Subject: Carriage of Iron Ore Fines (and associated cargoes)

Circular to Assureds (no 006 2011)

This is the third circular issued by the Club dealing with the carriage of Iron Ore Fines and follows on from our October 2009 (number 005 2009) and July 2010 (number 008 2010) circulars both of which are attached.

Introduction

The purpose of this circular is to:

- Serve as a general reminder to Assureds of the risks associated with iron ore fines particularly bearing in mind the forthcoming monsoon season in India;

- Alert Assureds to the practice of some shippers who erroneously identify iron ore fines cargoes as Class C (Note 1 below) where the IMO have now stated all such cargoes should be considered and treated as Class A;

- Alert Assureds to potential problems concerning “sinter feed” loaded from Brazil.

Iron ore fines update

All Assureds are asked to ensure that they are familiar with the issues that were raised in our previous circulars. The advice provided within those two circulars remains current, including but not limited to, the advice concerning the dangers of carriage of this type of cargo, high risk of liquefaction, unreliable practice of certain shippers in providing inaccurate

1 The IMSBC Code defines Group A and Group C cargoes as follows:

For the purpose of this Code, unless expressly provided otherwise, the following definitions shall apply:

1.7.5 Cargoes which may liquefy means cargoes which contain a certain proportion of fine particles and a certain amount of moisture. They may liquefy if shipped with a moisture content in excess of their transportable moisture limit.

1.7.12 Group A consists of cargoes which may liquefy if shipped at a moisture content in excess of their transportable moisture limit.

1.7.14 Group C consists of cargoes which are neither liable to liquefy (Group A) nor to possess chemical hazards (Group B).
information to owners and charterers in relation to the suitability for carriage of the intended cargoes and proper testing and requirements for safe carriage as set out in the IMSBC Code, IMO requirements and SOLAS.

Despite a high degree of publicity, and tragically loss of life, owners, charterers and operators are still being exposed to unacceptable pressures from some shippers in relation to carriage of cargoes that may liquefy. On occasion, this has involved putting unreasonable pressure (including physical violence and wrongful imprisonment) on independent experts and surveyors, falsifying documents and providing certificates which on subsequent testing and analysis by independent laboratories, have shown to be wholly inaccurate and not representative of the cargoes produced for shipment. In such circumstances it is even more important that the recommendations set out in the previous circulars are followed, and where possible charterers adopt the recommended clause set out below.

The IMSBC Code (the “Code”) which came into force when it was published in 2009 and became mandatory on 1 January 2011 introduced a requirement under the provisions of the SOLAS convention concerning the carriage of iron ore fines type cargo. Although iron ore fines are not listed explicitly in the Code as a material which may liquefy, the Code “defines” cargoes which may liquefy as those which “contain a certain proportion of fine particles and a certain amount of moisture”. Iron ore fines as a cargo meet this description and it is now internationally accepted that such cargoes have a high and significant risk of liquefaction.

IMO circular DSC.1/Circ.63 of 12 October 2010 (attached) highlighted the need to raise awareness of the dangers of liquefaction associated with the carriage of iron ore fines, following the work conducted by various P&I Clubs and other reporting casualty services including the Charterers P&I Club. The IMO circular made it quite clear that iron ore fines may liquefy and should be treated in all cases as Group A cargo notwithstanding the practice adopted by some shippers of identifying the cargo as Group C cargo. Accordingly, where it is proposed to ship a cargo with a Moisture Content (MC) in excess of the Transportable Moisture Limit (TML) such cargo should not be accepted for loading.

Bearing in mind the forthcoming monsoon season in India it is extremely important that all parties involved in the contractual carriage take all available precautions to ensure the safety for carriage of the product and are vigilant as to the risks that certification may not accurately describe the condition of the cargo as and when presented. This is especially the case due to the unfortunate but repeated failure of some shippers to meet the requirements of the Code, together with the practical difficulties that are encountered due to the physical nature of the product, the way in which it is mined, transported and stock piled.

Where there is any doubt at all as to the condition of such cargo intended to be presented for loading then as a bare minimum a can test, as described in the Code, should be carried out, and independent advice sought from the Club and their experts.
Brazil

Information is now beginning to come to light which suggests that similar difficulties and dangers as experienced in relation to the carriage of Iron Ore Fines ex Indonesia/India may equally apply to the carriage of Sinter Feed and Sinter Feed Carajas cargoes being presented for loading out of Brazil.

Sinter Feed is specifically listed as a Group A cargo under the Code. However once again there is a significant risk that the cargo may be misdescribed by shippers as Group C cargo.

