

## **Merchant Shipping Notice No. 9 of 2010**

**No.: 69-NT (1)/2008**

**Date: 27<sup>th</sup> August, 2010**

**Subject: Safe loading, stowage, carriage and discharging of iron ore fines on ships from Indian Ports in fair and foul season - reg.**

**For the attention of – Ship owner, Ship master, Shipper, Port Terminal and other concerned Stakeholders.**

1. The Mercantile Marine Departments shall carry out 100% Port State Control / Flag State Implementation Inspections of all vessels loading cargo of Iron ore fines / Concentrates and similar type of cargoes from Indian Ports during fair / foul weather season.
2. These vessels shall only sail out from Indian ports after obtaining clearance from the concerned Mercantile Marine Departments.
3. In addition, the provisions of this notice shall also be strictly complied with.
4. Laboratory Test Houses conducting test on cargo samples of iron ore fines has the approval of the Competent Authority if accepted by the ship, shipper or their representatives.
5. Non-compliance of the provisions of International Regulations, National Rules and this notice shall be viewed seriously.
6. Legal action for such contraventions shall be taken against the Ship owner, Ship master, Shipper, Port terminal and other concerned Stakeholders under the provisions of Merchant Shipping Act, 1958 and other applicable laws.

## **PART I**

### **Introduction**

#### **Spate of shipping casualties involving ships engaged in carriage of Iron ore fines:**

##### **1. Introduction**

Certain problems involved in the carriage of Iron ore fines came to notice of Directorate after the incident of M.V. "Asian Forest" in July 2009 followed by many near miss cases involving ships carrying iron ore fines from Indian Ports in August 2009 including another serious shipping casualty of "M.V.Black Rose" in the month of September 2009. M.V. Asian Forest and M.V.Black Rose became wreck in Indian waters leaving behind over 1400 tons of bunker oil entrapped in the bunker tanks. These ships encountered heavy listing due to shift of cargo on account of liquefaction. Investigation into these incidents highlighted improper cargo information, excessive moisture content in the cargo, liquification and refusal of entry of the affected vessels by Port Authorities. Timely intervention by the Maritime Assistance Service (MAS), i.e. Directorate General of Shipping, Mumbai prevented occurrence of shipping casualty in many cases of reported near misses.

##### **2. Constitution of Committees**

To address the concerns related to carriage of iron ore fines from Indian shores, a technical committee was constituted by the Ministry of Shipping and Director General of shipping each. One of the committees was headed by the Chairman National Shipping Board (NSB) and other by the Nautical Advisor to the Government of India. Upon completion of their task, the respective committee concluded that shippers, port terminals, charterers and the ship owners do not provide adequate and timely support to the ship masters in safe carriage of iron ore fines from Indian ports. It was also observed that the Master of the ships were not exercising due diligence while loading this cargo from Indian ports and not using their overriding authority provided under the safety management system (ISM Code requirement).

##### **3. Applicability of International Regulations and National Rules**

Carriage of solid bulk cargoes by sea is regulated to prevent injury to persons or damage to ship and their cargoes. The Government of India is party to the SOLAS Convention 1974 as amended and the provisions relating to the carriage of solid bulk cargoes under SOLAS 1974 as amended have been enacted into the rules made under Merchant Shipping Act called MS (Carriage of Cargo) Rules, 1991 incorporating the elements of code of safe practice for solid bulk cargoes (BC Code) which is recommendatory in nature till date. The International Maritime Solid Bulk Cargoes Code (IMSBC Code) is expected to come into force on 01.01.2011, and superceding existing Solid Bulk Cargo Code (BC Code). This IMSBC Code

highlights the prime hazards associated with the shipment of solid bulk cargoes, such as loss or reduction of stability during a voyage due to liquification, structural damage due to improper cargo distribution and chemical reactions of cargoes. Although the provisions of the existing BC Code are recommendatory in nature, the same has been included in the Merchant Shipping (Carriage of Cargo) Rules, 1991. The new IMSBC Code modifying the existing BC Code has undergone many changes in layout and content. The Directorate, in view of the shipping casualties and near misses stated above had issued Merchant Shipping (MS) Notice 31 and 34 in the September 2009, which are still in force and required to be adhered strictly. These notices broadly provide guidelines to the shipping industry to comply with the relevant rules and regulations for safe carriage of iron ore fines.

