JURONG ISLAND - BANYAN BASIN
VOPAK TERMINALS SINGAPORE PTE LTD (OBV)

<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>OBV1</td>
<td>16.5</td>
<td></td>
<td>260</td>
<td>144,000</td>
<td></td>
</tr>
<tr>
<td>OBV2</td>
<td>16.8</td>
<td>16.2</td>
<td>260</td>
<td>144,000</td>
<td></td>
</tr>
<tr>
<td>OBV3</td>
<td>11.5</td>
<td></td>
<td>170</td>
<td>31,350</td>
<td></td>
</tr>
<tr>
<td>OBV4</td>
<td>15.8</td>
<td></td>
<td>185</td>
<td>61,550</td>
<td></td>
</tr>
<tr>
<td>OBV5</td>
<td>15.2</td>
<td></td>
<td>235</td>
<td>96,000</td>
<td></td>
</tr>
<tr>
<td>OBV6</td>
<td>16.2</td>
<td></td>
<td>235</td>
<td>96,000</td>
<td></td>
</tr>
<tr>
<td>OBV7</td>
<td>15.3</td>
<td></td>
<td>235</td>
<td>96,000</td>
<td></td>
</tr>
</tbody>
</table>

GENERAL INFORMATION

1. No berthing for vessels above maximum displacement
2. Berth located in slack water (Inner Banyan Basin) – no restriction to berthing side.
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 – P03
   : Operation room number: +65-6896-7300/7301
6. Berth Box:
   Jetty 1: 291 metres
   Jetty 2: 291 metres
   Jetty 3: 187 metres
   Caution: Shallow water exists beyond the berth box of OBV1, OBV2 and OBV3 toward the shore side.
7. If vessel’s LOA >250 metres and draft > 14.0 metres, 3 tugs are to be assigned.
   For vessel with GT > 75,000 tonnes, 4 tugs are to be assigned.

PILOTAGE GUIDELINES

1. BERTHING (Day and Night)
   Flood and Ebb Tide
a) **Tidal strength < 1.0 kts**

Day: No restriction

Night: No restriction

b) **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.

c) **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

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

d) **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

Night: Draft <10.0 metres: No restriction
Draft ≥10.0 metres: No berthing if LOA ≥200 metres
Draft ≥11.0 metres: No berthing if LOA ≥180 metres

2 **UNBERTHING (Day and Night)**

**Flood and Ebb tide**

a) **Tidal strength <1.5 kts**

Day: No restriction

Night: Draft <14.0 metres: No restriction
Draft ≥14.0 metres: No unberthing if LOA ≥240 metres

b) **Tidal strength >1.5 kts to <2.5 kts**

Day: No restriction

Night: Draft <13.0 metres: No restriction
Draft ≥13.0 metres: No Unberthing if LOA ≥240 metres

c) Tidal strength >2.5 kts

Day: No restriction

Night: Draft <12.0 metres: No restriction
Draft ≥12.0 metres: No unberthing if LOA ≥ 240 metres

*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 @: OBV1, OBV2, OBV3, OBV4, OBV5, OBV6 and OBV7

<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>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>
</tr>
<tr>
<td>71 to 122 metres</td>
<td>1 small tug</td>
<td></td>
</tr>
<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;14.0m</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>
</tr>
</tbody>
</table>
CHARTLET

Chartlet for illustration purposes only, not to be used for navigation. For navigation, mariners are advised to use the appropriate BA nautical charts.