Sinter Feed is a grade of iron ore that is too fine for use in a blast furnace and therefore requires agglomeration into larger lumps at destination, in a process known as “sintering”. Some Sinter Feed cargoes are produced by a concentration process, and are therefore a sub-type of Iron Ore Concentrate (itself a Group A cargo listed in the Code), whereas others are unprocessed fines. As such it is a cargo which effectively has the same characteristics as Iron Ore Fines and is subject to the same risks of liquefaction. This being the case the recommendations made in the previous circulars equally apply to the carriage of Sinter Feed.

Another closely related cargo is “Pellet Feed”, which is also listed in the Code as a Group A cargo. It differs from Sinter Feed in the agglomeration process applied at destination prior to use in a blast furnace, but is also a fine-grained grade of iron ore. Some shippers have switched cargo descriptions between both names partway through loading. The above issues with Sinter Feed apply equally to Pellet Feed.

The certification requirements and associated sampling and testing issues identified in previous circulars on Iron Ore Fines equally apply to cargoes of Sinter Feed and Pellet Feed.

Assureds should be aware that Sinter Feed, Pellet Feed and Iron Ore Fines are cargoes also regularly shipped from not just Brazilian ports but also from Venezuela, Mexico, Australia, South Africa and other countries in addition to India and Indonesia. The issues raised in this and previous circulars equally apply to these cargoes regardless of the country of origin.

Suggested Charterparty Clause(s)

We have drafted the following protective clauses that charterers may insert into charter-parties with their owners or disponent owners if possible; the following clause is designed for Assureds who are not the shippers of the cargo:

Iron Ore Fines and Similar Cargo Clause

“Nowithstanding any provision contained in this charterparty, owners acknowledge and fully understand the risks associated with the carriage of Iron Ore Fines, Sinter Feed and other similar cargoes and hereby undertake to exercise their best endeavours to ensure strict compliance by Shippers with the requirements of the International Maritime Solid Bulk Cargoes Code (IMSBC) (the “Code”) including but not limited to testing and cargo clearance.
requirements. Owners will remain ultimately responsible in respect of any claim and/or loss and/or expense which may arise as a result of a failure by Shippers or other third parties to adhere to the Code, including but not limited to loss of time/delay/required remedial measures.”

The following is designed for use by Assureds who are also (whether directly or indirectly) the shippers of such cargoes; Assureds who are also the shippers are expected to comply strictly with the provisions of the Code, as any failure to comply may prejudice their cover with the Club:

“Notwithstanding any contrary provision contained in this charterparty, Owners, hereby warrant that both they, their Masters and crews understand fully the risks associated with the carriage of Iron Ore Fines and similar unprocessed ores and are conversant with all of the requirements of the International Maritime Solid Bulk Cargoes Code (the “IMSBC Code”) and SOLAS including but not limited to sampling, testing and cargo clearance requirements. Owners undertake only to load cargoes that are safe for carriage by complying strictly with the requirements of the IMSBC Code and SOLAS. All time spent by Owners satisfying themselves of the safety of the cargo as aforesaid shall count as half laytime or, if the vessel is on demurrage, as half demurrage. Owners will remain ultimately responsible in respect of any claim and/or loss (including loss of time or delay) and/or expense which may arise as a result of their failure to comply with this Clause.”

Iron Ore Fines/Sinter Feed Hotline

The Charterers P&I Club has entered into an arrangement with:

- A firm of UK based cargo experts who will provide guidelines in relation to practical issues and advice concerning the properties and carriage of Iron Ore Fines/Sinter Feed and similar cargoes;

- A firm of London solicitors who will provide general guidance in relation to issues concerning the carriage of Iron Ore Fines/Sinter Feed and similar cargoes and can recommend charterparty wordings.

Recommendations/Conditions

Cargo liquefaction at sea could result in the loss of the ship, the cargo and her crew. In view of the potential human cost of such a tragedy all parties concerned should ensure that the cargo is safe to carry. Clearly shippers should properly test, describe and certify the cargo and it is also incumbent on charterers and owners independently to verify that the cargo is indeed safe to carry. There are obvious practical constraints as in many ports there is a severe shortage of expertise and independent contractors available to provide such services. We would not recommend any Assured to engage in the carriage of cargoes prone to liquefaction unless they have a high degree of experience in this sector.
In addition to the advice provided in our previous circulars, we would recommend that when an Assured is chartering a ship to carry iron ore fines, concentrates or any other form or derivative of Iron Ore - for example sinter feed - the following protocols must be observed:

- It is a condition of cover that all such cargoes are certified and presented for loading as being Class A cargo;

- The Assured verifies that the Master has the requisite experience of carrying this type of the cargo;

- That wherever possible the Assured agrees with the owner to the joint appointment of a surveyor nominated and instructed by the owner, with the cost being shared 50/50 between owner and charterer;

- That in the absence of being able to obtain the owners agreement to a joint survey as above, the Assured will take all reasonable steps to instruct their own independent expert to verify the condition of the cargo. This could, for example, include the cost of flying in an expert from overseas if the requisite expertise is not available locally.

