Protect ships from Tsunami

- Probability of a large, M8-M9 class earthquake occurring within 30 years is appx. 70%.
- A large tsunami may arrive at a short notice on several fronts in Japan.

To decide on evacuation actions quickly, it is important to make Ship’s Tsunami evacuation manual & Response against Tsunami Checklist in advance.

### Response against Tsunami Checklist

Format of the "Ship’s Tsunami Evacuation Manual" with one sheet (front/back) for 3 important steps on tsunami evacuation measures

1. **Basic items to be filled in advance**
2. **Information to be confirmed when earthquake / tsunami occurs**
3. **Checklist for tsunami evacuation measures**

#### Website

Guidance and Formats in English, Chinese, Korean, Russian and Spanish are available on our website.


Safety Policy Division, Maritime Bureau, MLIT, Japan
### Response against Tsunami Checklist

**Port and Ship Information**
- Port: Inbound / Outbound
- Berth: Seismic design / Non-seismic design
- Ship name: Gross Tonnage: Crew: Cargo:

**Basic Information**
- Safe water area: From ( ), ( ) m Water depth: m
- Location: Latitude: Longitude: Distance from berth to safe water area: nm
- Time to arrive safe water area: minutes
- Place of evacuation area on land: Handling support: Tug (Yes • No)

**Contact Point**
- Agent: Operating company:
- Stevedore: Harbor Master:
- Liner: Japan Coast Guard:
- Tug Company: Other:

**Response against Tsunami (Basic Policy)**

<table>
<thead>
<tr>
<th>Warning level</th>
<th>Tsunami height</th>
<th>On berthing</th>
<th>On anchoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Tsunami warning</td>
<td>More than 3m</td>
<td>Within ~ minutes</td>
<td>More than ~ minutes</td>
</tr>
<tr>
<td>Tsunami warning</td>
<td>1~3m</td>
<td>Within ~ minutes</td>
<td>More than ~ minutes</td>
</tr>
<tr>
<td>Tsunami advisory</td>
<td>Less than 1m</td>
<td>Within ~ minutes</td>
<td>More than ~ minutes</td>
</tr>
</tbody>
</table>

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**Earthquake Information (Date - )**

<table>
<thead>
<tr>
<th>Time</th>
<th>Scale</th>
<th>Place</th>
<th>Seismic Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>h</td>
<td>M</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tsunami Information**
- Time to arrival of Tsunami m
- Anticipated height m

**Captain Judgement**
- Emergency departure
- Stay alongside
- Evacuation to the land

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### Basic Response List

**Emergency departure**
- Interruption of cargo work (minutes)
- Crew readiness (minutes)
- Standby for departure (Engine and Thruster if provided) (minutes)
- Consider support (Tug, handler and Mooring crew are necessary or not) (minutes)
- Confirm store landing facilities (Crane, Loading Arm, Bellows Chute, etc...) available (minutes)
- Check the suitability of the departure route (Proximity of hazards and other vessels in way of departure route) (minutes)
- Unmooring or cutting lines (minutes)
- Give notice to the shore (relevant departments or the operating company), after departure (minutes)

**Staying alongside**
- Crew readiness (minutes)
- Tending mooring lines / Tightening brakes of mooring winches (minutes)
- Standby anchor (minutes)
- Standby engine and thruster if provided (To avoid damaging of lines, Surging) (minutes)
- Discuss or instruct for the interruption of Cargo work, etc... (minutes)
- Check watertight measures (close all the watertight doors /openings, etc...) (minutes)
- Give notice to the shore (relevant departments or the operating company) (minutes)
- Check the ways to obtain the latest information (minutes)
  - (Preparing vessel on the advice or the indication from Harbor Master/ Harbor administrator, etc...)
  - (Check the safe water area in advance for the emergency departure)
  - (Check the safe area, the evacuation route for evacuation to the land)

**Evacuation to the land**
- Crew readiness (minutes)
- Check the safe area, the evacuation route, the required time to evacuate etc... (minutes)
- Instruct crew to evacuate to land (minutes)
- Carry out the required work on board till Evacuation to the land (minutes)
  - (Disengaging the connections such as loading facilities between the ship and the land)

**Attention in case of drifting**

When the ship drifts from berth, the mooring may break, and cargo handling facilities, such as cranes etc. may collapsed, therefore crew shall evacuate to the safe area.