JURONG ISLAND, HORIZON BANYAN TERMINAL(S) PTE LTD - OBH

<table>
<thead>
<tr>
<th>JETTY</th>
<th>DEPTH A/S (m)</th>
<th>APPROACH DEPTH (m)</th>
<th>MAX LOA (m)</th>
<th>MAX DISPL. (Tons)</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBH1</td>
<td>16.8</td>
<td>16.2</td>
<td>336</td>
<td>275,000</td>
<td></td>
</tr>
<tr>
<td>OBH2</td>
<td>15.4</td>
<td></td>
<td>260</td>
<td>150,000</td>
<td></td>
</tr>
<tr>
<td>OBH3</td>
<td>15.6</td>
<td></td>
<td>200</td>
<td>66,000</td>
<td></td>
</tr>
<tr>
<td>OBH4</td>
<td>15.6</td>
<td></td>
<td>200</td>
<td>66,000</td>
<td></td>
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</tbody>
</table>

**GENERAL INFORMATION**

1. No berthing for vessels above maximum displacement.

2. Berth 1 (OBH1) is located in tidal water (Outer Banyan Basin).

3. Approaches to the Banyan Basin entrance is affected by cross current and tidal restriction apply – see Pilotage guidelines below.

4. During the approach to the entrance of Banyan Basin, it is prudent to stem the prevailing current particularly when the tidal stream exceeds 1 knot in the Sinki Fairway prior entering the Banyan Basin.

5. Communication: Pilot Walkie Talkie channel - P07
   : Operation room number - +65-6303-8222/3/5

6. Tugs requirement:
   
a) If vessel’s LOA >250 metres and draft > 14.0 metres, 3 tugs are to be assigned.

b) VLCC with draft >15m or GT >100,000, 4 tugs to assist for berthing or unberthing operation.

c) VLCC when transiting the channel shall have two tugs to escort.
PILOTAGE GUIDELINES

1 BERTHING (Day and Night)

Flood and Ebb Tide

a) Tidal strength ≤0.5 kts

Day: No restriction

Night: No restriction

b) Tidal strength >0.5 to <1.0 kts

Day: No restriction

Night: Draft <15.0 metres or GT <100,000T: No restriction

Draft ≥15 metres: No berthing if LOA ≥ 270 metres

c) Tidal strength >1.0 kts to <1.5 kts

Day: Draft <12.5 metres: No restriction

Draft ≥12.5 metres: No berthing if LOA ≥250 metres.

Night: Draft <12.0 metres: No restriction

Draft ≥12.0 metres: No berthing if LOA ≥230 metres.

GT ≥100,000: No berthing

d) Tidal strength >1.5 kts to <2.5 kts

Day: Draft <11.0 metres: No restriction

Draft ≥11.0 metres: No Berthing if LOA ≥240 metres

Draft ≥12.5 metres: No Berthing if LOA ≥200 metres

GT ≥100,000T: No berthing

Night: Draft <11.0 metres: No restriction

Draft ≥11.0 metres: No berthing if LOA ≥230 metres

Draft ≥12.5 metres: No berthing if LOA ≥180 metres

GT ≥100,000T: No berthing

e) Tidal strength > 2.5 kts

Day: Draft <10.0 metres: No restriction

Draft ≥10.0 metres: No Berthing if LOA ≥220 metres

Draft ≥11.0 metres: No Berthing if LOA ≥ 200 metres
GT $\geq 100,000$: No berthing

Night: Draft $< 10.0$ metres: No restriction
      Draft $\geq 10.0$ metres: No berthing if LOA $\geq 200$ metres
      Draft $\geq 11.0$ metres: No berthing if LOA $\geq 180$ metres
      GT $\geq 100,000$: No berthing

2 UNBERTHING (Day and Night)

Flood and Ebb tide

a) Tidal strength $\leq 0.5$ kts

   Day: No restriction
   Night: No restriction

b) Tidal strength $> 0.5$ kts to $< 1.5$ kts

   Day: No restriction
   Night: Draft $< 14.0$ metres: No restriction
          Draft $\geq 14.0$ metres: No unberthing if LOA $\geq 240$ metres

c) Tidal strength $> 1.5$ kts to $< 2.5$ kts

   Day: No restriction
   Night: Draft $< 13.0$ metres: No restriction
          Draft $\geq 13.0$ metres: No unberthing if LOA $\geq 240$ metres
          GT $\geq 100,000$: No unberthing

d) Tidal strength $> 2.5$ kts

   Day: No restriction
   GT $\geq 100,000$: No unberthing
   Night: Draft $< 12.0$ metres: No restriction
          Draft $\geq 12.0$ metres: No unberthing if LOA $\geq 240$ metres
          GT $\geq 100,000$: No unberthing

*Note: The Jetty is located in slack water. The above tidal restrictions are meant for the approach to Banyan basin entrance.
### TUG ASSIGNMENT GUIDELINES

**TUG RECOMMENDATION FOR BERTHING AND UNBERTHING @: OBH1, OBH2, OBH3 and OBH4.**

<table>
<thead>
<tr>
<th>LENGTH OVERALL OF VESSEL (LOA)</th>
<th>NUMBER OF TUGS</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 70 metres</td>
<td>Pilot, in consultation with the master, may order a tug from the tug company nominated by the ship’s agent</td>
<td></td>
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<tr>
<td>71 to 122 metres</td>
<td>1 small tug</td>
<td>A vessel equipped with a suitable bow/stern thruster(s), in good working condition, may dispense with the need for a tug in that position.</td>
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<tr>
<td>123 to 152 metres</td>
<td>2 small tugs</td>
<td></td>
</tr>
<tr>
<td>153 to 180 metres</td>
<td>2 medium tugs</td>
<td></td>
</tr>
<tr>
<td>181 to 250 metres</td>
<td>2 big tugs</td>
<td></td>
</tr>
<tr>
<td>251 metres and above with draft &gt; 14 metres</td>
<td>3 big tugs</td>
<td></td>
</tr>
<tr>
<td>251 metres and above with GT &gt; 75,000</td>
<td>4 big tugs</td>
<td></td>
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</tbody>
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