JURONG ISLAND, PETROCHEMICAL CORPORATION OF S’PORE (OPCS)

<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>OPCS1</td>
<td>1.6</td>
<td>2.5</td>
<td>41</td>
<td></td>
<td>Barge Pier.</td>
</tr>
<tr>
<td>OPCBA</td>
<td>3.0</td>
<td>3.0</td>
<td>100</td>
<td>8,000</td>
<td>Barge Pier. No night movement.</td>
</tr>
<tr>
<td>OPCS 3</td>
<td>10.2</td>
<td>10.0</td>
<td>130</td>
<td>14,000</td>
<td>PCs shall ensure 60m overall clearance between vessels for daylight operations and 100m overall clearance for night operations.</td>
</tr>
<tr>
<td>OPCS 4</td>
<td>11.9</td>
<td>12.0</td>
<td>140</td>
<td>45,760</td>
<td></td>
</tr>
<tr>
<td>OPCS 5</td>
<td>12.1</td>
<td>11.9</td>
<td>140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPCS 6</td>
<td>14.2</td>
<td>14.2</td>
<td>259</td>
<td>145,000</td>
<td></td>
</tr>
</tbody>
</table>

GENERAL INFORMATION

1. No berthing if wind speed > 20 knots.
2. No movement above maximum displacement
3. Tug requirements (for berthing/unberthing):
   - Day/Night - 1 tug for LPG Carriers and Chemical Carriers of LOA ≤ 100m.
   - - 2 tugs for LPG Carriers and Chemical Carriers of LOA > 100m and other types of vessels LOA > 122m.
4. The maximum LOA for vessels berthing at jetty 5 is 140m. This is due to piles supporting the dolphins are inclined and protruding towards the line of jetties.
5. Pilot Walkie-Talkie Channel: P03

PILOTAGE GUIDELINES

1. BERTHING / UNBERTHING (DAY)
   a. OPCS1, OPCS3, OPCS4, OPCS5 and OPCBA
      No restriction.
   b. OPCS6
      Flood Tide
Tidal strength <2.0 knots (Sinki Fairway – BANYAN Prediction)  
- No restriction.

Tidal strength >2.0 knots (Sinki Fairway – BANYAN Prediction)  
- No berthing/unberthing.

**Ebb Tide (Berthing)**

Tidal strength ≤0.5 knots (Sinki Fairway – BANYAN Prediction)  
- No restriction.

Tidal strength >0.5 to 1.5 knots (Sinki Fairway – BANYAN Prediction)  
- LOA ≤ 122m.

Tidal strength >1.5 knots (Sinki Fairway – BANYAN Prediction)  
- No berthing.

**Ebb Tide (Unberthing)**

**Starboard A/S**

Tidal strength >1.0 knots (Sinki Fairway – BANYAN Prediction) and Draft ≥ 12m  
- No unberthing.

Tidal strength >2.0 knots (Sinki Fairway – BANYAN Prediction)  
- No unberthing.

**Port A/S**

Tidal strength ≤0.5 knots (Sinki Fairway – BANYAN Prediction)  
- No restriction.

Tidal strength >0.5 to 1.5 knots (Sinki Fairway – BANYAN Prediction)  
- LOA ≤ 122m.

Tidal strength >1.5 knots (Sinki Fairway – BANYAN Prediction)  
- No unberthing.

2. **BERTHING / UNBERTHING (NIGHT)**

a. **OPCS1 and OPCBA**

   No night movement.

b. **OPCS3 to OPC5**

   i)  LOA ≤ 122m  No restriction.
   ii) LOA > 122m  No berthing/unberthing.
c. OPCS6

Flood Tide

Tidal strength < 2.0 knots (Sinki Fairway – BANYAN Prediction)
- No restriction.

Tidal strength > 2.0 knots (Sinki Fairway – BANYAN Prediction)
- No berthing/unberthing.

Ebb Tide (Berthing)

Tidal strength < 0.5 knots (Sinki Fairway – BANYAN Prediction)
- No restriction.

Tidal strength > 0.5 to 1.5 knots (Sinki Fairway – BANYAN Prediction)
- LOA ≤ 122m.

Tidal strength > 1.5 knots (Sinki Fairway – BANYAN Prediction)
- No berthing.

Ebb Tide (Unberthing)

Starboard A/S

Tidal strength > 1.0 knots (Sinki Fairway – BANYAN Prediction) and Draft > 12m
- No unberthing.

Tidal strength > 2.0 knots (Sinki Fairway – BANYAN Prediction)
- No unberthing.

Port A/S

Tidal strength < 0.5 knots (Sinki Fairway – BANYAN Prediction)
- No restriction.

Tidal strength > 0.5 to 1.5 knots (Sinki Fairway – BANYAN Prediction)
- LOA ≤ 122m.

Tidal strength > 1.5 knots (Sinki Fairway – BANYAN Prediction)
- No unberthing.
**TUGS ASSIGNMENT GUIDELINES**

The following are guidelines for assigning tugs to vessels berthing & unberthing at Jetties 3 to 6

<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 100 metres</td>
<td>1 small tug</td>
<td></td>
</tr>
<tr>
<td>101 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 metres and above</td>
<td>2 big tugs</td>
<td></td>
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</tbody>
</table>

Note: A vessel equipped with a thruster is **NOT** dispensed with the need for a tug in that position.