
Port State Control - Recurring Deficiencies

Notice to ship owners, managers, Masters, Approved Nautical Inspectors, Recognised Organisations and surveyors

1. Purpose

- 1.1. This Information Notice (IN) is to bring to the attention of Companies operating Bahamian ships a number of recurring deficiencies raised at Port State Control (PSC) inspections that resulted in a PSC detention.

2. Application

- 2.1. This IN is applicable to all Bahamian ships on international voyages that visit ports of countries outside The Bahamas.

3. General

- 3.1. The Bahamas Maritime Authority (BMA) as a Flag State Authority is committed to ensuring that all Bahamian ships are always fully compliant with international Convention requirements and national regulations and fully supports the objectives of the IMO Port State Control (PSC) inspection process in eliminating sub-standard shipping.
- 3.2. Analysis of detainable deficiencies recorded against Bahamas flagged ships has identified the following unacceptable, easily identifiable and wholly avoidable deficiencies:
- i. Valid statutory certificates are not on board the ship, including seafarer's documents/certificates;
 - ii. Deficiencies/failures have not been reported to the BMA or Classification Society (Recognised Organisation) for agreed acceptance pending temporary arrangements in place;
 - iii. Any arrangement that bypasses essential safety or environmental monitoring equipment (e.g. "magic pipes" bypassing Oily Water Separator (OWS)/15ppm monitor);
 - iv. Equipment has been poorly maintained and/or maintenance has been inappropriately documented or not documented within the shipboard maintenance system;

- v. Crew are unfamiliar with essential equipment or systems they are responsible for (e.g. OWS, ECDIS, GMDSS equipment, etc.);
 - vi. Equipment which requires Flag State/Classification Society approval has been fitted, modified, or removed, or structural changes have been made without proper consultation with the Flag State/Classification Society/Recognised Organisation;
 - vii. Critical equipment has not been subject to regular testing as required (e.g. emergency equipment such as fan dampers and emergency fire pump);
 - viii. Logbooks, record books, hours of rest records and other documents are incomplete or inaccurate. It should be noted that PSC authorities may in some cases instigate criminal proceedings for alleged falsification of records where records are incomplete or inaccurate (in particular for hours of rest records and Oil Record Books).
- 3.3. Further advice is provided in the following sections for recurrent PSC deficiencies based on the specific risk area.

4. Fire Safety

- 4.1. There have been several PSC detentions involving defective firefighting and fire prevention equipment.
- 4.2. It is a requirement of Regulation 14.2.1 of Chapter II-2 of the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS) that all firefighting equipment shall be kept in good order and readily available for use.
- 4.3. It is also a requirement of Regulation 11(c) of SOLAS Chapter I that any defects which affect the safety of the ship or its continued compliance with statutory requirements are to be reported to the flag administration and the Recognised Organisation who issued the affected certificate on behalf of the flag administration.
- 4.4. In several cases ship's staff had known the equipment to be defective or had deliberately deactivated equipment.
- 4.5. **The deliberate deactivation of firefighting and fire prevention systems, without due cause, is not acceptable.** Where such circumstances are brought to the attention of the BMA they will be investigated and, where appropriate, further action will be taken by the BMA.
- 4.6. The most recurrent deficiencies related to fire safety are specifically due to:
- i. water mist systems being defective or not readily available for use;
 - ii. quick closing valves being found defective;
 - iii. leaking sprinkler bulbs.

4.7. Water mist systems

4.7.1. All owners, managers and masters of Bahamian ships are to ensure that all firefighting equipment shall be kept in good order and readily available for use. In particular:

- i. All local application water spray systems are to be ready for use at all times. Where the local application system operates automatically, it is to be ensured that the associated fire detection systems are fully functional and will activate the local application system without manual intervention. All valves within the piping system are to be in the correct position to allow automatic operation.

4.8. Quick closing valves

4.8.1. Deficiencies related to quick closing valves are considered major deficiencies and generally warrant the detention of the ship.

- i. Quick closing valves are to be regularly maintained and tested by the crew. **Quick closing valves must not be “gagged” or otherwise disabled.** The inspection, maintenance and testing of quick closing valves is to be incorporated in the company’s Safety Management System and ship’s planned maintenance system.

