

► coastline, has only 27. Blackpool and Brighton have been excluded.

Stubble-burning, the commission says, should be banned within five years and research into alternative uses for straw should be stepped up. Setting a definite timetable, the commission argues, will ensure that industry will be able to invest with confidence in the necessary technology, knowing that there will be a guaranteed market for it.

The report also recommends that the government should reactivate the moribund Commission on Energy and the Environment, its only independent source of advice on energy strategy. Nuclear power, it says, is an important option that must be kept open. A "modest increase" may be desirable.

NIREX, the body responsible for radioactive waste, should include people from outside the nuclear industry, and the Radioactive Waste Management Advisory Committee should include members with experience of local government.

The report criticises the lack of supervision of the transport of nuclear waste and advises that either NIREX or the advisory committee should be responsible for it. It also calls for more research into the polluting potential of newer industries, such as microelectronics and bioengineering.

Central to the report is the finding of the commissioners that the government is unnecessarily secretive about environmental matters. There is, says the report, "no case for withholding from the public information which regulating authorities are entitled by statute to receive". The commission wants a general presumption in favour of unrestricted access by the public to statutory pollution control data, except where a genuine case for secrecy can be substantiated.

The commission argues that the public has "environmental rights", analogous to the legal concept of beneficial interest, in the condition of their physical environment and information about it. In addition it believes that more openness would dispel many fears that are fuelled by secrecy and would be an important means of auditing and guiding the pollution-control authorities. The commission dismisses industry's fears about opening the books as "misconceived" and criticises the secrecy imposed on the Air Pollution Inspectorate by the Health and Safety at Work Act as a step backward. It also deplores official foot-dragging on environmental issues, commenting that in many cases authorities are "reluctant to change their attitudes for fear of being seen to respond to pressure".

The commission is "disturbed to note signs of a decreasing emphasis on environmental protection in the UK characterised by significant reductions in the resources available for research monitoring and forward thinking". It says that the public has not lost interest in environmental matters during the recession. The commission feels that the Department of the Environment has run down its environmental protection side, so that it is able to react only to day-to-day pressures, rather than developing environmental policy. It says "cycles of complacency, alternating with panic, are the least effective approach to environmental improvement and carries economic penalties". □

## Lead peril found in house dust

A NATIONWIDE study of 53 towns and villages in Britain has pinpointed lead in house dust as a potentially important hazard to young children. The study, by scientists at Imperial College in London, is paid for by the Department of the Environment (DoE). It reveals that the levels of lead and cadmium, another toxic metal, in dust collected in homes, on roadsides and in school playgrounds "markedly exceed previously published data". And, most worryingly, the highest concentrations of lead and cadmium were found inside homes.

The DoE has now awarded Dr Ian Thornton and his team from the Applied Geochemistry Research Group at Imperial another contract to investigate the sources of lead in the home. These are likely to include old lead-based paint and lead brought in from outside, much of it emissions from cars.

The study covered some 5000 homes. In each, Thornton's team took samples from dust in vacuum cleaners and from flat surfaces above floor level. They also sampled garden soil and dust from nearby streets and playgrounds.

The first data will be published later this year. The results will cover the towns of Brighton, Bristol, Edinburgh, Liverpool, Newcastle-upon-Tyne, Portsmouth, Shrewsbury, Stoke-on-Trent and a number of London boroughs. The average lead content of house dust in the urban areas surveyed is 1300 parts per million, which is slightly higher than in road dust, almost twice as high as in garden soils and two-and-a-half times that in playground dust. In London the figures were all around 50 per cent higher than in other urban areas. The mean concentration of lead in household dust was 1900 parts per million. The highest figure was 36 900 parts per million, in a London home.

Cadmium concentrations in dust are much lower. They average 10.5 parts per million in household dust. But cadmium is more toxic than lead. A report published by the DoE in 1980 said: "Especially attention is necessary with respect to possible long-term effects of low-level exposure [to cadmium], particularly in view of our greatly increased usage of the metals since the 1940s." □

## Doctor docks with Soviet space station

THE SOVIET UNION seems set to make a detailed study of the effects on the human cardiovascular system of prolonged spaceflight. The crew of the Soyuz T-10, which was launched earlier this month to link up with the orbiting space station Salyut 7, includes a cardiologist, Dr Oleg Atkov. He is the first Soviet doctor to go into orbit since 1973.

According to Radio Moscow, the flight

in welding in space. The Soviet media ignored last week's untethered spacewalk by Americans aboard the shuttle. Though the USSR clearly leads the way in establishing a permanent manned presence in space, the US is ahead in spacewalk experience and technology.

However, the American claims this

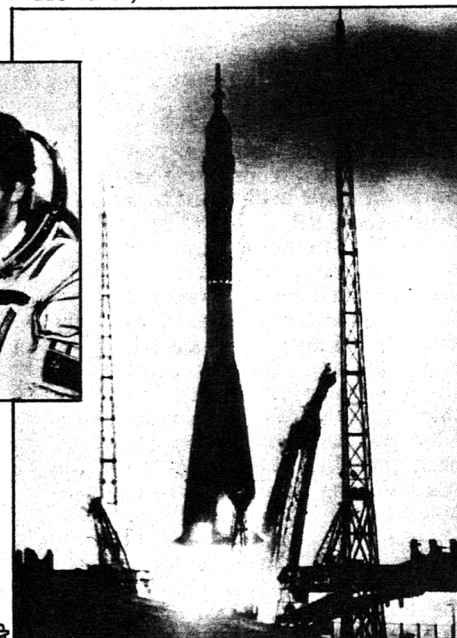


will also study the Earth's natural resources, as seen through the station's multispectral camera.

The Soviet Union hopes that the launch of Soyuz T-10 will finally mark the start of its continual manning of the space station. In late April the present incumbents, Atkov, Leonid Kizim and Vladimir Solovyov, will be joined by three more cosmonauts, Yuriy Malyshev, Nikolai Rukavishnikov and the first Indian cosmonaut, Rakesh Sharma, aboard Soyuz T-11, for eight days of experiments.

The current crew have had a long wait before getting into orbit. Kizim and Solovyov were the back-up crew for the joint Soviet-French mission two years ago and again for the Soyuz T-9 launch last summer.

During their flight they will probably make a spacewalk to carry on experiments



Soyuz T-10 launched from Baikonur. Left: doctor in space, Atkov is on the left

month for making the first untethered walk in space do not stand up. The honour should go to Yuriy Romanenko, who accidentally floated out of Salyut 6's hatch without his safety line in December 1977. He would have floated away to his doom had not his colleague, Georgi Grechko, who was already outside, grabbed him and pulled him to safety. Jonathan McDowell