Assureds are hereby put on notice that in circumstances where Underwriters consider that an Assured has fundamentally ignored the advice of the Club in this or any previous circulars and, in particular, where it is clear to Underwriters that the Assured has not taken adequate precautions to verify the condition of the cargo prior to shipment; then Club cover may well be prejudiced. For the avoidance of doubt, Underwriters are of the view that if an Assured simply seeks to passively rely on representations/certification provided by the shippers without being proactively involved, wholly or jointly, in independently testing the cargo prior to loading; then Underwriters are very likely to determine that cover has been breached.

Charterers carrying sinter feed from Brazil should be aware of the potential for disputes because Owners and their P&I Clubs are becoming very alive to this problem and significant delays and costs that can be expected whilst it is determined whether or not the cargo is safe to transport. It is critical that the financial exposure to such delay and the cost of independent testing is factored in when considering the economic benefit of chartering a ship to carry such cargo.

**Further Guidance**

In the first instance all enquiries should be addressed to your usual contact at the Club who will be able to refer appropriate queries to the hotline service and if necessary appoint an independent surveyor at the load port.

Michael Else and Company Limited, as Managers

Dated London 28 May 2011

E&O.E
CARRIAGE OF IRON ORE FINES THAT MAY LIQUEFY

1 The Sub-Committee on Dangerous Goods, Solid Cargoes and Containers (DSC), at its fifteenth session (13 to 17 September 2010), considered a preliminary report submitted by a Member Government relating to two recent serious casualties in the last monsoon season of 2009 and many near misses reported by the ship masters on ships engaged in the carriage of iron ore fines. The Sub-Committee also considered another submission made by an industry organization relating to the carriage of this cargo.

2 In considering the above submissions, the Sub-Committee concluded that:

.1 there is a need to raise awareness despite the efforts made by the various protection and indemnity clubs and other reporting casualty services, informing of the probable dangers of liquefaction associated with carriage of iron ore fines;

.2 that iron ore fines is not specifically listed in the International Maritime Solid Bulk Cargoes (IMSBC) Code;

.3 iron ore fines may liquefy and should be treated as such, in particular the Master should refer to section 7 of the IMSBC Code, which warns about cargoes that may liquefy;

.4 if this cargo is shipped with moisture content in excess of its transportable moisture limit (TML) there is a risk of cargo shift, which may result in capsizing;

.5 the Master should be aware that some shippers have in the past declared this cargo under the "iron ore" schedule in the IMSBC Code, which is classified as a Group 'C' cargo;

.6 the Master should not accept this cargo for loading unless the moisture content of the cargo indicated in the certificate is less than its transportable moisture limit; and

.7 the Master should exercise good seamanship when handling and carrying this cargo, such as protecting the cargo holds bilge covers to stop the ingress of this fine cargo into the bilge wells, for further guidance refer to sections 7 and 8 of the IMSBC Code.
3 In order to investigate further the hazards and risks associated with the carriage of iron ore fines, including clarification of the existing schedules on DRI and iron ore Group ‘C’ and the need for a new schedule, Member Governments and international organizations are invited to submit relevant information regarding the safe handling and carriage of this cargo, at their earliest convenience, to the Organization.

4 Member Governments are also invited to bring the above information to the attention of shippers, terminal operators, shipowners, ship operators, charterers, shipmasters and all other entities concerned, requesting that extreme care and appropriate action be taken, taking into account the provisions of relevant IMO instruments when handling and carrying iron ore fines in bulk.
Subject: Carriage of Iron Ore Fines

Circular to Assureds (no 008 2010)

This is the second circular issued by the Club dealing with the carriage of Iron Ore Fines and follows on from our October 2009 circular number 005 2009 which is attached for ease of reference. This circular provides an update and reminder to Assureds of the dangers in relation to carriage of Iron Ore Fines cargoes as set out in our first circular and the requirements of the International Maritime Solid Bulk Cargoes Code (IMSBC) – “the Code”.

The circular also gives the details of an "Iron Ore Fines Hotline” which has been established by the Club.

