**PULAU BUSING - TANKSTORE PTE LTD (OTS)**

<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. (tonnes)</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTS1</td>
<td>16.9</td>
<td>{17.8 from West }{Selat Sinki} {16.6m from East }{Jong Fairway}</td>
<td>360</td>
<td>276,710</td>
<td>Shallow depths of 16.2m, 14.9m exist West of berth.</td>
</tr>
<tr>
<td>OTS2</td>
<td>17.0</td>
<td>7.0 (130 South of berth)</td>
<td>312</td>
<td>224,475</td>
<td></td>
</tr>
<tr>
<td>OTS3</td>
<td>15.0</td>
<td>7.0 (230 South of berth)</td>
<td>102</td>
<td>17,455</td>
<td></td>
</tr>
<tr>
<td>OTS4</td>
<td>12.5</td>
<td>7.0 (230 South of berth)</td>
<td>126</td>
<td>17,455</td>
<td></td>
</tr>
<tr>
<td>OTS5</td>
<td>14.7</td>
<td>{15.3 m from West }{Selat Sinki}</td>
<td>280</td>
<td>292,940</td>
<td>See Note 5</td>
</tr>
<tr>
<td>OTS5E&amp;W</td>
<td>14.7</td>
<td>{15.3 m from East }{Jong Fairway}</td>
<td>140</td>
<td>163,150</td>
<td>See Note 5</td>
</tr>
<tr>
<td>OTS6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>For waterboat</td>
</tr>
<tr>
<td>OTS6W</td>
<td>7.0</td>
<td>8.0</td>
<td>120</td>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td>OTS6E</td>
<td>10.7</td>
<td>8.0</td>
<td>120</td>
<td>15,500</td>
<td></td>
</tr>
<tr>
<td>OTS7</td>
<td>15.3</td>
<td>15.3m from west 15.3m from east</td>
<td>280</td>
<td>156,000</td>
<td>See Note 5</td>
</tr>
<tr>
<td>OTS8</td>
<td>17.1</td>
<td>16.1 m from west 15.3 m from east</td>
<td>280</td>
<td>156,000</td>
<td>See Note 5</td>
</tr>
<tr>
<td>OTS9</td>
<td>18.1</td>
<td>16.1 m from west 15.3 m from east</td>
<td>200</td>
<td>65,000</td>
<td>See Note 5 &amp; 6</td>
</tr>
<tr>
<td>OTS10</td>
<td>16.2</td>
<td>16.1 m from west 15.3 m from east</td>
<td>185</td>
<td>61,500</td>
<td>See Note 5 Inner Berth (daylight movements only)</td>
</tr>
</tbody>
</table>
GENERAL INFORMATION

1. Controlling depth of the channel is 17.8m and is marked by 4 buoys i.e. Sinki, Pempang, Butir and Busong.
2. For berthing of vessels with draft >14.0m, 3 big tugs are recommended.
3. For berthing, one mooring boat will be provided for vessels with LOA ≤200m and 2 mooring boats for vessels with LOA >200m.
4. Please note the existence of the Shell (Bukom/Pandan) pipeline located east of jetty OTS2.
5. Please note the existence of pipelines located west of jetties OTS9 & 10.
6. The minimum separation distance between vessels at jetties OTS5, 7, 8 & 9 is not to be less than 50m at all times.
7. Pilot and terminal’s walkie-talkie operating channel: 5

PILOTAGE GUIDELINES

1. BERTHING & UNBERTHING (DAY & NIGHT)
   a) Flood & Ebb Tide
      OTS 1 & 2 - VLCC (LOA >280m or >75,000GT)
      i) vessel to stem the tidal stream and tidal strength <2.0kt
      ii) 4 big tugs to assist with bollard pull of at least 45 tons each and have backup towline for emergency purpose.
      iii) no movement in Jong Fairway during hours of darkness
   
