identifying entrance onto site to be restricted to authorized persons only.
- d) Approve and grant access to the work site only to workers and authorized persons.
- e) Immediately stop unauthorized persons from circulating in inspection/work areas and remove them from the site.
- f) Provide site safety orientation to all persons before granting access. Advise of site conditions, hazards and mandatory safety rules to be observed on site.
- g) Secure work site at night time to extent required to protect against unauthorized entry. Provide security guard where protection cannot be achieved by other means.
- h) Ensure persons granted access to site wear appropriate personal protective equipment (PPE) suitable to work and site conditions.
- i) Provide such PPE to authorized persons who require access to perform inspections or other approved purposes.
- j) Ensure workers and other persons granted access are trained as per Section 7.8 as warranted.

#### **4.1.4 Hazard Assessments**

The Contractor must implement and carry out a Health and Safety Hazard Assessment program as part of the work.

The program is to include:

- a) The Contractor must conduct a site specific Health and Safety Hazard Assessment before commencing the project and during the course of work, identifying risks and hazards resulting from site conditions, weather conditions and work operations.
- b) The Contractor must perform ongoing assessments addressing new risks and hazards as work progresses.
- c) The Contractor must conduct hazard assessment when the scope of work has been changed and when potential hazard or weakness in current health and safety practices are identified by an inspector or by an authorized safety representative. Potential hazards must be identified and addressed in the project specific Health and Safety Plan.

#### **4.1.5 Health and Safety Meetings**

The Contractor must provide site safety orientation to all workers and other authorized persons prior to granting them access to the vessel. Specific occupational health and safety meetings are to be conducted by the Contractor in accordance with the Provincial Occupational Health and Safety requirements.

#### **4.1.6 Safety Supervision and Inspections**

The Contractor must designate one person to be present at the work site who is responsible for supervising health and safety of the Work. The person is to be certified and competent in Occupational Health and Safety as defined in the Provincial Occupational Health and Safety Act. The Contractor must assign responsibility, obligation and authority to such designated person to stop work as deemed necessary for reasons of health and safety. The Contractor must conduct regularly scheduled informal safety inspections of work site, note deficiencies and remedial action taken in a log book or diary and keep inspection reports at the site.

#### **4.1.7 Training**

The Contractor must ensure that all workers and other persons granted access to each site are competently trained and knowledgeable on:

- a) Safe use of tools and equipment.
- b) How to wear and use PPE.
- c) Safe work practices and procedures to be followed in carrying out work.
- d) Site conditions and minimum safety rules to be observed on site, as given at site orientation sessions.
- e) Workplace Hazardous Materials Identification System (WHMIS) training for the applicable hazardous materials.
- f) The Health and Safety Plan (HSP)
- g) Specific hazard procedures and controls, as warranted. Eg: Asbestos worker training, Lead awareness training, and Fall Protection training.

#### **4.1.8 Accident Reporting**

The Contractor must investigate and report the following incidents and accidents:

- a) Those as required by Provincial Occupational Safety and Health Act and Regulations.
- b) Injury requiring medical aid as defined in the Canadian Dictionary of Safety Terms-1987, published by the Canadian Society of Safety Engineers (C.S.S.E) as follows:
- b) Medical Aid Injury: any minor injury for which medical treatment was provided and the cost of which is covered by Workers' Compensation Board of the province in which the injury was incurred.
- c) Property damage in excess of \$5000.00.
- d) Those which require notification to Workers Compensation Board or other regulatory agencies as stipulated by applicable law or regulations.

The Contractor must send written reports to Canada for all above cases.

#### **4.1.9 Site Records**

The Contractor must maintain on each site a copy of all health and safety documentation and reports specified to be produced as part of the work and received from authorities having jurisdiction. The Contractor must upon request, make available to authorized safety representative, for review.

#### **4.1.10 Non-compliance**

The Contractor must immediately address and correct health and safety violations and non-compliance issues. Negligence or failure to follow occupational health and safety provisions specified in the Contract Documents and of those of applicable laws and regulations will result in corrective measures taken by the Crown against the Contractor.

#### **4.1.11 Hazardous Products**

The Contractor must comply with requirements of WHMIS. The Contractor must keep Materials Safety Data Sheets (MSDS) for all products used at the site.

