



**CJA Marine Services Pte Ltd**

20 Prince Edward Road,  
#03-09, Finger Pier Building,  
Singapore 079213

Tel: (65) 62811986 / 7

Fax : (65) 62811966

E-Mail: [cjamarine@pacific.net.sg](mailto:cjamarine@pacific.net.sg)

Web site : [www.cjamarine.com](http://www.cjamarine.com)

---

## **GUIDELINES FOR BUNKER SURVEYORS**

### **1.0 PRELIMINARY STEPS**

Every bunker surveyor must obtain the following items or information:

- Name of vessel;
- ETA of vessel;
- Location of vessel;
- Date and Quantity required for bunkering;
- Bunker supplier's contact number;
- Local agent/client's contact number and the person in-charge;
- Respective Forms and necessary documents required for bunkering;
- Sample bottles and seals; and
- Water and oil paste.

### **2.0 PROCEDURES PRIOR TO BUNKERING**

- 2.01 All surveyors must be properly attired with overalls, safety boots, helmets and gloves.
- 2.02 Surveyors are expected to attend to the vessel at least ONE hour before the bunker barge is alongside and observe the ship's draft physically as well as to counter check by using gauges on the vessel, if any.
- 2.03 The surveyor should introduce himself to the Chief Engineer or the responsible Officer in-charge and explain the survey procedures.

- 2.04 The sounding tape, including the bob must be inspected without any discrepancies noted.
- 2.05 The opening sounding of the nominated and non-nominated tanks, which includes Settling Tanks, Overflow Tanks, Service Tanks and any tank space related to the bunker's receiving system should be sounded in the presence of the Chief Engineer or responsible Officer In-charge.
- 2.06 At least two measurements of sounding should be taken. If the readings differ, a subsequent sounding should be taken in order to obtain the average.
- 2.07 Water paste must be used to detect free water in both the nominated and non-nominated tanks.
- 2.08 To determine the nominated tanks's temperature, the thermometer must be immersed at mid-level of the sounded height of the tank. The immersion must be for at least five minutes in order to obtain a stable temperature reading. The temperature reading should be noted in the presence of the Chief Engineer or the responsible Officer In-charge.
- 2.09 The volume of the pipeline leading to the forward receiving tank (if any), should be calculated as this volume contributes to the quantity difference.
- 2.10 The ROB quantity of fuel should be calculated based on the advise of the Chief Engineer or the responsible Officer In-charge with regards to the density of the respective fuels.
- 2.11 Upon arrival of the bunker barge, the draft of the barge should be noted physically.
- 2.12 All cargo tanks, including the barge bunker tanks and the Ballast tanks should be inspected in the presence of the Chief Engineer and the Bunker Barge Officer.
- 2.13 To calculate the quantity of the fuel in the cargo tanks of the bunker barge, the same procedure for the calculation of the ROB of the vessel should be followed.

### **3.0 PROCEDURES DURING BUNKERING**

- 3.01 The surveyor should take note of the time in which the hose was connected and the pumping rate of which was agreed by the parties concerned.
- 3.02 All safety measures in accordance with the latest Singapore Bunkering Procedures should be followed prior to, during and after bunkering.

- 3.03 Samples should be taken from the vessel manifold by composite continuous drips and witnessed by the vessel's representatives.
- 3.04 During the bunkering operations, the surveyor should be vigilant and keep a close watch of the sampling point to prevent anyone from tampering with the samples. In addition, he must ensure that communication between the vessel and the bunker tanker should be maintained during the entire bunkering operation.

#### **4.0 AFTER BUNKERING**

- 4.01 After delivery is completed, the bunkers contained in the cargo hoses should be air-blown to the vessel's tank. In the case where the vessel's tank is too high, which makes air-blowing ineffective, the contents in the hoses should be drained back into the bunker tanker before gauging is taken.
- 4.02 Samples should be taken, sealed and witnessed by the respective parties. The sample witness forms must be signed and the respective samples should be distributed to the signatories concerned.
- 4.03 The closing sounding of the barge should be done first and the surveyor has to ensure that calibration tables used must be the same as used for the opening soundings.
- 4.04 The steps taken for calculating the quantity remaining on the bunker barge cargo tankers is the same as those of the opening sounding. In addition, the surveyor has to check all other tanks (e.g. Ballast tanks, Bunker tanks of the bunker barge) to ensure that no migration or increase of fuel has taken place.
- 4.05 The vessel's closing sounding should be taken in accordance with the same procedures as that for the opening sounding of the vessel.
- 4.06 The quantity of bunker received should be calculated based on the pro rata density between the barge bunker's density and the vessel's ROB bunker's density.
- 4.06 The surveyor should ensure that all forms must be signed by the Chief Engineer and the bunker barge's representatives. A copy of the Bunker Delivery Receipt (BDR) must be retained by the surveyor. A one-litre bottle of the respective oil bunkered should be retained.

## **5.0 HANDLING DISPUTES**

- 5.01 Should there be a dispute, the surveyor should immediately inform his principal concerned and the following procedures should be observed: -
- 5.02 The surveyor is instructed to re-do the entire procedure upon completion of bunkering and to counter check the calculations done pre and post bunkering.
- 5.03 In addition, surveyors should scrutinise the Stock Movement Report to ensure that the quantity of all the cargo tanks in the barge tallied with the quantity calculated prior to bunkering of the Bunker barge; and, if possible, obtain a copy of the report.
- 5.04 If the dispute has not yet been resolved, a statement of fact should be written by the surveyor and he should obtain a copy of the letters of protest (in accordance with the latest bunkering procedures) by the vessel and the bunker barge respectively as well as ensuring that all relevant documents have been duly signed by all parties concerned.

C Rajesh  
CJA Marine Services Pte Ltd

*Note:-The above is prepared as a guideline and CJA Marine Services Pte Ltd shall have no liability for errors or omissions or for any damage resulting from this.*