4.9. Sprinkler heads

4.9.1. In a number of PSC inspections sprinkler heads have been found with empty glass bulbs. Following an investigation with the sprinkler system suppliers, the root cause for the unexpected empty bulbs was identified to be due to “external hits” (i.e. contact damage).

4.9.2. Notwithstanding the identified root cause, the supplier identified during a review of their manufacturing process that part of the coating process might expose the sprinkler head to potential “micro cracking” of the sprinkler bulbs. The supplier amended their procedures, recalled the affected batches and raised awareness via a service bulletin.

4.9.3. It should be noted that external contact damage can happen either prior to installation (e.g. during transport and storage) and whilst fitted in place (e.g. accidental damage during luggage handling, gym, playroom etc.). External contact may cause “micro cracks” in the glass bulb that are not necessarily visible, which could result in the liquid leaking or evaporating from the bulb.

4.9.4. When the liquid leaks or evaporates from the bulb, the system may not operate as designed. Sprinkler heads with no liquid in the glass bulb therefore need to be replaced, though a small bubble in the liquid is acceptable. Examples are shown in the following paragraphs.

- i. Sprinkler heads that require immediate replacement:



- ii. Sprinkler head with small air bubble that does not require replacement:



- 4.9.5. The Company should ensure that spare sprinkler heads are stored and transported carefully to avoid damage and should ensure that they comply with any service bulletins or recommendations issued by suppliers.
- 4.9.6. Suppliers have also highlighted issues related due to external corrosion of sprinkler heads, which can impair sprinkler head performance. During routine inspections, special attention should be given to sprinkler heads subject to aggressive atmospheres (e.g. in galleys and saunas).

5. MARPOL Annex I (Oil)

- 5.1. Compliance with Annex I of the International Convention on the Prevention of Pollution from Ships 1973, as amended (MARPOL) is one the most common items subject to inspection on any PSC inspection.
- 5.2. The most common deficiencies related to MARPOL Annex I are where members of the engine room crew are unable to demonstrate the following to the PSC Officer (PSCO):
 - i. Correct operation of the OWS;
 - ii. How to conduct the 15ppm oil content monitor function test;
 - iii. Effective OWS operation when taking suction from respective bilge holding tank;
 - iv. OWS being unable to produce an effluent with oil content below 15ppm after test.
- 5.3. On several occasions PSC deficiencies have been raised relating to calculation of OWS pumping rate in the Oil Record Book Part I (ORB) Code D15.4 entries. The net discharge rate should not be greater than the maximum approved OWS discharge rate as stated within the International Oil Pollution Prevention Certificate (Form A or Form B) or on the type approval certificate for the OWS. If the discharge rate is greater than the maximum approved OWS discharge rate, the OWS may not be operating correctly.
- 5.4. Similar caution should be exercised when determining actual oil residue quantity disposed of by incineration and where the OWS and the incinerator have flowmeters installed to indicate the quantity of oil residues being disposed of.
- 5.5. Deficiencies indicated in 5.2 and 5.3 above may be indicative of failings in the effectiveness or implementation of the company's Safety Management System, which could warrant detention of the ship and to a request for additional external audits by PSC prior to the ship being allowed to depart port.
- 5.6. The BMA recommends that the following steps be considered by the company to enhance engine room crew members' awareness of OWS and 15ppm oil content monitor operations and the ORB procedures:
 - i. Produce a set of clear instructions for Chief Engineers and other Engineering Officers with regards to correct and consistent entries in Oil Record Book;
 - ii. Produce a ship-specific set of instructions addressing correct OWS operation and include same within the on-board training program for all engine room crew;
 - iii. Include bilge holding tank internal inspection and cleaning, where necessary, in the ship's planned maintenance system;
 - iv. Include OWS and 15ppm oil content monitor operational tests in the ship's planned maintenance system. Should such tests be unsuccessful, the BMA and ships Classification Society should be informed immediately so that suitable short-term arrangements can be put in place, in order to mitigate potential PSC sanctions.

- 5.7. Companies and Masters are reminded that, as per the requirements of Regulation 6.4.3 of MARPOL Annex I, should any defect be discovered which substantially affects the efficiency or completeness of the ship's equipment covered by MARPOL Annex I, the master or owner shall report the nature of the defect to :
- i. The BMA;
 - ii. The ship's Classification Society;
 - iii. The appropriate authorities of the port state of any port the ship may be calling.