Key Factors in Relation to Carriage of Iron Ore Fines

The danger inherent in the carriage of this particular cargo is the high risk of liquefaction which in the most extreme of cases can lead to a vessels loss of stability, capsize and sinking. Under the provisions of the Code it is for the shipper prior to loading to provide the competent authority at the port of loading with details as to the characteristics and properties of the cargo. This information from the shipper must also be provided to the Master of a vessel waiting to load such cargoes. The overriding requirement is that cargoes presented for loading are in a safe condition for carriage.

Amongst the key information which must be provided are details of the Flow Moisture Point, Transportable Moisture Limit and the Moisture Content. All of these are factors which have impact on the likelihood of the cargo to undergo liquefaction and are described in detail in the previous circular. Assureds are requested to again carefully review and consider the advice provided in the previous circular concerning the importance and basis of the above referenced data.

Failure of Shippers to meet the requirements of the Code

Notwithstanding the clear importance of the Code in relation to safe carriage and a clear history of serious casualties where provisions of the Code have not been followed, we are advised that it appears a number of shippers are not following the requirements of the Code. While at present the Code is not mandatory it will become so in January 2011 under the provisions of SOLAS. In any event it is essential that the requirements are strictly followed in order to avoid the potential of a serious incident.

Amongst the important changes introduced by the Code is the provision in section 4.5.2 which states that the interval between sampling/testing and loading shall never be more than an absolute period of 7 days. This is a change from the previous Bulk Cargo Code and is a point which has not currently become fixed in the minds of Shippers/Charterers/Owners. It is important that this provision is followed. Similarly at clause 4.5.2 the Code states that notwithstanding the 7 day provision wherever there is "significant rain or snow" a "check test" should be carried out to ensure that the material is still fit for carriage. The word "significant" is not defined by the Code neither is any explanation given as to what would amount to a "check test". However these requirements clearly put an onus on the shipper to ensure that rainfall does not result in a cargo becoming unsafe even if the figures on the cargo declaration accurately described the cargo state at the time of sampling. It is...
important that Charterers make sure that their Owners are insisting upon full and proper compliance with these and other provisions of the Code.

**Indian Port Trust Circulars**

Partly as a result of these concerns both the Mormugao and New Mangalore Port Trusts have themselves issued additional circulars dealing with the risks involved in the carriage of this cargo, the requirements for testing and the regulations now in place locally concerning clearance for shipment. These circulars have also highlighted for exporters the duty to ensure that cargo both in stock pile and delivered on truck is kept protected from water ingress during the monsoon period.

Charterers should ensure that Owners are aware of these requirements and have complied with the same. Copies of these circulars are attached for ease of reference.

**Recommendations**

As highlighted in the previous circular the dangers involved in carriage of Iron Ore Fines cargoes are particularly increased due to the practice of stockpiling cargoes where such stockpiles are exposed to the weather. These dangers are particularly prevalent during the monsoon period and therefore Assureds must ensure that steps are taken properly to protect their position viz a viz both owners and cargo interests. Particular concern has been expressed with regard to the shipment of such cargoes from Indian ports although there is also now evidence that similar problems are being encountered in relation to export of this cargo from ports in Odessa and Yuznhy.

Where it is intended to carry an Iron Ore Fine cargo Assureds should send a message to Owners stressing the importance that Masters and crews have been briefed as to the dangers associated with the carriage, the requirements of the Code and that they are taking steps to check the condition of the cargo being presented and weather conditions prior to loading where cargo is being sourced from stockpiles. Where possible it would be sensible for Assureds to include in their charterparty contracts specific provisions which deal with the risks involved in the carriage of Iron Ore Fines and which transfer responsibility to the Owners to ensure that the requirements of the Code are followed.

If an Assured is likely to trade with Iron Ores Fines and is not the shipper of the cargo then we suggest that the following clause be included in the charterparty with Owners:

**Iron Ore Fines**

“Notwithstanding any provision contained in this charterparty, Owners acknowledge and understand the risks associated with the carriage of Iron Ore Fines and hereby undertake to exercise their best endeavours to ensure strict compliance by the Shippers with the requirements of the International Maritime Solid Bulk Cargoes Code (IMSBC) “the Code” including but not limited to testing and cargo clearance requirements. Owners will remain ultimately responsible in respect of any claim and/or loss and/or expense which may arise as a result of failure by Shippers or other third parties to adhere to the Code”.