#### **4.1.12 Confined Spaces**

The Contractor must:

- a) Carry out work in confined spaces in compliance with Provincial Occupational Safety and Health Regulations;
- b) Conduct hazard assessments for each confined space and address in Health and Safety Plan before entering confined space.
  - At minimum, a written confined space entry procedure, rescue procedure and air monitoring procedure for each confined space is required, as well as any other provincial regulatory requirements.
  - The written plans should consider, but not be limited to, the following elements:
    - Entry permit system
    - Isolation of energy
    - Atmospheric testing
    - Ventilation and purging
    - Hot work (e.g. welding, cutting, grinding, use of non-explosion proof electrical equipment, or any other work that could produce a source of ignition)
    - Rescue
    - Means of entering and exiting
- c) Provide and maintain equipment and PPE as required for the safety and emergency evacuation of persons entering confined spaces.
- d) Provide training to persons who will be entering the confined space, attendant personnel and rescue personnel. Training to be specialized instructions beyond (basic confined space entry information) as required to suit type and conditions of confined space and must meet applicable regulatory requirements.
- e) Where workers of more than one employer will perform work in the same confined space, prepare a co-ordination document and provide to each employer.

Any entry into confined spaces onboard the vessel during the contract period must be conducted in accordance with the Provincial Occupational Safety and Health Regulations and Canada Shipping Act 2001. Where work is done in areas such as bilge, tanks or space with no mechanical ventilation, there must be a Gas Free Certificate issued by a Marine Chemist or a person who is qualified and certified to

operate the testing equipment. The Gas Free Certificate must be posted at the entrance of the compartment and must specify, "safe for persons" or "safe for hot work" as appropriate.

#### **4.1.13 Diving Operations**

Where required, the Contractor must:

- a) conduct all diving work to comply fully with the requirements of the Provincial Diving Regulations and CSA Z275.2-04, "Occupational Safety Code for Diving Operations", CSA Z275.4-02, "Competency Standards for Diving Operations" and CSA Z180.1-00, "Compressed Breathing Air and Systems." The Contractor must comply with Divisions I and II for Type 2 Dives as defined in Part XVIII of the Canada Labour Code for Diving Operations.
- b) ensure dive personnel meet the minimum competency requirements of the CSA Z275.4-02 and all divers possess a valid Category 1 Diving Certificate.
- c) ensure dive personnel have a current (less than one year) validated medical examination certificate(s) from a licensed Diving Physician in in Canada (Prov. Equal) who is knowledgeable and competent in diving and hyperbolic medicine, for all dives.

#### **4.1.14 Hot work**

The Contractor must provide fire extinguishers (any other related equipment) and fire watches during any hot work and for a minimum of 30 minutes after work has stopped. Any hot work carried out onboard the vessel during the contract must be conducted in accordance with the Canada Shipping Act 2001, and applicable Provincial Acts and Regulations. Both the front (welder side) and back side of a deck or a bulkhead being cut or welded must be visually monitored continuously by the fire watches. All combustible materials must be removed from the area where the burning and welding is taking place.

### **4.2 HAZARDOUS MATERIALS AND MISCELLANEOUS ITEMS**

#### **4.2.1 General**

Under this item, hazardous material means all materials as identified in the Hazardous Material Assessment (HMA) reports provided with the SOW, materials identified by subsequent sampling reports completed by the Contractor, all Controlled waste and/or otherwise regulated material or substances for which exposure will, or may, result in a health hazard. The HMA and any available reports are included in the Appendices of this statement of work.

The use of subcontractors for any part of the process of working with or managing Hazardous Materials does not relieve the Contractor of its responsibilities. In all matters covered by this statement of work, the Contractor must ensure, and maintain records to document, the safe and environmentally sound management of Hazardous wastes by subcontractors.

All hazardous materials must be removed from the vessel by the Contractor in accordance with applicable regulations. The hazardous materials must be containerized and transported to a facility certified by the authority having jurisdiction to dispose of these materials.

The HMA and subsequent sampling reports show the location of these products on board the vessel. Quantities and volumes of hazardous materials contained in consultant sampling reports and referenced in this document are approximate only.

The HMA is the best information available to Canada on the hazardous materials within the vessel at the time of sampling. Although the environmental information is not final, and is only meant to aid Bidders in the bid process, the types and quantities of most hazardous materials on board are not expected to change significantly. The Contractor must survey the vessel to identify actual quantities of hazardous materials any other hazardous material present on the vessel and must dispose of this material in accordance with federal and provincial regulations.

#### **4.2.2 Paint**

Paint on board may contain contaminants such as lead, mercury, arsenic, PCBs, and cadmium. All loose and flaky paint must be scraped off, vacuumed and disposed in accordance with applicable regulations. Paints exceeding Provincial leachate criteria must be handled as a hazardous material and in accordance with all regulations.

Painted surfaces containing concentrations of PCBs >50 mg/kg must be removed and handled and disposed as a Hazardous waste containing PCBs in accordance with Federal and Provincial regulations.

