



MARINE SHIPPING INCIDENT

Great Barrier Reef Marine Park - Douglas Shoal

INFORMATION SHEET 3

What happened and when?

At 5.10pm on Saturday 3 April 2010, the 230m long bulk coal carrier *Shen Neng 1* ran aground on Douglas Shoal, around 92km north east of Gladstone. Bound for China, the ship had left the Port of Gladstone carrying approximately 68 000 tonnes of coal. There was also approximately 950 cubic metres of oil on board.

Douglas Shoal is one of about 2900 coral reefs and shoals in the Great Barrier Reef.



Diver sampling rubble bank

The grounding of the ship *Shen Neng 1* has required a coordinated response across many Australian and Queensland Government departments in accordance with the *National Plan to Combat Pollution of the Sea by Oil and other Noxious Substances* and the *Queensland Coastal Contingency Action Plan*. Maritime Safety Queensland is the lead operational agency with support from the Australian Maritime Safety Authority (AMSA) and environmental advice and operational support from the Great Barrier Reef Marine Park Authority (GBRMPA) and Queensland agencies. AMSA and GBRMPA are coordinating an investigation into the incident.

The GBRMPA is coordinating a Scientific Advisory Panel (SAP). Panel members will assess information gathered. The panel will advise on environmental issues related to the grounding and impact site.

What is the latest information?

The *Shen Neng 1* was towed from Barren Island to Port of Gladstone on Wednesday 21 April via the Curtis Channel. It is currently waiting for calm weather to be moved into the harbour. The ship has been inspected and is considered stable with little possibility of further deterioration. There are no reports of oil leaks and further leaks are considered unlikely. Throughout the journey, AMSA Dorniers followed the ship and used thermal and IR sensors to check for spills.

Initial environmental inspection

An inspection team comprising staff from the GBRMPA and the Queensland Department of Environment and Resource Management have undertaken initial assessments of the shoal area. Key findings include:

- The site of the *Shen Neng 1* grounding is the largest and

most complex ship grounding site the GBRMPA has had to assess.

- The *Shen Neng 1* traversed a large area of Douglas Shoal while grounding. As a result, the grounding has caused extensive damage to the reef community on Douglas Shoal.
- The top of Douglas Shoal is relatively flat, and the seabed community contains a wide variety of marine life including hard and soft corals and seaweed. Fish life on the shoal is rich and abundant.
- The initial assessment of 50% of the reef area within the track of the grounded vessel revealed damage varying from severe to moderate across the area impacted. Additional physical damage is likely to be observed when remaining areas are surveyed.
- The grounding has resulted in the contamination of Douglas Shoal with antifouling paint deposited onto the shoal and among sediments. Antifoul paints are used to coat the bottom of ships to prevent sea life such as algae and molluscs attaching themselves to the hull, thereby slowing down the ship and increasing fuel consumption. Samples of this paint residue have been collected and will be analysed further to determine their content and toxicity.

Further Environmental Assessment

Further environmental assessment has now been completed by the Australian Institute of Marine Science Research Vessel Cape Ferguson, the assessment was lead by AIMS, with support from James Cook University, GBRMPA, and the Department of Environment and Resource Management.

Bad weather prevented the researchers from diving on the site, but they were able to get passive and water samples, conduct multi-beam mapping of the shoal and damage, and remote camera characterisation of the habitat and damage. Preliminary results of this assessment will be made available to the GBRMPA shortly.

What will happen next regarding the environmental assessment process?

The team which conducted further environmental assessment will compile their results and present their findings to the SAP established by GBRMPA to provide expert environmental advice. At this point, the SAP will advise on the necessary long-term monitoring of the physical, biological and chemical damage of the site. The SAP will also consider the remediation possibilities for Douglas Shoal.

Investigation

The Australian Federal Police have charged the master and the Officer-on-watch with a variety of offences which hold penalties of up to three years in prison or a \$220 000 fine. The men appeared in Gladstone Magistrates Court on Friday 16 April and both were released on bail pending reappearance in court.