Charterers who are also, whether directly or indirectly, the shippers of the cargo, are expected to comply strictly with the provisions of the Code as any failure to comply may prejudice their cover with the Club.
Iron Ore Fines Hotline

The Charterers P&I Club has entered into an arrangement with:

- Experts Brookes Bell who will provide guidelines in relation to practical issues and advice concerning the properties and carriage of Iron Ore Fines.

- London Solicitors Holman Fenwick Willan who will provide general guidance in relation to issues concerning the carriage of Iron Ore Fines and can recommend charterparty wordings.

Finally, we repeat the recommendation made in our previous circular that when considering the carriage of Iron Ore Fines ex India, Assureds appoint and retain an independent cargo surveyor to monitor the loading operation, check certification and raise any points of concern with the shipper and Master. The Club feels strongly about the need to appoint an independent surveyor and consider for the purposes of cover, that it would be imprudent and improper not to do so.

In the first instance all enquiries should be addressed to your usual contact at the Club who will be able to refer appropriate queries to the hotline service and appoint an independent surveyor at the load port.

Michael Else and Company Limited, as Managers

Dated London 29 July 2010
Subject: Carriage of Iron Ore Fines

Circular to Assureds (no 005 2009)

Introduction

The purpose of this circular is to alert Assureds to the special risks involved in the carriage of Iron Ore Fines cargoes. We are grateful to Brookes Bell who have supplied all technical data and guidance in relation to the application of the International Maritime Solid Bulk Cargoes Code.

Guidance for Loading Cargoes of Iron Ore Fines

There have been a number of cases during the course of the last few years involving onboard liquefaction of iron ore fine cargoes loaded from Indian ports. In the least serious of these incidents, the vessels concerned experienced cargo liquefaction, shifting and development of slight lists, whereas in the most serious extreme loss of stability, capsize and sinking occurred. The following is a basic summary of the IMO requirements for the loading of cargoes prone to liquefaction, such as iron ore fines which should carefully be noted by all those engaged in the carriage of such cargoes.

Cargoes not listed in the IMSBC Code

The most recent version of the IMO Code dealing with carriage of bulk materials is the IMSBC Code (the "Code"). The Code has been available and applied on a voluntary basis from 1 January 2009, anticipating its envisaged official entry into force on 1 January 2011, from which date it will be mandatory under the provisions of the SOLAS Convention.

Although iron ore fines are not listed explicitly in the Code as a material which may liquefy it defines ‘cargoes which may liquefy’ as those which ‘contain a proportion of fine particles and a certain amount of moisture’; iron ore fines as a cargo meet this description, and these cargoes are known to be capable of liquefaction.

The Code states in section 1.3 that if a cargo is not listed in the index but is proposed for carriage, the shipper should, prior to loading, provide the competent authority of the port of loading with the characteristics and properties of the cargo.

Assessment of acceptability of consignments for safe shipment

This is dealt with under various sub-sections presented in ‘Section 4’ of the Code, ‘Assessment of acceptability of consignments for safe shipment’. The areas covered
by this section include details of the information which must be supplied by the shipper to the Master of a vessel waiting to load a shipment of such cargo, as well as the background to that information, which includes sampling procedures and frequency of sampling in addition to certification.

The section also makes clear that it is the responsibility of the shipper to ensure that the cargo presented for loading is in a safe condition for shipment. Indeed it is a requirement of the Code that shippers present to the Master prior to the commencement of loading all necessary information, by way of certification, to demonstrate that to the best of their knowledge, the cargo is at that time safe for carriage.

For cargoes which may undergo liquefaction, data relating to the Flow Moisture Point (FMP), Transportable Moisture Limit (TML) and the actual Moisture Content (MC) are required.

**Flow Moisture Point (FMP)**

This is the moisture content of the material at which it first starts to show fluid characteristics. For materials produced via a regular and repeatable physical processing, such as metal ore concentrates, the Code requires that the FMP be determined once every six months unless the process is changed in any significant aspect. The FMP for such materials remains more or less constant hence the need only to carry out checks infrequently. In contrast, physically irregular materials such as iron ore fines or nickel laterite ores, due to their variable nature (and specifically the particle size range/distribution) have a Flow Moisture Point which varies significantly from mine to mine or from cargo to cargo. The Code states that where the characteristics of the cargo are variable, the TML will need to be re-tested and experience has shown that with iron ore fines cargoes this needs to be done for each shipment.

Various laboratory test methods by which the FMP may be determined are described in the Code in Appendix 2.

**Transportable Moisture Limit (TML)**

The TML is defined as 90% of the numerical value of the FMP and is the maximum moisture content permissible for any defined parcel of cargo within the shipment. It should be noted that the Code also warns in section 7.2.3 that through moisture migration it is possible for cargoes to develop a dangerous wet base even if the average moisture content is less than the TML.