PCBs (greater than 0.05 mg/kg) contained in paint on metals for recycling at a foundry must be removed and handled accordingly. Lead (leachability greater than 5.0 mg/L) contained in paints on materials that will be disposed of at a landfill must be removed and disposed of in accordance with Provincial requirements. All hazardous materials must be handled, packaged and disposed of in accordance with applicable Provincial/Federal regulations.

#### **4.2.3 Asbestos Containing Material (ACM):**

The HMA report indicates that asbestos may be present throughout the vessel. The report, as well as subsequent sampling information, is provided and is to be used as by the Contractor as a reference only. The Contractor must remove and dispose of all asbestos in accordance with applicable Provincial/Federal regulations. As asbestos may be present on the vessels, it is the Contractor's responsibility to determine the quantity and type of asbestos containing material onboard and dispose of this material in accordance with all applicable regulations.

#### **4.2.3 Liquid or Semi-Solid Waste**

Liquid or semi-solid waste such as paste and grease containers are found at numerous locations on the vessels as per the HMA report included as an Appendix to this Statement of Work. The Contractor must dispose of all liquid or semi-solid waste containers found in the vessel in accordance with the applicable regulations.

#### **4.2.4 Liquid Uncontrolled Mercury**

The drencher room contains a quantity of uncontrolled liquid mercury below and in behind a gauge panel located in this area. The mercury poses a risk to personnel who may spend extended period of time in this enclosed space, and as such the space has been locked and identified as containing a hazard.



Contractors are to allot resources to deal with this hazardous material prior to or during the destruction of the vessel.

#### **4.2.5 Miscellaneous Items**

The vessel contains numerous miscellaneous items of all types that were identified under the HMA report. The Contractor must remove and dispose of these items in accordance with the applicable regulations.

The Contractor must make reference to the HMA report for the identification and location of noted debris. The HMA reports are only presented as reference and it is the Contractor's responsibility to determine the quantity and types of material left on board and to dispose of these items in accordance with all applicable regulations.

#### **4.2.6 Tracking of Hazardous and other Waste**

The Contractor must maintain a database that tracks all Hazardous and other Waste from the point of transfer to Contractor Care and Custody to final disposal. In the database, for each item identified in the EA (or subsequently identified), the Contractor must:

- a) Identify the type of Waste;
- b) Identify the removal process;
- c) Identify the weight of Waste removed from the vessel;
- d) Identify the secure process for transporting the Waste from the vessel to the next location;
- e) Identify the location where the Waste is to be stored awaiting final disposal;
- f) Identify the method of secure transport used to transport the Waste to a facility certified to dispose of the Waste;
- g) Provide shipping manifest, bill of lading or tracking number for transport of Waste to the certified facility;
- h) Identify the facility disposing of the Waste and provide their certification number to dispose of the Waste identified;
- i) Provide shipping manifest, bill of lading or tracking number confirming delivery and acceptance of the Waste by the certified disposal facility;
- j) Track the delta of Waste removed from the vessel with Waste accepted at certified disposal facility. The Contractor must ensure that all Waste by weight removed from the vessel matches the Waste by weight accepted at appropriate certified disposal facility at the completion of the Work.

The Contractor must submit to the Crown within 5 days after issuance, all copies of manifests and Transportation of Dangerous Goods sheets, showing the type/description of materials removed from the vessel for disposal. The certificate must indicate the quantity removed, any testing conducted, and the location of disposal. All Waste must be accounted for in a database by the Contractor until the vessel has been properly disposed in accordance with the Statement of Work.

### **5. CROWN SUPPORT**

As required to perform the Work and at the discretion of the Project Authority, CBSA will endeavour to provide Contractor personnel with:

- a) Relevant internal documentation; see Appendix A for the Environmental Assessment, hull survey, etc.; and
- b) Access to CBSA personnel to support delivery of work.

## **6. REQUIRED PLANS**

As part of the work required, the Contractor must provide the following plans for review and approval by the Technical Authority. Deliverable dates are indicated in section 8 of this Statement of Work.

### **6.1 WORK PLAN**

This plan shall describe the Contractor's approach and methodology with respect to the proposed work. This plan shall, at a minimum, indicate:

- a. Location/details of Approved Site
- b. The process to move the vessel from the present location to the Approved Site. Vessel survey for towing or lift vessel/towed floating dock operation, stability considerations, towing arrangement, towing limitations, contingency plan in case of breakage of the towline, co-ordination with regulatory agencies and spill emergency response.)
- c. Details of air quality monitoring and describe the administrative controls to be used in support of the data collected. The Contractor shall provide a written procedure identifying how adequate air quality will be provided onboard the vessel and how the records will be maintained.
- d. Outline step-by-step proposed methodology for disposing of the vessel, including specific equipment needed. The description shall detail how the vessel structure will be dismantled. The description shall also indicate steps to dispose/recycle parts and materials, etc. Finally, the methodology must reference how vessel stability will be maintained and monitored during cleaning and disposal activities.

