

Hold Cleanliness Inspection

Obtain voyage instructions provided to the Master. The result of a survey may be adverse to the clients' instructions. Request the instructions to the Master from the client prior to attendance.

Concerning a Hold Inspection, Instructions to the charterer should contain the following:

- Verify that they include cargo fixture details, timings, type, cleanliness requirements and carriage instructions. Confirmation of receipt and understanding of all provided instructions.
- Hold cleanliness and preparation requirements are planned properly and that a formalised plan is created. Details of the method of preparation, the cleanliness standard and the equipment, resources and time required to complete preparations safely and effectively.

The standards of cleanliness required can vary depending on the cargo. If there is a change between cargo types, care must be taken to account for cargo residues and mitigate chemical reactions between them. MARPOL regulations are to be observed when disposing of cargo residues from previous voyages.

In particular the following should be attended to:

- Check that the vessel preparation for the next intended cargo, has made full use of the discharge facilities of the current port/ terminal. Removal of as much cargo remnants out of the holds has been completed;
- Instructions for washing-down procedures are in accordance with an approved industry standard. The standard is provided and strictly adhered to;
- Time constraints will potentially limit the completion of the full washing-down procedure. This cannot be provided as an excuse for limiting the scope of cleaning. Reference is to be made to the client instructions for hold preparation and cleanliness;
- MARPOL regulations and local port regulations are to be strictly complied with.

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When cleaning instructions are provided the following five standards will be applied for the bulk cargo trade:

Stringent clean	<ul style="list-style-type: none"> • 'Hospital clean'. • Highest and most stringent of standards. • Holds to have 100% intact paint coatings on all surfaces, including the tank top, all ladder rungs and undersides of hatches. • Required for very specific cargoes and such high standards of cleanliness will only be met by vessels trading exclusively in such cargoes.
Grain clean	<ul style="list-style-type: none"> • Most common requirement required for the majority of bulk and break bulk cargoes. • <i>"Holds must be clean, swept and washed down with fresh water, free from insects, odour, residue of previous cargo, lashing material, loose rust scale and paint flakes etc. Final loading condition must be dried, well ventilated and ready to receive the intended cargo subject to shippers and relevant surveyor's inspection."</i> • Differentiate loose rust scale from oxidation rust (light atmospheric rusting). Generally, <i>"loose rust scale will break away when struck with a fist or when light pressure is applied with a knife blade or scraper under the edge of the scale. Oxidation rust typically forms on bare metal surfaces but will not flake off when struck or when light pressure from a knife is applied"</i>. • The presence of hard-adhering scale within a hold is normally acceptable; however, the scale should not fall during the voyage or during normal cargo operations. • Different countries apply different standards to what constitutes an acceptable amount of loose scale or loose paint. • For our inspection, we should note the discharge port. Canada, U.S.A. and Australia are particularly strict and surveyors are expected to apply inspections and standards to a higher level of competency.
Normal clean	<ul style="list-style-type: none"> • Holds are swept clean and all residues of the previous cargo are removed. • After sweeping the hold is water washed down and dried ready for taking cargoes similar to or compatible with the last shipment.
Shovel clean	<ul style="list-style-type: none"> • Requires no washing down and the hold must be presented having been shovel cleared (hand shovel or dozer bucket) and very roughly swept by the stevedores or crew.
Load on top	<ul style="list-style-type: none"> • New cargo is loaded on top of existing cargo residues. • Appropriate in long term contracts where a particular vessel is transporting the same commodity to and from the same ports. • Guidance may be necessary for the Master on specific cleaning instructions, as load on top could still require a certain standard of cleanliness as per the provisions under a charter party.

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If no specific cleaning instructions are received, good practice dictates that holds are cleaned to a minimum standard. At AMS we regard this as Normal clean. The clients instructions will always be sought and confirmed.

When reporting to our client, regarding the hold cleanliness, a general comment will be made regarding the general condition of the vessel. In particular the maintenance of: Hold Steel, coatings, attached secondary structures, bilge wells, manhole covers, and hatch covers together with their coamings and seals.

The following should be noted, when conducting a hold survey;

- When loading the same type of cargo, and no clean up requirements are stated, inspections cannot be carried out unless a basic clean-up is carried-out;
- Failure to carry out a sweep-up of cargo debris and loose rust scale will obstruct the survey as it can hide fresh damage, which may lead to a claim. Cleaning holds to a minimum standard involves a sweep up and thorough saltwater wash, followed by a freshwater wash and then a dry out. OR NORMAL CLEAN.
- Cleaning should always be finished with a fresh water wash-down. No traces of chemicals or chlorides should be detectable and with certain cargoes, their presence will be tested;
- After wash down, holds are to be dried properly and ventilated. Additional preparations should be applied as required. e.g lime washing.

Key Point: precautions must be taken when dealing with chemicals during the cleaning process. A surveyor must be aware that a hold space is a confined space. Do not enter first or alone.

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Safety

- if chemicals are to be used as part of the washing-down procedure, agreement on compatibility with the next intended cargo must be sought from the shippers/ charterers;
- the proposed chemicals must be understood and accurate data must be obtained on their use and safe handling;
- When a chemical product and/or other specialist equipment is used, proper risk assessments, permits to work and standard operating procedures must be followed. Tool-box talks should be carried out with all crew members involved and full/correct PPE must be issued and worn at all times throughout the task;
- Cargo residues, wash water and wash water containing chemicals which are Harmful to the Marine Environment (HME) must be identified as such and disposed of in the correct manner. From 1 January 2013, new requirements under MARPOL annex V have come into force, which specifically apply to the disposal of cargo residues and wash water in to the marine environment. All persons involved in the cargo chain must familiarise themselves with these requirements.

- No discharge of cargo residues should occur less than 12 nautical miles from the nearest land, or the nearest ice shelf.
- No discharge of cargo residues should occur within the six MARPOL defined 'Special Areas'.
- No discharge of any cargo residues specified as HME.
- Hold wash water should be discharged to a suitable reception facility (RF).

Note: due to a reported lack of adequate reception facilities at present, MEPC Circular 8104 allows the discharge of HME cargo residues contained in hold wash water until 31 December 2015 outside Special Areas providing that:

- Based on the information from the relevant port authorities, the master determines that there are no adequate RFs at the receiving terminal or at the next port of call.
- The ship is en-route and as far as practicable (but at least 12 nautical miles) from the nearest land.
- Before washing solid bulk cargoes are removed (and bagged for discharge ashore) as far as practicable (and the holds swept).
- Filters are used in the bilge wells to collect any remaining solid particles.
- The discharge is recorded in the garbage record book with the flag state notified utilising the revised consolidated format for reporting alleged inadequacies of port reception facilities stated in MEPC.1/ Circ.469/Rev.2.
- It is still a requirement for receiving terminals to provide adequate port reception facilities for this waste stream, the circular only provides flexibility for ship owners and operators in the case when receiving terminals have failed to meet their obligations under the Annex.