The Great Barrier Reef (GBR) is a complex of coral reefs, shoals, and islets in the Pacific Ocean off the north-eastern coast of Australia. The GBR extends in roughly a northwest-southeast direction for more than 2,000 km, at an offshore distance ranging from 16 to 160 km, and it has as area of some 350,000 km² [1].

The reef actually consists of some 2,100 individual reefs and some 800 fringing reefs formed around islands or bordering coastlines. Many are dry or barely awash at low tide; some have islands of coral sand, or cays; others fringe high islands or the mainland coast (Fig. 1). The Great Barrier Reef was selected as a World Heritage Site in 1981. A large part of the GBR is protected by the Great Barrier Reef Marine Park, helping to limit the impact of human use.

The Great Barrier Reef is visited by approximately two million people each year. A variety of boat tours and cruises are offered, from single day trips, to longer voyages. Several continental and coral cay islands host tourist resorts. Some of the most popular tourist activities on the Great Barrier Reef include snorkelling and diving.
The salvage and pollutant containment operation for the Chinese coal carrier Shen Neng 1 was managed by the Australian Maritime Safety Authority (AMSA), in conjunction with Maritime Safety Queensland (MSQ) [2]. The Pacific Responder emergency response vessel was dispatched from waters north of Cairns to provide support, the MSQ vessel Norfolk was dispatched from Heron Island to provide logistical support and AMSA’s surveillance aircraft flew from Cairns to assess the situation. A dispersant-spraying aircraft was deployed from Rockhampton to manage a 100 m × 3 km ribbon of oil that had leaked from the ship. The carrier was on the shoal and salvage assistance was required to move the vessel. Two tugboats were employed to stabilise the carrier. Oil was initially transferred internally from vulnerable tanks to secure ones to reduce the risk of further spillage and to stabilise the carrier and its cargo. The Larcom bunker barge was dispatched from Gladstone and the oil was pumped from Shen Neng 1 to the bunker. Once the oil was transferred from the carrier, the carrier was refloated, and three tugs began pulling the ship off Douglas Shoal. The vessel was towed around three nautical miles southwest of Douglas Shoal for an initial assessment, and later secured at safe anchorage off Great Keppel Island to allow divers to inspect the hull of the carrier. Salvage experts had indicated that the Shen Neng 1 required repairs and its coal cargo was later off loaded prior to being towed to a foreign port for repairs.

While the incident received world wide attention, only a minor oil spill took place and a major disaster was prevented. It was however a timely reminder of the fragility of the Great Barrier Reef’s unique eco-system that supports a wide diversity of life.

REFERENCES