### **6.2 TOW PLAN- DEAD VESSEL TRANSFER**

The Contractor must submit to the Crown for review a Tow Plan that details the process to move the vessel from the present location to the Contractor's Approved Site. At minimum the Tow Plan must address:

- a) Schedule and route including safe harbour;
- b) Surveys required for safe-to-tow certification/Vessel survey for towing;
- c) Vessel condition report;
- d) Towing arrangement;

Additionally the Contractor must follow the Transport Canada Marine Safety, Ship safety bulletin:

No: 06/2015- Safety of Dead Ship Towing operations

No: 13/1988 -Safety of towed ships and other floating objects

The Contractor shall obtain and pay all fees for certificates, surveyors, and pilotage authorities, deemed

necessary by the applicable regulations and any insurance for any required towing operation. The Contractor shall provide to Canada, prior to moving the vessel, a voyage certificate for the intended destination from an approved surveyor stating that the vessel is safe to transport in accordance with the chosen method of transport.

### **6.3 ENVIRONMENTAL PROTECTION PLAN:**

The Contractor must have in place an environmental management system consistent with the procedures required for the Environmental Management System ISO 14001-latest edition – Requirements published by the International Organization for Standardization (ISO). It is not the intent of this clause to require that the Contractor be registered to the applicable standard; however, the Contractor's environmental management system must address each requirement contained in the standard.

The Contractor shall develop an Environmental Protection Plan (EPP) that demonstrates the Contractor's commitment to avoidance of adverse environmental impacts through implementation of best practices rooted in pollution prevention and the promotion of sound environmental practices for the project to be undertaken. This plan shall include identification and description of the Approved Site or sites where the work will be completed and must address all of the following for each site, at minimum:

- a) Indicate the method of vessel cleaning, transportation from the work site to the disposal site, and the method of packaging and bundling.
- b) Environmental Contingency Plan – this plan shall indicate the process of how contaminants are to be contained and how to deal with situations involving petroleum product leaks in water or on the ground, ozone depleting substance leaks, or fire on the vessel or explosion. Tools and materials to be used and available on board or on the site of work for the duration of the contract shall be identified.
- c) Provide details on the process for cleaning, removal, and disposal of hazardous materials, hydrocarbon impacted areas and miscellaneous items including, but not limited to: controlled wastes, tanks, piping, engines, shafting, gearing, stern tubes, steering gear, hydraulics, bilge, areas, black and grey water, asbestos, polychlorinated biphenyls (PCBs), paint, and other hazardous materials. Also briefly include the engineering controls and personal protective equipment to be used to minimize worker exposure to hazardous materials.

The Contractor shall provide all personnel, insurance, equipment, tools, vehicles, materials, facilities, supervision and any other items and services necessary to clean, dismantle, recycle, and dispose of the vessel and any and all Hazardous wastes.

### **6.4 HEALTH AND SAFETY PLAN**

The Contractor must develop a written, site-specific Project Health and Safety Plan (HSP) for the Approved Site or Sites where work is to take place, based on their site specific Health and Safety Hazard Assessment Program, prior to commencement of work.

The Contractor must provide key personnel in their management organization to deal with Health and Safety related issues. The names and addresses and a 24/7 telephone number of the responsible team must be provided to the Crown. The Health and Safety Response Team (HSRT) must be instructed on how to initiate first action in the case where petroleum or hazardous discharge occurs or in which any other situation, incident or accident should occur. The Contractor must provide a revised list of names in the event of personnel changes in the HSRT.

The Contractor is responsible for the health and safety of all workers, subcontractors and other persons granted access to the work site and must provide a project specific Health and Safety Plan to the Crown in accordance with the statement of work.

The HSP must give detailed procedures on all potential project hazards including but not limited to:

- a) Work in Confined and Enclosed Space.
- b) Diving Operations.
- c) Working in close proximity to water.
- d) Scaffolds, Ladders and other aloft working surfaces.
- e) Cutting, welding and heating.
- f) Personnel Protective Equipment (PPE).
- g) Fall Protection.
- h) Gear and Equipment for rigging and handling material.
- i) Air quality measurement and log keeping.
- j) Escape route from work area and location of First Aid Station.
- k) Lead exposure control plan
- l) PCB exposure control plan.
- m) Mold exposure control plan.
- n) Mercury and heavy metals exposure control plan, and
- o) Asbestos exposure control plan.