**Moisture Content (MC)**

The MC is the moisture content of the material at the time of shipment. Unlike previous versions of the Bulk Cargo Code, the new Code makes clear that the MC determination (sampling and analysis) should be no more than 1 week prior to the time of loading, irrespective of whether the stockpile is open to the elements or not. In the event that there is any rainfall or snowfall on the stockpile, then the suitability
of the shipment for carriage must be reassessed by sampling and MC determination. Only if the MC is still below the TML should the cargo be presented for loading.

Situation in India with Iron Ore Fines

Stockpiles

It appears that the majority of the stockpiles of iron ore fines are located in the open and thus exposed to the elements. During the summer dry period, this is not such a problem since the amount of rainfall is low. However, during monsoon time, this means that the stockpiles are subjected to frequent heavy rainfall with the result that the iron ore fines can become very wet. Since heavy and persistent rainfall occurs virtually every day during this period, it becomes much more difficult to ensure that the cargo is safe for carriage – the problem being that sampling and analysis for moisture content takes at least a day to complete if done properly, by which time the stockpiles are likely to have been wetted again by further rain if they have not been properly covered.

Testing

Until the beginning of 2008 iron ore fines were not regularly tested for FMP, not least because there was only one flow table in the whole of India, and the certificates being issued generally stated that the TML was ‘13.5% approx’. Since that time, some laboratories have been set up equipped with the apparatus to determine FMP and thus to provide better determined TML's. However, the staff conducting these new determinations have comparatively little experience and in any event, do not always follow the correct procedure as set out in the Code, Appendix No. 2. Consequently, the values being determined for FMP and hence TML are not necessarily reliable or accurate.

In addition, the method being employed to determine MC is not necessarily in compliance with the method stated in the Code, leading to other errors and possibly to an undervalued result.

Certificates

The value of the information stated on the certificates being issued by the laboratories is of course only as good and reliable as the test methods being used and samples taken. Given the potential that there are deficiencies in the test methods from some of the laboratories not all of the test results are necessarily reliable.

Circular By Government of India Ministry of Shipping Dated 1 October 2009

Assured's attention is drawn to a Circular dated 1 October 2009 published by the Government of India Ministry of Shipping. This Circular highlights the current difficulties and dangers experienced in relation to the carriage of iron ore fine cargoes and sets out in its central paragraph that;
“Master, Owners and Agents of vessels are therefore advised to exercise due caution while loading this cargo and ensure that the moisture content of the cargo loaded on their vessel continues to remain within the transportable limit before the vessels sails out of the port. To confirm the Moisture content, Master’s of vessel may ensure that the hatch wise moisture content of the cargo on the vessel is independently analysed whenever it has not been possible to confirm that further increase in Moisture content had not taken place after the cargo was tested for Moisture Content.”

On the face of it this appears to be reasonable advice. However the circular does not deal with the fact that the normal regime of checks on board a vessel as applied to other group A cargoes are only capable of detecting gross over moistness. The reality of liquefaction is that it takes place during ocean transport as a consequence of both the condition of the cargo and the energy imparted to the cargo from the vessel’s movement in the seaway, engine vibrations etc. Cargoes which may appear to be solid at the time of loading can and do take on a wholly different apparent nature and behaviour when subjected to vibrations. This is the whole purpose of the various tests for flow properties, energy is imparted into the samples to see whether they flow. Even the crude can test is a method (albeit limited) of testing flow property. The real difficulty in relation to the carriage of this cargo is that it is impossible for the vessel to determine whether a cargo is safe to carry by means of normal visual checks. Simple taking of samples is wholly inappropriate and most likely contrary to the provisions of the Code. Assureds should ensure that when carrying such cargoes owners are aware of the above issues. Proper additional checks should be carried out if the Master has reason to believe that there is an inaccuracy in the certificates provided by the shipper when loading the cargo.

Conclusions

Recent dramatic events have again highlighted the dangers associated with carriage of iron ore fines, particularly from Indian ports, and the failures of the routine procedures designed to ensure that only safe cargoes are presented for loading. There is a possibility that the information provided in test certificates presented in relation to the cargoes concerned could be inaccurate.

Under these circumstances, Masters and crews of ships arriving in Indian ports to load iron ore fines should be aware of the dangers associated with carriage and remain vigilant at all times by checking the condition of the cargo being presented and weather conditions prior to loading onboard where cargo is being taken from stock piles.

