## PULAU SEBAROK - VOPAK TERMINAL (OSV)

<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>OSV2</td>
<td>11.7</td>
<td>16.6</td>
<td>264</td>
<td>45,800</td>
<td></td>
</tr>
<tr>
<td>OSV3</td>
<td>16.9</td>
<td>16.6</td>
<td>370</td>
<td>210,000</td>
<td>see para. 3 under General Information</td>
</tr>
<tr>
<td>OSV4</td>
<td>12.9</td>
<td>16.6</td>
<td>250</td>
<td>80,000</td>
<td>11.5m patch located 50m SE of southern most dolphin</td>
</tr>
<tr>
<td>OSV5</td>
<td>17.6</td>
<td>17.0</td>
<td>280</td>
<td>106,000</td>
<td>See General Information</td>
</tr>
<tr>
<td>OSV6</td>
<td>10.3</td>
<td>7.6</td>
<td>116</td>
<td>13,000</td>
<td></td>
</tr>
<tr>
<td>OSV7</td>
<td>10.1</td>
<td>7.6</td>
<td>110</td>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td>OSV8</td>
<td>17.0</td>
<td>17.0</td>
<td>280</td>
<td>210,000</td>
<td>See General Information</td>
</tr>
<tr>
<td>OSV9</td>
<td>17.0</td>
<td>11.1</td>
<td>145</td>
<td>19,500</td>
<td></td>
</tr>
<tr>
<td>OSV10</td>
<td>11.7</td>
<td>10.0</td>
<td>145</td>
<td>19,500</td>
<td></td>
</tr>
</tbody>
</table>

### GENERAL INFORMATION

1. No berthing of vessels above the maximum displacement.

2. Berthing of VLCC to be carried out only during daylight and on slack tide.

3. **OSV3**

   A 12.0m patch is located 14m off the northernmost mooring dolphin. An additional tug may be considered when berthing deep draft vessels.

4. **OSV5**

   a) The tidal predictions are based on Gusong Beacon Tidal Predictions.

   b) Vessels should keep clear of the SBM mooring area (SBM buoy and floating hoses).

5. **OSV8**

   a) Shallow waters of depths 11.1m lie 100m west of the transit of W. Jambi Beacon and the yellow dolphin marker at the western end of berth 9.

   b) For berthing on a flood, it is recommended to turn and stem the flood tide off OSV5 first then followed by backing in to berth at OSV8

Revised: 01 Jun 2016
Note: Anchoring in the area is prohibited due to the Shell SBM pipeline.

6. OSV6 and 7
   a) Generally during the beginning of the flood stream at Gusong Station, the tidal stream at jetty flows in a 345°T direction.
   b) A counter tidal stream occurs and flows in the opposite direction (-165°T) at around the time of the maximum flood prediction at Gusong.
   c) The tidal stream would continue in the direction of 165°T till the time of the maximum ebb (Gusong Prediction) when it would reverse its direction and flow in a direction of 345°T right through the next flood.
   d) The recommended approach to and from the jetty is via the channel south of Sebarok Beacon.

7. Pilot walkie talkie channel – 05
   Terminal contact number: OSV2-8(Vopak)  +65-9127 3169
                                    +65-9126-7210
                                    OSV2(SPC)  +65-6272 0611
                                    OSV2(Clean sea)  +65-9828 0538

PILOTAGE GUIDELINES

1. BERTHING (DAY)
   a) Flood Tide
      (i) OSV3, 4, 6, 7, 9 & 10
          No restriction
      (ii) OSV5
           LOA ≤210m - No restriction
           LOA >210 to 260m - Tidal strength ≤2.0 kt
           LOA >260m - Tidal strength ≤1.0kt
      (iii) OSV8
            LOA ≤210m - No restriction
            LOA >210 to 260m - Tidal strength ≤1.5 kt
            LOA >260m - Tidal strength ≤1.0kt

   b) Ebb Tide
      (i) OSV3, 4, 6, 7, 9 & 10
          When no counter current exist - No restriction
          When counter current exist - Vessel’s displ. to be ≤40,000GT
      (ii) OSV5
           No restriction
2. UNBERTHING (DAY)

a) Flood Tide

(i) **OSV3, 4, 6, 7, 9 & 10**
   No restriction

(ii) **OSV 5 & OSV 8**
   Stbd side a/s:
   LOA <210m - No restriction
   LOA >210 to 260m draft <11.6m - Tidal strength ≤1.5kt
   LOA >210m to 260m draft >11.6m - Tidal strength ≤1.0kt
   LOA >260m - Tidal strength ≤0.5kt