The exposure control plans referenced in k), l), m), n) and o) should at a minimum consider the following:

- a) Clear delineation of responsibilities
- b) Clearly defined hazard, its location and /or the activities which may contribute to exposure
- c) Control methods to be used, considering all methods (engineering controls, administrative controls, personal protective equipment)
- d) Acceptable work practices, hygiene practices and housekeeping measures
- e) Training
- f) Medical surveillance (where applicable)

The HSP must contain four (4) parts with following information:

Part 1 – Hazards:

List of individual health risks and safety hazards identified by hazard assessment process.

Part 2 - Safety Measures:

Engineering controls, personal protective equipment and safe work practices used to mitigate hazards and risks listed in Part 1 of Plan.

Part 3 - Emergency Response:

Detail standard operating procedures, evacuation procedures and emergency procedures in the occurrence of an accident, incident or emergency. Include response to all hazards listed in Part 1 of Plan. Evacuation measures to complement the Facility's existing Emergency Response and Evacuation Plan should one exist.

List names and telephone numbers of officials to contact including:

- Contractor and all Subcontractors.
- Federal and Provincial Departments as stipulated by laws and regulations of authorities having jurisdiction and local emergency resource organizations, as

- needed based on nature of emergency.
- Officials from Canada as provided.

#### Part 4 – HSP Site Communications

Procedures used on site to share work related safety issues between workers, subcontractors, and General Contractor.

The Contractor must prepare the HSP in a three column format, addressing the three parts specified above, as follows:

Column 1	Column 2	Column 3
Part 1	Part 2	Part 3a/3b
Identified Hazard	Control Measures	Emergency Measures & Implemented Communications

The Contractor must develop the HSP in collaboration with subcontractors. The HSP must address work activities of all trades.

The Contractor must revise and update the HSP as required.

The Contractor must implement and enforce compliance with requirements of the HSP for entire duration of work to completion.

As work progresses, the Contractor must review and update the HSP to address additional health risks and safety hazards identified by ongoing hazard assessments.

The Contractor must post copy of the HSP and all updates at the site.

#### Note:

Submission of the HSP and any subsequent updates to Canada is for review and information purposes only. Canada's receipt and review, including any comments made on the HSP must not be construed to imply approval in part, or in whole, of the HSP by Canada and must not be interpreted as a warranty of the HSP being complete and accurate, or as a confirmation that all health and safety requirements of the work has been addressed or that the HSP is legislatively compliant. Furthermore, Canada's review of the HSP must not relieve the Contractor of any of his/her legal obligations for Occupational Health and Safety provisions specified as part of the Work and those required by provincial legislation or those which would otherwise be applicable to the site of the work.

#### 6.4.1 Inorganic lead exposure control plan

The Contractor must:

- Conduct a risk assessment of the worksite and activities. The assessment must be conducted by a person qualified in inorganic lead removal activities,
- Implement a lead exposure control plan in accordance with Provincial Occupational Safety and Health Regulations for workers that are exposed to lead.
- The plan should account for a means to wash / decontaminate skin and work clothes prior to leaving the work site.

#### **6.4.2 Polychlorinated biphenyl (~~pcb~~ PCB) exposure control plan**

The Contractor must:

- a) Conduct a risk assessment of the worksite and activities. The assessment must be conducted by a person qualified in PCB removal activities,
- b) Implement a PCB exposure control plan in accordance with Provincial Occupational Safety and Health Regulations for workers that are exposed to PCBs.

#### **6.4.3 Indoor air quality and mold exposure control plan**

The Contractor must:

- a) Conduct a risk assessment of the worksite and activities. The assessment must be conducted by a person qualified in indoor air quality and mold removal activities,
- b) Implement an indoor air quality and a mold exposure control plan in accordance with Provincial Occupational Safety and Health Regulations for workers that are exposed to poor air quality and/or mold;

#### **6.4.5 Mercury and heavy metals exposure control plan**

The Contractor must:

- a) Conduct a risk assessment of the worksite and activities. The assessment must be conducted by a person qualified in mercury / heavy metals removal activities,
- b) Implement a mercury and heavy metals exposure control plan in accordance with Provincial Occupational Safety and Health Regulations for workers that may be exposed to mercury or heavy metals;

#### **6.4.6 Asbestos exposure control plan**

The Contractor must:

- a) Conduct a risk assessment of the worksite and activities. The assessment must be conducted by a person qualified in asbestos abatement activities,
- b) Implement an asbestos exposure control plan in accordance with Provincial Occupational Safety and Health Regulations for workers that may be exposed to asbestos.