To this end, Section 8 of the Code describes the ‘can-test’ which is a simple spot check by which the crew and Master can assess the condition of the cargo without specialist equipment. However, it should be noted that this method does not replace the laboratory test procedures described in the Code nor should it be relied upon as an overall guarantee that the cargo is safe for carriage – it is only a spot check designed to provide the Master with an indication of the condition of the cargo. If the Master and/or crew have any doubt about the cargo being safe for carriage they should seek specialist advice and further laboratory testing.
While the Code itself deals with the obligations of Shippers towards Owners when loading such bulk cargo, in practice Owners will look to Charterers to ensure that they are in compliance with their obligations concerning the presentation of cargo for carriage and that cargo as delivered is in accordance with the requirements of any contract of carriage in place between Owners and Charterers. In light of the points raised in this circular Assureds should pay special regard to their responsibilities when loading such cargo.

Guidance on Loss Prevention

In view of the potentially dangerous nature of this cargo and technical advice set out above, Assureds should take all steps to ensure that the requirements of the Code are followed and all proper safety checks are maintained, including but not limited to checking the accuracy of certificates. It is recommended that when considering the carriage of iron ore fines ex India, Assureds appoint and retain an independent cargo surveyor to monitor the loading operation, check certification and raise any points of concern with the shipper and Master. If an Assured has any questions regarding the carriage of iron ore fines they should get in touch with their normal contacts in the Club's claims department. Assureds may also wish to incorporate specific provisions within their charterparties dealing with the risks involved in the carriage of iron ore fines and to transfer responsibility to the Owners to check and ensure that the Code requirements are followed. Again, if an Assured needs any assistance with the review and/or advice in relation to particular clauses they should get in touch with their normal contacts in the Club's claims department.

Assureds should carefully check the provisions of their charterparties to ensure that they are adequately protected in circumstances where the Shipper fails to comply with the guidance provided in the Code and generally in relation to the carriage of bulk cargoes.

Assureds attention is drawn to the provisions of the Terms and Conditions which deal with the obligation at all times to comply with the ISM Code and SOLAS (Class 1 clause 4 (F) and Class 2 clause 13(P), and the exclusions in relation to imprudent and/or hazardous trading Class 1 clause 4(D) and Class 2 clause 13(I)).

Details of how to purchase copies of the Code can be found at www.imo.org

Michael Else and Company Limited, Managers E. & O.E.
Dated London 26 October 2009
CIRCULAR

Sub: Sailing of vessels loaded with "iron ore fines" "processed iron ore fines" and "blended lumpsum fines" from MPT.

Due to sinking of a number of vessels carrying cargoes as described above, the Ministry of Shipping expressing concern, has recommended the following steps to be taken –

(1) These cargoes need to be transported in covered trucks and barges having hatch covers so that ingress of moisture into the cargo is avoided.

(2) These cargo need to be stored in sheds having permanent covered structure so that ingress of moisture into the cargo is avoided.

(3) The appropriate test procedure to be used for determining the Transportable Moisture Limit for the different types of ore needs to be specified by the Directorate.

(4) While these cargoes are being loaded on the vessel, in addition to the general precautions taken by the vessel, the moisture content, TML and FMP of the cargo loaded on the vessel needs to be independently sampled and assessed by a competent organization appointed by the owner/charterer under supervisor of the P&I Club of the ship. This assessment should be in addition to those being carried out by the shipper. This sampling and assessing organization needs to be approved by the DG (Shipping).

(5) After the hatch wise data obtained by the independent sampling and assessment organization has been accepted by the Ship's P&I Club, the information needs to be submitted to the Surveyor of the Mercantile Marine Department for further necessary action. Only after obtaining clearance from the Mercantile Marine Department should the vessel be permitted to sail out of the port.

It may be noted that as directed by the Ministry of Shipping, ships will only be permitted to sail after this Port gets clearance from the MMD. Hence, prior sailing a letter from the MMD with respect to the TML & FMP of cargo loaded on the vessel needs to be approved by the MMD after which the Pilot will be deputed to sail the vessel from their respective berths.

This is issued for strict compliance.

DY CONSERVATOR

TO
ALL PORT USERS

C.C. The Surveyor in Charge, MMD, Bogda, Headland.
NEW MANGALORE PORT TRUST
TRAFFIC DEPARTMENT
Panambur, Mangalore – 575 010.

No. NMPT/TM/IOF/2010

C_I_R_C_U_L_A_R

Sub: Pre-monsoon preparation – Reg.