   Port side a/s - No restriction

b) Ebb Tide

(i) **OSV3, 4, 6, 7, 9 & 10**
   No restriction

(ii) **OSV 5 & OSV 8**
   Stbd side a/s - No restriction

   Port side a/s:
   LOA <210m - No restriction
   LOA >210 to 260m draft <11.6m - Tidal strength ≤1.5kt
   LOA >210m to 260m draft >11.6m - Tidal strength ≤1.0kt
   LOA >260m - Tidal strength ≤0.5kt

3. BERTHING (NIGHT)

a) Flood Tide

(i) **OSV3 & 4**
   Tidal strength ≤1.0 kt - No restriction
   Tidal strength >1.0 kt - Vessel’s displ. to be ≤50,000 GT

(ii) **OSV5**
   LOA ≤210m - No restriction
   LOA >210 to 260m - Tidal strength ≤2.0 kt
   LOA >260m - Tidal strength ≤1.0kt

(iii) **OSV6, 7, 9 & 10**
   No restriction
(iv) **OSV8**  
- **LOA <210m** - No restriction  
- **LOA >210 to 260m** - Tidal strength ≤1.5 kt  
- **LOA >260m** - Tidal strength ≤1.0 kt

b) **Ebb Tide**

(i) **OSV3 & 4**  
- When no counter current exist - No restriction  
- When counter current exist - Vessel’s displ. to be ≤ 40,000GT

(ii) **OSV5, 6, 7, 9 & 10**  
No restriction

(iii) **OSV8**  
- **LOA <210m** - No restriction  
- **LOA >210 to 260m** - Tidal strength ≤2.0 kt  
- **LOA >260m** - Tidal strength ≤1.0 kt

4. **UNBERTHING (NIGHT)**

a) **Flood Tide**

(i) **OSV3, 4, 6, 7, 9 & 10**  
No restriction

(ii) **OSV5 & OSV8**  
Stbd side a/s:  
- **LOA <210m** - No restriction  
- **LOA >210 to 260m draft ≤11.6m** - Tidal strength ≤1.5 kt  
- **LOA >210m to 260m draft >11.6m** - Tidal strength ≤1.0 kt  
- **LOA >260m** - Tidal strength ≤0.5 kt

**OSV5**  
Port side a/s - No restriction

b) **Ebb Tide**

(i) **OSV3, 4, 6, 7, 9 & 10**  
No restriction

(ii) **OSV5 & OSV8**  
Stbd side a/s - No restriction

**Port side a/s:**  
- **LOA <210m** - No restriction  
- **LOA >210 to 260m draft ≤11.6m** - Tidal strength ≤1.5 kt  
- **LOA >210m to 260m draft >11.6m** - Tidal strength ≤1.0 kt  
- **LOA >260m** - Tidal strength ≤0.5 kt

Revised: 01 Jun 2016
TUG ASSIGNMENT GUIDELINES

The following guidelines are for assigning tugs to vessels berthing and unberthing at jetties at OSV2 to OSV9:

<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></td>
</tr>
<tr>
<td>123 to 152 metres</td>
<td>2 small tugs</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>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></td>
</tr>
<tr>
<td>281 metres and above</td>
<td>4 big tugs</td>
<td></td>
</tr>
</tbody>
</table>

The following guidelines are for assigning tugs to vessels berthing and unberthing at jetty OSV10:

<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>1 small tug</td>
<td>Pilot, in consultation with the master, may order an additional tug from the tug company nominated by the ship’s agent during strong ebb stream</td>
</tr>
<tr>
<td>71 metres and above</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>
</tbody>
</table>