

## How to clean up oil spills on soil

Once a spill has reached soil, gravel, pebbles or any broken ground, the control, containment and clean up of the spill often becomes more difficult than one onto a hardstand or sealed surface. The clean up procedures described in these notes are for a minor spill (few litres) to a medium spill (1500 litres) of oil or fuel. In the event of a major spill on soil, a different technique maybe more appropriate.

The four basic steps of a spill clean up are:

1. Control the spill
2. Contain the spill
3. Clean up the spill
4. Remediation the soil

When a spill occurs on soil, the first steps can often be carried out very quickly. Unless the spill is large, they should only take a few minutes.

Firstly, before attempting any spill clean up, ensure the area is safe to enter. Be aware of fumes and approach from upwind. ALWAYS ensure personal protection equipment is worn.

### CONTROL:

Stop the source of the spill. For example, upright the drum or stop the pump, turn off all ignition sources and locate drains.

### CONTAIN:

Use absorbent booms, banks of soil, hoses or any safe objects to surround and prevent the spill from further impacting the environment. Often with spills on soil, little sideways movement occurs after the initial few moments. Unless the soil is extremely compacted or wet, the spill will soak directly into the ground.

### CLEAN UP:

Large pools of liquid may be absorbed with pillows, pads or particulate. These absorbents are then recovered for disposal. The remaining spill should then be covered with a layer of an organic absorbent which is used to absorb any free liquid. If the type of soil allows, a rake can be used to help spread the absorbent material. Global Peat is recommended for this part of the procedure.

### REMEDIATION:

Biological remediation is often used to break down fuels, oils and other hydrocarbon products naturally. It's important to note this process can often be challenging in our dry Australian soil. In addition to the existing bacteria already present in soil, Global Peat contains hydrocarbon-eating bacteria and will help to commence the bioremediation process.

To speed up remediation, spray contaminated soil with liquid hydrocarbon-eating bacteria. This assists the natural degradation of any hydrocarbons still present in the soil, however it is unlikely the microbes will be effective below 300mm. Tilling the soil will improve penetration and oxygenation

To prevent moisture loss in the soil and to help bacteria survive, a thick layer of organic Global Peat can be spread over the contaminated area. Spray the area with water before applying the absorbent and again afterwards. It is essential to keep the area moist until the remediation is complete. This could be weeks or months, depending on the elements.



Oil absorbent pads are used to soak up pools of spilled liquid



Global Peat is used to absorb free liquid



A layer of absorbent material is used to retain moisture, warmth and continues to add bacteria to contaminated soil.