### **7. CONDUCT OF WORK**

#### **7.1 SHIPBREAKING**

##### **7.1.1 General**

The Contractor will assume all expenses in relation to the work described in this statement of work and will be responsible for any item's cost of cleaning and removing as defined in this statement of work.

Canada shall supply any available technical documents and drawings related to the vessel.

The Contractor will be required to be the Recyclable Owner and Waste Owner. The ownership of all Recyclable Materials and Waste will be passed directly from CBSA to the Contractor upon awarding of the contract

The vessel shall not be sold to a broker and shall be disposed/recycled in accordance with the intent of this statement of work.

### **7.1.2 Salvage / Recycling**

All Hazardous material, Waste, debris and hydrocarbon-based fluid must be removed from the vessel and disposed of in accordance with provincial and federal regulations. All structural components above the main deck, from the main deck to the keel and all equipment, machinery and other components installed on or contained in the structure must be cleaned, removed, recycled, reused and / or disposed of in accordance with applicable regulations.

Canada assumes no responsibility for the quality or quantity of any material to be removed under this project. Any assumptions made regarding the salvage value of any and all materials under this contract are by the Contractor only. All estimates of quality and quantity of salvaged materials are to be made by the Contractor. No consideration for payment will be made to the Contractor as a result of the Contractor receiving less than assumed salvage value of any materials. The Contractor is free to take its own samples of material onboard the vessel during the arranged site visit for the purpose of determining the quality and quantity of Waste onboard.

The vessel must not be sold to a broker and must be disposed/recycled in accordance with the intent of this statement of work.

The Contractor must consult with the Provincial Department of Environment and Conservation on whether proposed salvage activities require registration under the Provincial Environmental Assessment Regulations. Should the project require registration and an environmental assessment, the Contractor must include the appropriate timeline for project release from the Province in the schedule prior to start of the work.

### **7.1.3 Detail records**

The Contractor must keep and maintain detailed records of quantities of, and revenues received from the sale of scrap metals and other materials and provide them to the Technical Authority.

## **7.2 SPECIFICATION OF WORK**

### **7.2.1 Personnel**

The Contractor must provide all personnel, insurance, equipment, tools, vehicles, materials, facilities, supervision and any other items and services necessary to clean, dismantle, recycle, and dispose of the vessel and any and all Hazardous wastes.

### **7.2.2 Trim and Stability**

The Contractor will be solely responsible to ensure the stability of the vessel at all times during the work. The Contractor must have on staff or subcontract the service of a Naval Architect; registered to practice, as a Professional Engineer, to verify and confirm the vessel stability during the Ship Breaking operation should this work be done while the vessel is afloat. The Naval Architect must approve significant changes to the Management Plan, such as an unscheduled movement or removal of weights from the vessel.

### **7.2.3 Hazardous Wastes**

The Contractor must provide all WHMIS MSDS for any material furnished by the Contractor during the course of the work of the contract. The Contractor must submit to Canada within 5 days after issuance, all copies of manifests and Transportation of Dangerous Goods sheets, showing the type/description of materials removed from the vessel for disposal. The certificate must indicate the quantity removed, any testing conducted, and the location of disposal. All Waste must be accounted for in a database by the Contractor until the vessel has been properly disposed in accordance with the Statement of Work.

### **7.2.4 Ownership**

Any equipment removed from the vessel must become the property of the Contractor except as specifically identified prior to contract award.

The Contractor must pay for all federal, provincial and municipal taxes and dumping fees (tipping fees) at the municipal / regional landfill, PCB disposal facility and controlled waste handling and disposal facilities during the course of this project.

### **7.2.5 Regulatory**

In addition to various provincial and federal regulations regarding hazardous materials, the Contractor must comply with all directives and requirements issued by the provincial departments regarding the removal, transport, placement and disposal of hazardous materials for various locations, including:

- The disposal of hazardous materials in appropriate waste containers.
- The transport of hazardous materials to an Approved Site.
- Any and all requirements, which may exist regarding notifications of the presence of hazardous materials.
- The asbestos work must be done by a registered asbestos abatement contractor.
- Disposal of PCBs must be via incineration conducted by a registered PCB disposal contractor.
- The requirements for training of Contractor's personnel conducting the hazardous materials abatement work.

### **7.2.6 Salvage/Recycle**

The Contractor must remove all liquid from bilges, tanks and receivers and dispose of this material according to all appropriate regulations for the jurisdiction under which the Contractor operates. Hazardous materials identified in the statement of work must be removed and dispose of this material according to all appropriate regulations for the jurisdiction under which the Contractor operates. The remaining asset must be cleaned and dismantled, recycled or disposed of in accordance with the requirements of the Statement of Work. The disposition of the ballast in the tanks will be provided to the Contractor at the time of the site visit. It is the responsibility of the Contractor to dispose of all liquid Waste removed from the vessel.