## **PART II**

### **4. Directives to all concerned in safe carriage of Iron ore fines**

The Directorate reiterates that the ship owners, ship masters, shippers and port terminals shall conform to National and International Regulations including prevailing International Practices as stipulated in MS Notice No. 31 of 2009 and additional safeguards specified under MS Notice No. 34 of 2009 for safe carriage of iron ore fines. In view of the onset of South West Monsoon in Indian waters, it is directed that:

- i) The ship owner shall comply with the provisions of SOLAS Chapter VI, IMSBC Code and additional safety measures for bulk carriers under Chapter XII of SOLAS 1974, if applicable;
- ii) The shipper shall provide the master or his representative with appropriate information on cargo sufficiently in advance, prior to of the loading of iron ore fines to take precautionary measures, which may be necessary for proper stowage and safe carriage of this cargo.
- iii) The Port Authorities shall ensure that shipper gives current cargo information such as Moisture Content,( including Flow Moisture Point (FMP) and Transportable Moisture Limit (TML), and Cargo Density declaration. They shall also fulfill their relevant obligations specified in the IMSBC Code which includes the provisions specified in the Code of practice for the safe loading and unloading of bulk carriers (BLU Code);
- iv) The agent of the ships calling Indian Ports for shipment of captioned cargo shall advise and encourage the Masters to use their discretion and overriding authority under SOLAS 1974 as amended;
- v) The masters are directed to verify the moisture content of the iron ore fines, if in any doubt, in accordance with the provisions of IMSBC code prior to the acceptance of the shipment during the entire loading operations;
- vi) The Ports are requested to facilitate entry of vessels in need of assistance as places of refuge when the masters are apprehensive about

the safety of their vessels due to excessive moisture contents, taking into account the provisions of IMO Resolution A.949 (23) that deals with Places of Refuge. In doing so, the Port shall take all measures for the safety of their own Port. If in any doubt, the Port Authority shall consult the D.G. Shipping, notified as Maritime Assistance Service (MAS) in accordance with IMO Resolution A.950 (23).

## **5. Special requirements for safe loading and unloading of iron ore fines**

The ship, shipper, port terminal and other concerned in safe loading and unloading of iron ore fines shall in addition comply with the following instructions:

(i) Ships:

(a) Ships nominated for iron ore fines loading from Indian ports are suitable and in addition the ship master to ensure following that the ship is:

1) Weather tight and efficient in all respects to face the normal perils of the sea for the intended voyage;

2) Provided with an approved stability and loading booklet approved by the Flag Administration in a language understood by the ship's officers concerned and using standard expression and abbreviations. If the language is neither English, nor French, nor Spanish, a translation into one of these languages should be included;

3) Provided with hatch openings of sufficient size to enable the cargo to be loaded, stowed and unloaded satisfactorily; and

4) Provided with the hatch identification numbers used in the loading manual and loading or unloading plan. The location, size and colour of these numbers shall be chosen so that they are clearly visible to the operator of the loading or unloading equipment.

(b) Ships which are required to carry out stress calculations shall have on board an approved loading instrument by the flag administration for the rapid calculation of such stresses;

(c) All propulsion and auxiliary machinery shall be in good functional order. Deck equipment relating to mooring and berthing operations, including anchors, cables, mooring lines, hawsers and winches, shall be operational and in good order and condition;

(d) All hatches hatch operating systems and safety devices shall be in good functional order, and used only for their intended purpose.

- (e) List indication lights, if fitted, shall be tested prior to loading or unloading and proved operational;
  - (f) Ship's own cargo handling equipment shall be properly certificated and maintained, and used only under the general supervision of suitably qualified ship's personnel;
  - (g) Ship Master shall ensure to receive from the shipper of intended cargo, details of the nature of the cargo required under Chapter VI of SOLAS 1974, as amended. Where additional details, such as trimming or continuous measurement of the water in the cargo, etc, are required, the master shall inform the terminal accordingly;
  - (h) Ship master shall ensure that the prior to the shipment of cargoes stated above the vessel is made cargo worthy;
  - (i) ship master shall conduct can test or other test prescribed in the IMSBC Code to the extent reasonable and practicable prior to the acceptance of shipment of cargo along with the terminal representative in case of any doubt about the information submitted by the shipper or quality of cargo;
  - (j) in the event of any undue commercial influence, the master shall not hesitate to use his authority prescribed under SOLAS Chapter V regulation 34 - 1 and over riding authority under the safety management system as applicable;
  - (k) In case of non co-operation by the port terminal or shipper or other entities in safe loading of cargo posing threat to safety of the ship, the master shall not hesitate to report the matter to the Competent Authority.
- (ii) Ship owner, manager or operator when offering a ship for cargo of iron ore fines, shall ensure that the ship:
- (a) is maintained in a sound, seaworthy condition;
  - (b) has on board a Competent and Qualified Crew;
  - (c) has on board at least one Officer proficient in the languages used at both the loading and unloading ports, or has an officer available who is proficient in the English language; and
  - d) is free of defects that may prejudice the ship's safe navigation, loading or unloading.
- (iii) Shipper has the following responsibility:
- (a) the Shipper shall provide the master or his representative with appropriate information of the iron ore fines cargo sufficiently in

advance, prior to loading and if in any doubt shall approach the Competent Authority without any delay;

(b) the Shipper shall provide Cargo Information and Cargo Density Declaration for iron ore fines in the prescribed form as specified in the IMSBC Code;

(c) the shipper shall have the samples of iron ore fine cargoes tested for ascertaining the moisture content or transportable moisture limit as per the requirements specified in IMBSC Code.

