



# Fuel oil spillage and seals in the southwest

**(All fuel oil is a serious fire hazard & can be a physical threat to people. At all times, human safety is paramount!)**

**All fuel oil spills at sea or with the potential to affect the marine environment should be reported to the coastguard, especially where marine life is at risk.**

Fuel oil comes in different grades which have different effects on marine life. Heavy grades cause physical problems associated with being coated on their eyes/skin, reducing their ability to see, navigate, breathe, feed and swim.

It is commonly thought that **heavy grade** oil poses the most threat to seals, but as they are not animals that groom, only moderate to heavy coverage of heavier grade fuel oils are likely to be life threatening. Small oil patches may cause localised irritation. Fuel oil that has been spilt in the sea for some time will be weathered and poses the least threat to wildlife.

**Light grade** fuel oil poses the greatest potential threat, as it is associated with volatile hydrocarbons. These can be breathed in by seals causing irritation and inflammation of their mucus membranes. Contact with the fuel oil can irritate a seal's skin and relatively large eyes.

If any unweathered fuel oil is ingested by a seal eating food covered in fuel oil, this can affect a seal's ability to absorb water from its prey, increasing dehydration. Once absorbed into the seal's system, fuel oil can cause problems for their major organs, including the liver, kidneys and brain. Fully hydrated seals have wet eyes with tear patches visible when the seals are dry, so dry eyes are a sign of dehydration.

## **Seals, a mobile marine species and oil, a mobile pollutant.**

Each fuel oil spill is likely to be unique and pose unique challenges! The fact that both the seals and the fuel oil are mobile increases the level of difficulty in dealing with such incidents. Despite being likely that seals can smell fuel oil, they may not naturally avoid a polluted area. The natural curiosity of seals may even increase the likelihood of them being attracted into visiting areas of the sea with significant sound activity, such as around a fuel spill, especially if the spill is in the vicinity of a known haul out or seal transit route. Fuel oil spills across access routes to known seal haul outs or on seal haul outs may require seal deterrents to be deployed consisting of surface to sea bed vertical nets of a small enough mesh size to avoid seal entanglement, in conjunction with temporary acoustic deterrent devices. In the event of a serious spill, seals habituated to visiting an affected area (e.g. a harbour) may need, where possible, to be captured and relocated to the other coast to avoid a swift return.

## **Dealing with leaking fuel oil on land**

Aim to prevent fuel oil leaking into either the water table or the sea, if this is possible. This can be done by placing several booms or fuel oil absorbent pads across the drainage path of the fuel oil. If it is possible to collect the draining fuel oil into containers, then do so.

## **Dealing with leaking fuel oil at sea**

Aim to prevent as much fuel oil leaking into the sea as possible. Fuel spill incidents will be dealt with by the emergency or military services. A fuel spill in the vicinity of a known seal haul out may require booms to be placed in such a way as to funnel the fuel oil away from the seal haul out.

## **Dealing with fuel oiled seal pups or small juveniles**

Seal pups or juveniles covered in large patches of fuel oil of any grade, that are small enough to capture and handle safely can be washed with detergent in warm water and rinsed thoroughly. Seal pups that are thought to have inhaled or ingested fuel oil may require treatment. Contact British Divers Marine Life Rescue (01825 765546 : 24 hour hotline) for rescue assistance by trained Marine Mammal Medics. Treatment will need to be undertaken at the National Seal Sanctuary at Gweek (01326 221361) or another registered rescue centre such as the RSPCA Wildlife Hospital, West Hatch. Prior contact is essential to get the advice, assistance and expertise of the Animal Care Team.

## **Dealing with fuel oiled juvenile seals or adults.**

Significant expertise in handling seals will be required to rescue and treat larger seals, along with a large team of trained rescuers. Contact BDMLR and the NSS. Larger seals in the sea may need to be netted or encouraged onto land and immobilised, depending on the individual circumstances. Whilst feeding wild seals is discouraged, in exceptional circumstances, it may be possible to treat adult seals by feeding them medicated fish.