   2. BERTHING (DAY & NIGHT)
      b) Flood Tide
      OTS1, 2, 4, 5, 5E&W, 7, 8 & 9
      From East
      LOA ≤260m Draft ≤14.0m No restriction
      Draft >14.0m Tidal strength ≤1.0kt
      LOA >260m to ≤280m Draft ≤12.0m Tidal strength ≤ 1.0kt
      Draft >12.0m Tidal strength ≤ 0.5kt
      From West
      LOA ≤260m No restriction
      LOA >260m to ≤280m Draft ≤14.0m No restriction
      Draft >14.0m Tidal strength ≤1.0kt
OTS3, 6E, 6W & 10  Tidal strength ≤1.0k

b) **Ebb Tide**

OTS1 to 9

**From West**

- LOA ≤260m  
  Draft ≤14.0m No restriction  
  Draft >14.0m Tidal strength ≤1.0kt

- LOA >260m to ≤280m  
  Draft ≤12.0m Tidal strength ≤1.0kt  
  Draft >12.0m Tidal strength <0.5kt

**From East**

- LOA ≤260m  
  No restriction

- LOA >260m to ≤280m  
  Draft ≤14.0m No restriction  
  Draft >14.0m Tidal strength ≤1.0kt

OTS10  Tidal strength ≤1.0k

3  **UNBERTHING (DAY AND NIGHT)**

a) **Flood Tide** (Port A/S)

OTS1 to 10

- LOA ≤260m  
  Draft ≤12.0m No restriction  
  Draft >12.0m Tidal strength ≤1.0kt

- LOA >260m to ≤280m  
  Tidal strength ≤0.5kt

b) **Flood Tide** (Starboard A/S)

OTS1, 2, 4, 5, 6E, 6W, 5E, 5W, 7, 8 & 10

**Out East**  No restriction

**Out West**

- LOA ≤260m  
  Draft ≤14.0m No restriction  
  Draft >14.0m Tidal strength ≤1.0kt

- LOA >260m to ≤280m  
  Draft ≤12.0m Tidal strength ≤1.0kt  
  Draft >12.0m Tidal strength ≤0.5kt

OTS3  No unberthing if OTS6 is occupied
c) **Ebb Tide** (Port A/S)

**OTS1 to 10**

**Out West**

- No restriction

**Out East**

- **LOA ≤ 260m**
  - Draft ≤ 14.0m: No restriction
  - Draft > 14.0m: Tidal strength ≤ 1.0kt

- **LOA > 260m**
  - Draft ≤ 12.0m: Tidal strength ≤ 1.0kt
  - Draft > 12.0m: Tidal strength ≤ 0.5kt


d) **Ebb Tide** (Starboard A/S)

**OTS1 to 10**

- **LOA ≤ 260m**
  - Draft ≤ 12.0m: No restriction
  - Draft > 12.0m: Tidal strength ≤ 1.0kt

- **LOA > 260m to < 280m**
  - Tidal strength ≤ 0.5kt

**TUGS ASSIGNMENT GUIDELINES**

Tug Recommendation For Berthing And Unberthing @: Berth 1, 2, 5, 5E&W, 7, 8 & 9.

<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>
</tr>
<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>
</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 220 metres</td>
<td>2 big tugs</td>
<td></td>
</tr>
<tr>
<td>221 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>281 metres and above</td>
<td>4 big tugs</td>
<td></td>
</tr>
</tbody>
</table>
Tug Recommendation For Berthing And Unberthing @: Berth 3, 4, 6, 6E&W & 10.

<table>
<thead>
<tr>
<th>LENGTH OVERALL OF VESSEL (LOA)</th>
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<th>REMARKS</th>
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<tr>
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<td>1 small tug</td>
<td></td>
</tr>
<tr>
<td>71 to 140 metres</td>
<td>2 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>
</tr>
<tr>
<td>141 metres and above</td>
<td>2 medium tugs</td>
<td></td>
</tr>
</tbody>
</table>