(iv) Port terminal has the following responsibility:

(a) Port terminal operators shall ensure that they only accept ships that can safely berth alongside their installation, taking into consideration issues such as:

(i) water depth at the berth;

(ii) maximum size of the ship;

(iii) mooring arrangements;

(iv) fendering;

(v) safe access; and

(vi) obstructions to loading / unloading operations.

(b) Terminal equipment shall be properly certificated and maintained in accordance with the Port Laws, Bye Laws, Dock Safety Laws and other applicable laws or standards accepted by the Port State Authorities. Such equipments shall only be operated by duly qualified and, if appropriate, certificated personnel required under the applicable laws. However, where automatic weighing equipment is provided, this shall be calibrated at regular intervals as per the requirements of the port laws/bye laws or the manufacturers as the case may be;

(c) Terminal personnel shall be trained in all aspects of safe loading and unloading of bulk carriers or other suitable types of ships, commensurate with their responsibilities at the earliest taking into account that:-

(i) the training shall be designed to provide familiarity with the general hazards of loading, unloading and carriage of iron ore fines and the adverse effect of improper cargo handling operations that may have on the safety of the ship; and

(ii) training to such personnel shall be provided by qualified trainer of the port terminals conforming to the standards specified in the port and other laws specified above.

(d) terminal operators shall ensure that personnel involved in the loading and unloading operations are duly rested to avoid fatigue;

(e) the port terminal shall cover the stockpiles of iron ore fines cargo likely to be adversely affected by precipitation or high humidity or rain or weather conditions during the South West seasonal monsoon in Indian waters to the extent reasonable and practicable;

(f) the port terminal shall provide proper drainage system for water from the stock piles of iron ore fines cargo lying in the open areas of its premises to the extent practicable and reasonable;

(g) the port terminal shall to the extent reasonable and practicable ensures adequate number of approved laboratory test houses availability within the port premises for carrying out efficient and effective testing of samples submitted by the shipper or the ship owner to verify the compliance of moisture content or transportable moisture limit of such cargoes;

(h) the port terminals engaged in the shipment of the cargo of iron ore fines may be audited by the Competent Authority if necessary for the purpose of verification of compliance with the relevant provisions of IMSBC Code at periodical intervals;

(i) the port terminals, if approached by the master of the ship in need of any assistance to prevent shipping casualty after the shipment of such cargoes shall provide safe and sheltered place to such ships to take corrective measures.

(v) Lab tests houses and cargo surveyors of shippers / exporters:

(a) all laboratory test houses conducting the tests on cargo samples of iron ore fines under Section 8 (test procedures for cargo that may liquefy) and appendix 2 (laboratory test procedures, associated apparatus and standards) under IMSBC Code shall be duly accepted by the shipper, ship or their representative. In the interim such acceptance shall be construed as having the approval of the Competent Authority;

(b) all personnel conducting such tests shall be suitably qualified and experienced;

(c) the cargo surveyors appointed by shippers / exporters shall be suitably qualified and experienced for the purpose of informing the terminal representative in respect of cargo quantity, quality and suitability of such cargoes for shipments from Indian ports;

(d) to avoid any dispute between the concerned parties with respect to sampling of iron ore fines, to the extent possible, the samples may be drawn jointly in presence of shipper and ship's representative. The sampling may be carried out in accordance with procedures prescribed in Section 4 of IMSBC Code.

(vi) For the purpose of implementation and enforcement of the provisions of the relevant part of SOLAS 1974 , Act, Rules, IMSBC Code and the M.S. Notices, the **Competent Authority is the Directorate General of Shipping**. This notice shall be read with Merchant Shipping Notices (MS) No. 31 and 34 of 2009.

All concerned in the safe carriage of iron ore fines specified in IMSBC Code from Indian ports or places are directed to comply with these provisions of Merchant Shipping Act, M.S. (Carriage of Cargo) Rules, 1991, this notice and the relevant provisions of IMSBC code. In the event of any contravention of these provisions, an appropriate legal action as prescribed in Indian Merchant Shipping Act, 1958 shall be taken.

This issues with the approval of Director General of Shipping, Additional Secretary to the Government of India.

(Capt. Deepak Kapoor)

Nautical Surveyor-cum-DDG(Tech)