1. Towage as Pilots advice Verdal harbour

1.1 Tugs

Escort Tractor/Voith schnieder tugs with bollard pull capacity of minimum 25t and conventional tugs minimum 25t. Tugs lines will be used for towing.

1.2 Tug requirement as Pilots advice for berthing and unberthing operations

| Vessel <u>without</u> bowthruster in berthing and unberthing operations, both in loaded and ballast conditions: | | | | | | |
|---|-------------|----------------------------|----------------------------|--|--|--|
| | 130m - 150m | 150m – 160m | 160m – 175m | | | |
| Number of | 1 conv. tug | 1 escort/tractor tug 26t + | 1 escort tug 45t + 1 conv. | | | |
| tugs | | 1 conv. Tug. | tug | | | |

| Vessel fitted with bow thrusters in berthing and unberthing operations, both in loaded and ballast conditions: | | | | | |
|--|-----------------|--------------------------|------------------|--|--|
| | - 150m | 150m – 160m | 160m – 175m | | |
| Number of | No tug required | 1 escort/tractor tug 26t | 1 escort tug 45t | | |
| tugs | | | | | |

| Vessel fitted with bow and stern thrusters in berthing and unberthing operations, both in | | | | |
|---|-----------------|--------------------------|--|--|
| loaded and ballast conditions: | | | | |
| | - 150m | 150m – 175m | | |
| Number of tugs | No tug required | 1 escort/tractor tug 26t | | |

2. Restrictions

2.1 Wind restrictions

No berthing operations will be carried out in wind conditions above 15 m/s, depending on wind direction and vessel size. This may on pilot and terminal managers judgement be evaluated on case-by-case basis.

2.2 Visibility restriction

A general advice of minimum visibility of 0.5 NM will apply for berthing operations for vessels over 150m.

2.3 Other Restrictions

Vessels above 150m, arrival / departure in daylight.

Drafts over 8m departure on rising tide close to high water.

The use of tugs to Pilots advice is built on the limitations and nature of arrival fairway to Verdal harbour area.