Durban dredging problems

N RECENT months a number of incidents have occurred to raise concern among the Durban shipping community about the safety of the port with regard the depth of water in strategic places.

One of these is the entrance channel, where two ships touched bottom while trying to enter port. As both ships had Transnet marine pilots on board and there has been no suggestion of pilot error, it becomes safe to assume there was a problem with the available depth of water at the time, coupled with heavy swells.

In early December the Germanowned container vessel ER Elsfleth of 33 800dwt touched bottom outside the harbour entrance channel just before reaching the shelter of the breakwater. The ship, which is fairly small compared with many other container ships, has a draught of 11.5m when fully loaded. At the time of its approaching the port a strong swell was running, so the assumption is that the ship touched bottom as the swell dropped to its lowest point.

This is an area where white water has been noted breaking in the entrance channel, which old salts will tell you is a sign of shallow water. This is noticeable when a strong swell is running, as it was on the day when ER Elsfleth tried to enter port.

All that Transnet had to say was that the ship "is suspected to have touched bottom".

Fortunately there was no damage and after divers had conducted an inspection the ship was able to

begin discharging and loading containers.

This incident followed that of a potentially more serious one involving the oil tanker Pacific Quarz in October last year. In very similar circumstances the tanker tore a large hole in its bottom hull after also "touching bottom" while trying to enter port. The tanker is double hulled and the gash opened up its water ballast tank, so no oil leaked, otherwise there could have been an environmental catastrophe on Durban's hands.

The implications of these two incidents, as well as several others involving ships within the harbour including one of a container vessel that got stuck on a sandbank for several hours, should be causing alarm bells to be ringing at TNPA's Harbour Master Department, as it suggests that dredging has not been done recently and that outside the port entrance a shoal is forming, while inside sections of the harbour have been silting up.

These are a layman's interpretation of events. It's up to TNPA to disclose the full facts of the matter, but so far none have been given despite being asked. The port doesn't lack the necessary equipment. A few years ago Transnet acquired the trailing suction dredger Isandlwana and has since taken delivery of the grab hopper dredger Italeni while retaining use of another trailing suction dredger, Ingwenya.

The department performs its own hydrographic soundings and is presumably aware of the changing conditions inside and outside the port. The entrance channel when



Isandlwana, one of Transnet's fleet of modern dredgers.

widened and deepened in 2010, at a cost of R2.83 billion, boasted a depth of 19m outside the channel entrance, shallowing to 16m as you enter the channel between the breakwaters and continuing with this depth until the end of the T-Jetty was reached. As none of the berths exceed a permissible draught of 12.5m and many are far less, no ship permitted to enter port should have been in danger of going aground.

The inference therefore is that maintenance dredging has not been performed, which resulted in these incidents taking place.

Although our attempts to obtain comment from Transnet have gone unanswered, we understand that since then a high spot off the corner of the T-Jetty opposite berths N and O has been removed (this is where a container ship got stuck) and dredging at other troublesome points has been done, including the sand trap outside the south breakwater.

This is essential in order to trap sand moving by littoral drift up the coast, which otherwise is dumped on the seabed in front of the port entrance, creating Durban's notorious sandbar. The Port of Durban has since been authorised to exceed the current dredging budget to attend to any urgent and additional dredging necessary in the port.

Although official comment has been withheld, the following was volunteered by a former Durban and Cape Town dredger master, harbour pilot and harbour master retired, Captain Bill Shewell.

"As marine staff working vessels through the entrance going back 50 years in my time, we witnessed the incredible speed that the sand drift past the Bluff would accumulate within two days of a westerly blow.

"As pilots we would consider the state of the tide before bringing deeper draught vessels in or wait until the dredgers had done a middle line bar sweep.

"The two large dredgers would already have been out at dawn, pipes down, sucking away this drift of collected sand and dropping their loads off the beach at Addington, allowing the sand to continue its natural drift north.

"Today or tomorrow or next year our next generation of dredgers will need to get off their berths at dawn, get out on the sandbar and dig like hell to suck off the last storm drift, and then continue digging a pit behind the Bluff drift (sand trap) considerably deeper than twice the new depth of the channel in the hope that they have dug or sucked out sufficient sand flow area to allow our normal deep draught vessels safe entrance

"It is not a mystery, it's a working challenge. If you want ships to cross the bar, dig the sand away, but remember it will come back, and the dredgers must be one step ahead again, budget or no budget.

"Before they dig out Toti harbour, the same will apply, just like Richards Bay and now Durban."

Stories, reports and pictures on this page are by Terry Hutson, except where otherwise indicated. For shipping activities, news and schedules please contact him at 031 466 1683, cell 082 331 5775, e-mail terry@ports.co.za or visit the website www.ports.co.za for ships in port and other maritime-related data.