



Friday 4<sup>th</sup> February 2011

## Bulletin 740 - 02/11 - DRI/Iron Ore Fines (Mis-declaration) - Venezuela

**The metallic contents found in Venezuelan DRI fines are usually not as high as those found in other ports around the world: it is common to find products similar to DRI but still with stated metallic percentages around 1% ~ 10%. However, these cargoes also contain very high levels of moisture (i.e. water, up to 12%) that reacts with the DRI to produce hydrogen, which has been responsible for several devastating explosions in vessels in the past.**

The IMSBC Code, which is now mandatory, cautions that the reactivity of this cargo is extremely difficult to assess owing to the nature of the material that can be included in the category. A worst case scenario should therefore be assumed at all times. Also, with such high moisture contents, there is a real risk that these cargoes will liquefy, and so the Transportable Moisture Limit (TML) should also be demanded.

In view of the uncertain origins of these cargoes, it is imperative that all analytical determinations should be obtained from representative samples of the cargo that is offered for shipment. Therefore, the standard that has been followed to obtain the samples must be stated on the relevant certificate: a generic certificate or sample is NOT acceptable.

It is highly important to note that most of the terminals and iron producers in Venezuela use the Ex Work (EXW) term when selling any product from their plants, therefore their responsibility often finishes when they leave the cargo at the berth alongside the vessel.

Also, it is rare to find terminals or iron ore producing companies selling their iron ore on the international market directly, there are often intermediaries or third party sellers who make the contracts between the buyers and the Venezuelan suppliers of the iron ore.

Due to the situation described above, and noting that the carriage of **DRI Fines** is much more expensive than the carriage of **Iron Ore Fines**, due to the requirement of a inerted atmosphere in the hold, (preferably with a nitrogen blanket) and with a maximum allowable moisture content of 0.3 per cent in respect of DRI (C) and also that the DRI sold in Venezuela usually doesn't have a high metallic content like more common DRI, **some third party sellers or resellers on the international market often describe the cargo to be exported as Iron Ore Fines.**

The Association has recently had a situation, where on reaching the Venezuelan terminal, the Master has found that the cargo was mis-declared (expecting to load **Iron Ore Fines** the cargo presented actually contained **DRI Fines**). A considerable amount of time was taken to resolve the issue.

As stated above most of the Venezuelan terminals **DO NOT** sell **Iron Ore Fines** since the process to turn the unprocessed product into iron ore fines particles smaller than approx 1 mm is more difficult than the regular process to produce DRI. Therefore, Masters and Members should be aware that there is only one terminal where **Iron Ore Fines** are produced and sold. This is the **FERROMINERA, C.A** terminal. The best prevention measure to take if the cargo under the C/P states iron ore fines is to check the terminal as soon as possible and if the terminal is not Ferrominera C.A. it can be determined at an early stage whether or not the cargo is Iron Ore

Fines and whether it contains DRI or at very least a by-product of DRI (The commodity may very well have a low metallic content but it remains DRI).

Irrespective of the load terminal the Member should in all instances request, at the earliest convenience, a full chemical analysis of the cargo that is offered, the analysis to include the total iron content AND the metallic iron content. These two measures will enable an expert to determine whether the cargo is iron ore fines, or DRI (C) – By-product Fines. Also, the Member should request details of the standards that have been followed to obtain the samples for analysis of the cargo.

A recommendation to Members in order to avoid any issue related to this type of cargo is to be clear at an early stage, what the commodities' origin is and verify the bulk trade conditions before signing any charter party.

A further recommendation would be to appoint a suitable 3<sup>rd</sup> party surveyor that can take care of checking the cargo quality even before the vessels arrival in order to provide timely advice to the Master and Owners.

Source of information: Loss Prevention Dept