

## PIRFO Draft Competency Standards

<b>NEW PIRFO 3 - 8.01</b>	<b>Demonstrate the ability to monitor and report on vessel performance in terms of the basic requirements of the International Convention on Protection of Pollution from Ships (MARPOL)</b>
<p><b>Prerequisites:</b></p> <p><b>Descriptor</b></p> <p>This module requires candidates to demonstrate basic knowledge of the international procedures for the disposal of waste at sea and the environmental management obligations of vessels as provided for in the MARPOL convention.</p>	
<b>Learning Outcome</b>	<b>Assessment Criteria</b>
<b>1. Procedures for the disposal of organic and inorganic waste at sea</b>	<p>1.1 Describe the effects arising from operational or accidental pollution of the marine environment on birds, mammals and fish</p> <p>1.2 Describe MARPOL requirements for the disposal of waste from vessels regarding:</p> <ul style="list-style-type: none"> <li>• plastics</li> <li>• packing and packaging materials</li> <li>• garbage</li> <li>• food scraps</li> </ul>
<b>2. Procedures for the disposal of oil and oily substances and managing the risks of a spill during refuelling</b>	<p>2.1 MARPOL requirements for the disposal of oil and oily substances from vessels are discussed</p> <p>2.2 Basic procedures to reduce environmental risks during fuelling of vessels are described</p>
<b>3. Monitor and report vessel performance in accordance with MARPOL obligations</b>	<p>5.1 The role of a fisheries observer in monitoring performance as required by MARPOL is understood</p> <p>5.2 The process for reporting pollution incidents is outlined</p>

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### Evidence and Assessment Guide

#### Context and Method of assessment

Assessment is to be conducted in a classroom or as part of a practical vessel based assignment. The following assessment methods are suggested:

- Written or oral short answer testing
- Practical exercises
- Participation in practical demonstration.

Resources for assessment may include:

- Simulations, videos, DVDs, and audio/visual aids
- On vessel practical exercises
- Appropriate observer reporting forms
- Three written scenarios outlining pollution events

#### Underpinning knowledge

The essential knowledge and understanding a person needed in relation to this module relates to the appropriate procedures for disposing of all forms of waste at sea from vessels. Candidates should be able to demonstrate an awareness of MARPOL as an international convention under the United Nations and the International Maritime Organisation.

MARPOL basic requirements for the disposal of organic, inorganic and plastic waste from a vessel should outlined along with requirements for the disposal of oil and oily substances.

Observers should be aware of the basic procedures to manage the risk of spills during fuelling.

Observers should be aware of their monitoring role in relation to MARPOL, and be able to complete the template or templates used to report incidents of pollution.

- Candidates should not be expected to have a comprehensive knowledge of the codes of the Convention but they must be able to clearly state where information to obtain verification of MARPOL codes can be obtained. They must also be able to demonstrate an ability to complete documentation associated with a MARPOL non-compliance event and have:
- An awareness of the sources of information that is required to complete the template for MARPOL non –compliance template. Currently (2009) this is known as GEN 6.
- An appreciation of the potential sensitivity of information that is collected and reported
- A clear grasp of the importance of accuracy in all aspects of collecting and documenting data

Learning Outcome	Assessment Criteria
<b>1. Procedures for the disposal of organic and inorganic waste at sea</b>	<p>1.1 Describe the effects arising from operational or accidental pollution of the marine environment on birds, mammals and fish:</p> <ul style="list-style-type: none"> <li>• Degradation of the ecosystem</li> <li>• Death or injury of birds, mammals, and fish</li> </ul> <p>1.2 No plastics dumped anywhere                      No cargo packing materials within 25 miles of land                      No discharge of unprocessed garbage within 12 nautical miles of land                      No discharge of processed food scraps within 3 nautical miles of land</p>

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<p><b>2. Procedures for the disposal of oil and oily substances and managing the risks of a spill during refuelling</b></p>	<p>Candidates do not need to cite the specifics of MARPOL oil and oily substance disposal. However, it is important that candidates are able to demonstrate that they can source information to obtain the specifics of the convention in relation to correct procedures for disposal.</p> <p>Refuelling procedures: Six form:</p> <ul style="list-style-type: none"> <li>• No smoking signs</li> <li>• Scuppers are blocked</li> <li>• Vents are monitored</li> <li>• Tanks are monitored</li> <li>• Communications tested</li> <li>• Valves checked</li> <li>• Pressure valves operative</li> <li>• Tank level gauges are checked and soundings taken</li> <li>• Emergency stop procedures are agreed to</li> </ul>
<p><b>3. Monitor and report vessel performance in accordance with MARPOL obligations</b></p>	<p>The role of a fisheries observer in monitoring performance under MARPOL is outlined, and the sensitivities surrounding the report of a pollution incident are understood.</p> <p>Candidates must be able to complete the form used to record pollution incidents and fuel transfers (currently GEN 6) to a minimum level of accuracy of 75%</p>
<p><b>Practical skills</b></p> <p>The essential skills a person needs to perform work to the required standard include:</p> <p>Literacy skills used for:</p> <ul style="list-style-type: none"> <li>• reading</li> <li>• obtaining more detailed knowledge</li> <li>• writing observations</li> <li>• documenting incidents</li> <li>•</li> </ul>	
<p><b>Critical aspects of evidence</b></p> <p>Assessment must confirm the ability to recognise and document MARPOL non-compliance events using the appropriate form for the purpose.</p>	