It is the Contractor's sole responsibility for determining the value of all salvageable portions of the vessel, including but not limited to: steel, main engine, generator, pumps, valves, pipes, hatches, portholes, furniture, winches, ropes, chains, anchors, cable wiring, etc.

#### **7.2.7 Technical**

The Contractor must include in the scope of work, all considerations for the impact on the overall vessel stability due to the removal of engines, equipment or structural steel sections from the vessel. Therefore, and because of the nature of this work, the Contractor must identify in the Management Plan in Section 6, the sequence in which the dismantling work will occur. The Contractor must indicate in the Master Work Schedule the Dismantling Timeline of the vessel structure to indicate the sequence in which major vessel structure and equipment are being removed until completion of this item.

#### **7.2.8 Berthing, Mooring, and Docking**

The Contractor is responsible for maintaining all material and labour required for handling, berthing, mooring and dry-docking (if applicable) for the vessel.

The Contractor must berth and moor the vessel for the duration of the contract period. Canada and the Inspection Authority must have unrestricted access to the vessel at all times under the supervision of the Contractor for Health and Safety reasons.

The location of the vessel for the duration of the contract must be at an Approved Site for the type of work intended and must be in accordance with federal, provincial and/or municipal requirements.

The Contractor shall supply all mooring lines and labour required in berthing, mooring, and casting off for the vessel.

#### **7.2.9 Services**

The Contractor must supply and erect two gangways complete with safety nets for the vessel in compliance with the Canada Labour Code while the vessel is on the blocks or alongside the Contractor's place of work. There must be two separate and independent means of accessing the vessel at all times. The gangways must be lighted during the work period after daylight. The Contractor must be responsible for the safety of the gangways.

The Contractor must provide fire protection in accordance with applicable Acts and Regulations for the duration of the contract while workers are on board the vessel.

#### **7.2.10 Bilge and Compartment Cleaning**

The bilge area is defined as the interior skin in all compartments under the deck plate, which may have been subject to contact with hydrocarbon based fluid. The Contractor must remove all bilge oily wastewater from the vessel and dispose of it in accordance with the applicable laws and regulations.

The Contractor must be responsible for the removal and disposal of oily water from bilge area within the vessel.

### **7.2.11 Ballast tanks and void Spaces**

Ballast tanks, void spaces and pipe tunnels were not designed to carry or contain any hydrocarbon based fluid but these spaces are required to be emptied of their contents.

The tanks may contain liquid, therefore the Contractor must follow all confined space safety requirements and exercise caution while emptying the remaining liquid ashore and assure that it meets applicable disposal regulations.

Please note that some of the ballast tanks have been used for sewage tanks during the vessel transit to Canada. Contractor are to consider these tanks as sewage tanks accordingly.

If any of the tanks are found to contain hydrocarbon based fluid then these tanks must be dealt with in accordance with applicable disposal regulations.

### **7.2.12 Diesel Oil Tanks and Oil Tanks**

The vessel is fitted with diesel oil and oil tanks. Fluid remaining in all tanks must be removed ashore and disposed of in accordance with applicable disposal regulations.

The Contractor must open all the tanks and remove the remaining diesel oil, oil or wastewater. Different fluid types must not be mixed to reduce disposal cost.

The Contractor must remove and dispose all oil contained elsewhere on the vessel including within engines, gearboxes, piping, equipment, controllable pitch systems, vessel main shafting, and any and all storage containers.

### **7.2.13 Black and Grey water Systems and tanks**

The Contractor must pump out the black and grey water systems and dispose of the fluid ashore in accordance with applicable disposal regulations.

The Contractor must open all the tanks and remove the remaining black and grey water from the vessel black and grey water system and associated tanks.

## **7.3 PROJECT SCHEDULE**

The project must have a Master Work schedule which is the schedule for the entire project. The Master Work schedule will include all tasks required for vessel disposal including; schedule milestones, deliverables, all subcontract work and activities, preparation for transporting the vessel, transporting the vessel, initial surveys, inspections, identification and safe removal and disposal of hazardous materials, dismantling and salvage.

The schedule shall be in tabular format with a Gantt chart and shall include:

- a) Original duration in calendar days. (baseline)
- b) Remaining duration.
- c) Percentage completed.
- d) Original and revised start and finish date for each task in relation to all work identified under this statement of work.

The schedule shall be updated to reflect the work progression every month until the completion of all tasks.

