JURONG ISLAND, VLCC JETTIES (OVL)

<table>
<thead>
<tr>
<th>JETTY</th>
<th>DEPTH A/S (m)</th>
<th>APPROACH DEPTH (m)</th>
<th>MAX. LOA(m)</th>
<th>MIN. LOA(m)</th>
<th>MAX DISPL (tons)</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVL1</td>
<td>24.2</td>
<td>22.5</td>
<td>353</td>
<td>232</td>
<td>387,000</td>
<td>NA</td>
</tr>
<tr>
<td>OVL2</td>
<td>24.5</td>
<td>22.5</td>
<td>353</td>
<td>232</td>
<td>387,000</td>
<td>Shallower depths of 21.9m exist NE of OVL2</td>
</tr>
</tbody>
</table>

GENERAL INFORMATION

1. These guidelines apply to all tankers berthing at OVL1 and OVL2.

2. Tug requirements
   (a) At least 4 big tugs should be deployed to assist VLCCs berthing and unberthing from OVL1 and 2. For VLCCs with a draft of 17m or more, all 4 tugs should have a bollard pull of at least 45 tons each.
   (b) For vessels from 250m to 280m LOA, when swinging is required, 4 big tugs should be deployed during berthing and unberthing as follows:
      (i) Draft 15 m to < 17m ~ at least one of the tugs at the bow and at the stern should have a bollard pull of not less than 45 tons.
      (ii) Draft ≥ 17m ~ all 4 tugs should have a bollard pull of at least 45 tons each.
   (c) All tugs deployed to assist a vessel with draft of 17m or more in berthing or unberthing are required to have a backup towline for emergency purposes.

3. Communications
   (a) OVL1: Pilot Walkie Talkie channel - P06
       : Operation room number: +65-6795 3090
   (b) OVL2: Pilot Walkie Talkie channel - P02
       : Operation room number: +65 6686 4076/9236 2530

PILOTAGE GUIDELINES

1. Berthing (Day and Night)
   a) Flood Tide
      Tidal strength ≤1.5 knots - No restriction
Tidal strength >1.5 knots to 2.0 knots - Draft restricted to < 17m
Tidal strength >2.0 knots - No berthing

b) **Ebb Tide**

Tidal strength ≤ 1.0 knot - No restriction
Tidal strength >1.0 knot to 1.5 knots - Draft restricted to < 17m
Tidal strength >1.5 knots - No berthing

2. **Unberthing (Day and Night)**

**Flood & Ebb Tides**

Tidal strength <1.5 knots - No restriction
Tidal strength >1.5 knots to 2.0 knots - Draft restricted to < 17m
Tidal strength >2.0 knots - No unberthing

**TUG ASSIGNMENT GUIDELINES**

**TUG RECOMMENDATION FOR BERTHING AND UNBERTHING @: OVL1 and OVL2.**

<table>
<thead>
<tr>
<th>LENGTH OVERALL OF VESSEL (LOA)</th>
<th>NUMBER OF TUGS</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>232 to 280 metres</td>
<td>2 big tugs</td>
<td>Pilot, in consultation with the master, may order an additional tug from the tug company nominated by the ship's agent</td>
</tr>
<tr>
<td>&gt; 280 metres or GT &gt; 75,000 with Draft &lt; 17 metres</td>
<td>4 big tugs</td>
<td></td>
</tr>
<tr>
<td>&gt; 280 metres or GT &gt; 75,000 with Draft ≥17 metres</td>
<td>(i) 4 big tugs (ii) Each with a minimum bollard pull of at least 45 tons each (iii) All tugs deployed to assist a vessel with draft of 17m or more in berthing or unberthing are required to have a backup towline for emergency purposes</td>
<td></td>
</tr>
</tbody>
</table>