

## **Micro warriors**

An army of micro-organisms may soon be cleaning up more than 200,000 ha of contaminated industrial sites in the United Kingdom. The United Kingdom government has launched a US\$21.4 million research programme, which will use micro-organisms and bacteria to reverse the damage done to polluted land and water. Plants have recycled carbon dioxide into oxygen for as long as humans have been breathing. Bioremediation pushes this natural process a step further. Living organisms, typically bacteria or plants, are introduced into contaminated areas to transform toxic substances into simpler, less harmful compounds. Researchers have found a wide array of species that are able to break down common pollutants, such as polychlorinated biphenyls, DDT and chlorinated solvents. Other bacteria can also degrade hydrocarbons in oil and petrol spills, or alter the composition of cancer-causing polyaromatic hydrocarbons. Certain plants, known as phytoremediators, can absorb radioactive elements and heavy metals from spill sites. (Down to Earth, 15 May 2001)