## 8. DELIVERABLES

The Contractor must produce the following deliverables:

No. SOW	Deliverable	Format	Due Date
6.1	Work Plan	Electronic format or hard copies	No more than 30 calendar days after contract award.
6.2	Towing Plan	Electronic format or hard copies	No more than 30 calendar days after contract award.
6.3	Environmental Protection Plan	Electronic format or Hard Copies	No more than 30 calendar days after contract award.
6.4	Health and Safety Plan	Electronic format or Hard Copies	No more than 30 calendar days after contract award.
7.3	Project Schedule	Gantt Chart , Electronic format	No more than 30 calendar days after contract award.
4.2.6	Tracking of hazardous and other waste	Electronic format or hard copies	Ongoing - within 5 days of action
4.1.12, 6.2, 7.2.3 and 10	Certificates	Electronic format or hard copies	Upon completion
7.1.3	Detail record	Electronic format or hard copies	Upon completion

## 9. PERIOD OF WORK / SCHEDULE

The Contractor must prepare and transfer the vessel to the Contractor's deconstruction site within 30 days of receiving the approval on the Work plan, Towing plan, Environmental protection plan and the Health and Safety Plan being approved.

Deconstruction and disposal of all materials within 240 days of the contract being awarded

## 10. PROJECT COMPLETION

The work will be considered complete when the following has occurred:

- a) All hazardous and/or controlled material is removed and has arrived at an approved Hazardous waste disposal facility for final disposal. Shipping certification and receipt of arrival must be

- accounted for. Final individual weights for all hazardous materials must be itemized. Disposal certification must be provided for hazardous material.
- b) The vessel hull and structure has been broken up into sections with all internal equipment witnessed, including all onboard stores, as witnessed by representative of Canada.
  - c) Completion of the Vessel Disposal Certificate.

The project must be completed no later than 240 calendar days of the contract being awarded.

## **APPENDIX A: REFERENCE DOCUMENTS**

The following reference documents are available by request of the Contracting Authority:

3GA M.V. "Sun Sea" Inventory of Hazardous Materials Report;

M/V "Sun Sea" Pre-Tow Inspection

## Appendix "B" - ACRONYMS AND DEFINITION

### 1. Acronyms

a)	ACM	Asbestos Containing Materials
b)	HSP	Health and Safety Plan
c)	HSRT	Health and Safety Response Team
d)	IA	Inspection Authority
e)	MSDS	Materials Safety Data Sheet
f)	OH&S	Occupational Health and Safety
g)	PCB	Polychlorinated Biphenyls
h)	PSPC	Public Services and Procurement Canada
i)	WHMIS	Workplace Hazardous Materials Identification System
j)	CBSA	Canada Border Services Agency

### 2. Definitions

**"Approved Site"** is any site or facility where the processes occur for cutting up the vessel, handling and disposal of the Hazardous waste and where the recycled materials are recycled. It includes a shipyard, dock, dry-dock or other facility where a vessel is stripped and disassembled, and facilities or sites for the disposal of Hazardous wastes or other wastes which are authorized or permitted to operate for this purpose by a relevant authority of the province where the site or facility is located.

**"Contractor"** is the legal entity that will contract with Canada to undertake the work.

**"Controlled waste"** is as defined by the laws of the jurisdiction of the waste generator, handling facilities and disposal facilities. Controlled wastes are those wastes to which regulations of the jurisdiction having authority apply. This includes the Canadian federal government, the provincial governments in which the Approved Site reside, the local governments in which the Approved Site reside, as well as international conventions that have been adopted by the Government of Canada. Controlled wastes include Hazardous wastes, non-hazardous, regulated wastes (such as asbestos-containing materials), Recyclable materials and non-hazardous, unregulated wastes.

**"Destruction"** is an action that renders an item unusable for its intended or strategic purpose and that is irreversible.

**"Hazardous waste"** is defined by the regulations of the government having jurisdiction at the Approved Site as defined above.

**"Hazardous material"** is any material that may pose a hazard to workers during the work.

**"Recyclable material"** is any material that is intended for reuse or recovery for reuse, and includes scrap and waste materials other than accountable material, derived from the Contract.

**“Recyclable Owner”** of all Recyclable material is the Contractor, unless the Recyclable material is considered to be Museum material.

**“Ship Breaking”** is defined as the process of systematically scrapping the entire infrastructure of an obsolete vessel by dismantling and disposing or recycling of all its component parts and hazardous materials.

**“Waste”** means any material that requires disposal but is not a Hazardous waste as defined by the jurisdiction at the location of the Approved Site.

**“Waste Owner”** The Contractor is the Waste Owner after ownership of the waste is passed to the Contractor direct from CBSA to the Contractor upon Contract Award.