NICKEL ORE: STOP, THINK, VERIFY!

Nickel Ore cargoes are exported from a number of countries in the Tropics including Indonesia, the Philippines, and New Caledonia. Four, very serious incidents recently resulted in the sinking of the bulk carriers Jian Fu Star, Nasco Diamond, Hong Wei and Vinalines Queen in very short succession, all of which were carrying nickel ore. These casualties have resulted in the loss of 66 seafarers’ lives in just over 12 months.

This guide aims to help masters, ship operators and other industry stakeholders understand the risks associated with the carriage of nickel ore cargoes.
## Intercargo Guide for the Safe Loading of Nickel Ore: What Should I look For?

<table>
<thead>
<tr>
<th>Step</th>
<th>Condition</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipper’s Declaration provided?</td>
<td>No</td>
<td>DO NOT LOAD</td>
</tr>
<tr>
<td>Correct BCSN used?</td>
<td>No</td>
<td>DO NOT LOAD</td>
</tr>
<tr>
<td>TML Stated?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moisture Content (MC) certified?</td>
<td>No</td>
<td>DO NOT LOAD</td>
</tr>
<tr>
<td>MC &lt; TML*</td>
<td>Yes</td>
<td>LOAD</td>
</tr>
<tr>
<td>Visual inspection OK?*</td>
<td>Yes</td>
<td>LOAD</td>
</tr>
<tr>
<td>Visual monitoring OK?*</td>
<td>Yes</td>
<td>CONTINUE LOADING</td>
</tr>
<tr>
<td>Visual monitoring OK?*</td>
<td>No</td>
<td>STOP LOADING</td>
</tr>
</tbody>
</table>

**Shipper’s Declaration:** It is a legal requirement under the provisions of SOLAS Chapter VI, Regulation 2 and the IMSBC Code Section 4.2 for the shipper to provide accurate cargo information to the Master.

**Correct BCSN:** All dry bulk cargoes should be shipped under their correct Bulk Cargo Shipping Name (BCSN). Nickel Ore does not yet have its own schedule in the IMSBC Code and hence has no BCSN. A cargo not listed in the IMSBC Code should be shipped under Section 1.3 of the IMSBC Code under a ‘tripartite agreement’. However, in the absence of such agreements, as a cargo known to be prone to liquefaction such as Nickel Ore should be transported under Section 7 of the IMSBC Code (Cargoes that may liquefy) as a “Group A” cargo.

**TML:** As a cargo prone to liquefaction, it is essential that Nickel Ore is classified as “Group A” and the accurate Flow Moisture Point (FMP) must be determined in accordance with the IMSBC Code and the Transportable Moisture Limit (TML) stated in the cargo declaration.

**Moisture Content (MC):** The actual moisture content of the cargo to be loaded must be provided by the shipper in accordance with the IMSBC Code from samples taken no more than seven days prior to loading. If the moisture content of the cargo is likely to have changed since the samples were taken, e.g. due to monsoon rain, further samples should be taken and the moisture content re-certified.

**MC < TML:** The actual moisture content must be below the Transportable Moisture Limit. If not the cargo must not be loaded.

**Visual Inspection:** As far as practicable, the owner’s representative or ship’s crew should visually inspect the cargo stockpiles prior to loading. If such inspections or any associated “can tests” conducted under Section 8 of the IMSBC Code cast doubt on the accuracy of the cargo declaration, then the cargo must not be loaded and further advice sought.

**Load:** The cargo should be loaded in accordance with the provisions of SOLAS Chapter VI, the Code of Practice for the Safe Loading and Unloading of Bulk Carriers (the BLU Code), and the IMSBC Code including trimming requirements under Section 5.

**Visual monitoring:** Visual monitoring should be carried out during loading and if indications of high moisture content are observed, such as free water or cargo splatter, loading must stop and further advice sought.

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*Independent Testing: Where doubt exists concerning any cargo declaration information (e.g certification shows MC within or below TML and yet the cargo appears wet/splatters when loaded), or there is suspicion that the cargo has been mis-represented, independent cargo testing to determine the FMP, TML and actual moisture content of the cargo to be loaded should be carried out.

†Can Tests may indicate when a cargo has exceeded its FMP - confirming that the cargo should be rejected and independent re-testing carried out. The Can Test cannot demonstrate the cargo moisture content is less than the TML, this can only be determined by laboratory tests. A cargo cannot be accepted for loading based on Can Tests alone.
Intercargo Guide for the Safe Loading of Nickel Ore: Stakeholder Responsibilities

The Responsible Shipper
Responsible shippers must not mis-represent cargoes. In order to provide accurate cargo declarations shippers should have in place procedures for sampling, testing and controlling moisture content of cargoes including procedures to protect cargo on barges from any precipitation and water ingress. These procedures should include provisions to facilitate access to stockpiles for the purpose of inspection, sampling and subsequent testing by the ship’s nominated representative. Additionally responsible shippers must have the ability to test cargo in accordance with the procedures set out in the IMSBC Code. The Competent Authority (CA) of the port of loading provides the regulatory oversight and should operate independently from the shipper.

Chartering Departments
Before fixing, chartering departments should refer to their own internal procedures regarding the acceptance of Nickel Ore cargoes. Due diligence on the shippers should include checks on the shippers commitment to safety through specific internal procedures implementing the IMSBC Code, including timely provision of accurate shipper’s declarations; and facilitating access to stockpiles for inspection, sampling and subsequent testing by the ship’s nominated representative. Charterparty clauses excluding the use of independent surveyors and consulting scientists should be viewed with extreme caution. If possible, clauses should expressly provide a right of independent testing in facilities commercially separate from the shipper.

The Responsible Shipowner
Responsible shipowners must check that the cargo documentation is provided as required in the IMSBC Code. As far as practicable the owner’s representative or ship’s crew should visually inspect the cargo stockpiles prior to loading. Visual monitoring should also be carried out during loading and if indications of high moisture content are observed, such as free water or cargo splatter, loading must stop and advice be sought. It is important to ensure that this process is ongoing throughout the loading operation especially as new barges present further cargo to be loaded.

Further Information and Support
Most P&I Clubs publish detailed information on the transportation of Nickel Ore. Consideration should be given to contacting the P&I Club prior to loading to obtain the latest information. In the event of difficulties, the ship’s P&I Club and the Competent Authority of the port of loading should be notified. Owners should also be aware that allowing a vessel to sail in circumstances where there has been non-compliance with the IMSBC code, or where they/ their master has concerns as to the safety of the cargo for carriage/risk of liquefaction, could have an impact on Hull cover.

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