

NORTHERN TERRITORY OIL SPILL CONTINGENCY PLAN

Introduction

The Northern Territory coastline is visited by a large number of ships carrying large amounts of oil either as fuel or cargo. Although there has never been a major oil spill in the Territory, there is always the potential for a collision, grounding or other accident that might result in a significant spill.

If a spill occurs there are a number of methods that might be used to prevent oil from impacting on the shoreline. The effectiveness of many of these methods requires calm weather and slow currents. If these conditions are not present on the day of a spill at least some of the oil is likely to impact on beaches, rocky shores, mangroves and in other coastal areas. If this happens, then depending on the type of shoreline (for example high-use sandy beach or mangrove), a cleanup effort might be mounted to remove beached oil and oily sand.

Even if weather and current conditions are favourable to mount an effective oil spill response, if the spill is particularly large, there would not be enough workers and equipment to protect the entire affected shoreline. For this reason it is important to identify, in advance, those areas of the NT Coast that are of highest priority for protection, second highest priority, etc., so that the limited personnel and equipment can be used to protect areas of greatest sensitivity.

The Action Plan

This identification of priority areas for protection (and cleanup) in advance is called "contingency planning" and also involves planning which oil spill response methods are most suitable for different kinds of shorelines. The NT (National Plan) Marine Pollution Management Committee (made up of representatives from government and industry) has recently approved an Oil Spill Contingency Plan for the Northern Territory, and portions of the Plan are discussed below.

Having an Oil Spill Contingency Plan will ensure that, if an oil spill does occur off the Northern Territory coast, the most effective responses can be called into action quickly and therefore damage to the environment is minimised.

Methods for Trapping and Cleaning-up Spilled Oil

If weather is calm and water currents are slow, a small oil slick can be "rounded up" in a floating plastic fence called a "boom". The boom has a flotation collar to keep the fence afloat and a skirt to prevent oil from running out under the boom. Once the boom has contained the oil, a vacuum-cleaner-like piece of equipment called a "skimmer" can suck the oil into temporary holding tanks on a boat or on the shore.

Another way of getting oil (contained by a boom) out of the water is by using long strands of "rope mop" which collect oil as they are dragged over the oil. The oiled mop is then dragged through a machine that uses a series of rubber rollers to squeeze the oil from the mop and into temporary holding tanks. Once oil is squeezed from a length of mop that portion of the mop is again laid out across the slick to pick up more oil.

Defensive booms can also be used to keep oil out of sensitive areas by deflecting oil away from the area or from blocking the entrance to a channel or creek. For example, one of the methods recommended to keep oil out of the important tourist attraction Doctor's Gully is to deflect an approaching slick away with a boom. Similarly, the Port of Darwin Oil Spill Contingency Plan recommends that defensive or exclusion booms be set across the mouths of Sandy, Ludmilla and Rapid Creeks to keep oil from landing in the mangrove forests,

which are one of the most sensitive habitats in Darwin Harbour. Oil Spill Contingency Plans are also in place for Gove and Milner Bay.

Setting defensive or exclusion booms, using skimmers, laying out rope mop and other methods require trained teams of workers and workboats. The Australian Maritime Safety Authority runs training courses and also provides stockpiles of equipment at major ports throughout Australia.

Priority Areas for Protection and Cleanup

Doctor's Gully, for example, is considered a No. 1 priority area because of its significance as a "fish-feeding" tourist attraction in the Darwin Area. The waters between Channel Island and the mainland are another priority area because of the diverse coral community in that area.

While sandy beaches are relatively easy to clean if an oil slick deposited on the shore, mangrove forests are virtually impossible to clean because of the difficulty of getting earthmovers and other machinery into such a habitat. Also, by trampling oil deeper into the ground and damaging the aerial roots of the trees, the use of heavy equipment and trampling by workers would actually make the situation worse in mangrove forests. For these reasons mangroves have a high priority for protection in the event of an oil spill in Darwin Harbour.

If oil lands on a sandy beach in a remote area, it might be left to "self-clean" naturally, as bacteria and other micro-organisms will eventually break down the oil. If high-use beaches such as Mindil or Casuarina were affected by oil a cleanup effort would be mounted to collect oiled sand and replace with clean sand if necessary.

Legislation

The NT *Marine Pollution Act* 1999 aims to protect the Territory's marine and coastal environment by minimising intentional and negligent discharges of ship-sourced pollutants into coastal waters. The pollutants dealt with are oil, noxious liquid substances in bulk, harmful substances in packaged form and garbage. Severe penalties apply for intentional discharges which cause specified environmental harm.

Contacts

To report suspected marine pollution incidents, please call the Marine Safety Branch of the Department of Planning and Infrastructure on 08 8999 5285 during office hours.

Alternatively, you can contact the **24 hours pollution hotline on 1800 064 567**.

A Final Note

The effectiveness of the oil spill response will depend to a great extent on weather conditions, water currents and the type and volume of oil spilled. If a storm is raging, with high waves and strong currents, many methods of defence will not work. Also, the Number One Priority during such an emergency is always the protection of human life, so certain responses may not be mounted if doing so will put workers in danger of injury or worse.

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