In view of the onset of monsoon, all the IOF Exporters, Stevedores, Steamer Agents and C&F Agents are requested to extend their co-operation in handling I.O.F. cargo for ensuring to control pollution as per the directions of KSPCB and requested to take actions as follows

1) Create sand bag bunds of two high around the stock held by the individual exporter in the allotted plots.

2) Cover the stocks with plastic sheets or tarpaulin, which should be well protected.

3) All the trucks laden with iron ore fines, which enter the Port should cover the same with tarpaulin or synthetic sheets.

4) All the empty trucks after unloading iron ore fines, shall cover with tarpaulin before leaving Port premises.

5) All the drains adjacent to the plot should be cleared of derbies and spillage.

6) The stocks held by the individual exporter should be cleared by nominating ships.

7) Steps should be initiated by the individual exporters / allottees to deploy men for house keeping of the area and names of the plot holder shall be displayed in their respective allotted plots.

8) The load capacity of IOF Trucks must be ensured strictly in line with the National Highway guidelines, while passing through N.H. 17 and other National Highways connecting to the Port to avoid damages to the roads and bridges during its way from mine heads to Port.

9) All the Stevedores, C&F Agents and transporters are requested to co-ordinate to ease out the congestion at National Highway and NMPT.

10) It is requested to educate and conduct awareness programme to the truck drivers to avoid speed driving in and around Port premises.
11) To ensure that truck drivers / cleaner should not sleep underneath the truck, while parking at National Highway or inside the Port premises.

12) To ensure that all the trucks should not overtake the vehicles, when they are moving inside the Port premises and follow the queuing system in a disciplinary way, while moving in the port premises.

13) To ensure that all the truck drivers and cleaners shall possess driving licence and identity card, while entering the Port for ensuring security measures as per the ISPS Code Certification.

14) The exporters or authorized handling agents shall submit the certification of cargo, worthiness and readiness to load the cargo prior to berthing of the vessel and copy advised to the Steamer Agent representing the vessel.

15) The Certificate confirming the availability of stock duly approved by the Surveyor for loading IOF prior to berthing of the vessel.

16) The Saveall nets should be provided by the Stevedores / handling Agents all along the vessel prior to commencement of cargo operations. The Steamer Agent and the Stevedore shall regulate the same.

17) The above undertaking letter shall be presented by the Shipper or his C&F Agent in the Berthing Meeting prior to finalization of Berth Schedule.

18) The representative of the Master of the vessel i.e. Steamer Agent shall issue advise to the Master of the vessel in writing stating that only worthy cargo complying to the specification (TML level) shall be permitted / loaded, failing which, the Captain / Agent shall agree to shift the vessel to anchorage. The copy of the letter shall be submitted to Traffic Department.

19) All the Agents who are in the process of nominating the vessels for loading IOF are hereby instructed to advise their respective principals / charterers / exporters to appoint authorized agents to oversee the cargo operations. The authorized agents shall ensure the worthiness of the cargo for the safety of the vessel.

20) The IOF Exporters shall obtain the certification of TML level from the agencies authorized by the DG Shipping under the supervision of P&I Club of the ship.
21) Loading operation shall be suspended during period of heavy showers by closing hatch cover.

22) The area around the hook point on the wharf shall be kept clean and water stagnation shall be cleared.

23) The Stevedores, respective Exporter, respective authorized sampling Surveyors shall continuously monitor the above measures and co-ordinate with the Master of the vessel in view to maintain the safety of the cargo and the vessel.

24) The Stevedore shall co-ordinate with the Master of the vessel for trimming the cargo to maintain stability of the vessel before sailing.

25) Only on the receipt of the clearance from the MMD, the Port clearance shall be issued to sail the vessel after completion of IOF loading.

26) Trade Notice issued by the Port vide No. NMPT/TM/IOF/2010 dtd. 07-06-2010 shall be strictly complied and guidelines suggested by Ministry of Shipping vide No. PT-1103/67/2010,PT Dtd. 28-05-2010 for handling IOF during monsoon season may be implemented and adhered to.

( S. GOPALAKRISHNA )
TRAFFIC MANAGER

To:

All the I.O.F. Exporters,
Copy to All the C&F Agents,
Copy to All the Stevedores,
Copy to All the Steamer Agents,
Copy to the President, NMP Stevedores Association,
Copy to the President, NMP C&F Agents Association,
Copy to the President, Mangalore Steamer Agents Association,
Copy to Dy. Conservator i/c., for kind information
Copy to Dock Master, for kind information
Copy submitted to the Chairman / Dy. Chairman for kind information.
Copy to the Nautical Surveyor-cum-DDG Technical, MMD for information and necessary action.
Copy to DTM (Operation) for compliance.