NEWS AND VIEWS

Sea Water Oil

THE first fears after the wreck of the oil tanker Torrey Canyon ten miles off Land's End were for the Cornish tourist trade. Now it seems that the steps taken to minimize the pollution of the beaches may rebound and cause widespread destruction of marine and bird life. So far about 250,000 gallons of detergent have been used in the attempt to break up the 60,000 tons of crude oil which the tanker had lost by last weekend. On board is a further 60,000 tons, in danger of being released into the sea if the tanker finally breaks up. It is expected that eventually up to 80,000 gallons of detergent a day will be used in the battle, both on the sea and on the foreshore.

The oil companies are frank in admitting that the effect of the detergent is unknown. On two occasions when it has been used, in the Elbe and the Thames Estuary, they claim that no damage was caused to wildlife. In both cases the quantities used were very much smaller, but so was the area in which the detergent was spread. Their view is that the effect of the crude oil is serious enough to justify the risk of using the detergent. A number of marine biologists, on the other hand, are alarmed at the prospects. It is difficult to be precise about the toxic agents in the detergents, particularly as seven types of detergent have been used, but plankton and plants are expected to be affected by concentrations as low as 1 p.p.m., and marine animals may well be killed by concentrations of 5 p.p.m. The Marine Biological Association at Plymouth will use its research vessel Sarsia to examine the sea in areas where the oil slick has been present. Examples of the marine fauna such as shellfish will be collected from all depths, and the sea will be analysed to determine the content of toxic substances. Some experience indicates that as much as 30 per cent of the fauna may be destroyed, but much depends on the effect of the winds and tides, and nobody is prepared to make any predictions.

Other methods which have been suggested for getting rid of the oil find some support. Silicones can be used to coagulate the oil into lumps which can then be swept up reasonably easily, but this method is very expensive. An alternative would be to burn the oil, either in the tanker or on the surface of the sea. Once the oil reaches the temperature of the sea water it does not burn well, but the lighter fractions would burn and leave a tar which would sink. The method, though, may well be very dangerous and, until the owners of the tanker abandon attempts to salvage her, technically illegal. Booms may be used to prevent the oil entering tidal rivers, where it would cause havoc. Whatever the outcome, the experience of the Torrey Canyon is likely to force changes in the ways tankers are operated. To the ministers sent down to Cornwall to organize the clearing-up operations the sight of the Torrey Canyon pouring oil into the Channel while their hands were tied by legal niceties must have been galling. The owners, too, may well be able to claim immunity from actions for damages, which look certain to be enormous, though difficult to calculate.

Appeal for Funds

THE Science of Science Foundation is appealing for £282,000 to support and to develop its activities in the next four years. At a ceremony in London last week Sir Peter Medawar, President of the Advisory Council, and Professor H. Bondi, Chairman of the Committee of Management, commended the foundation and its works—particularly those lying in the future—to the grant-giving public. Sir Peter emphasized that one of the principal objectives of the foundation is to "integrate" science more closely into public life. Professor Bondi was at pains to point out that the Science of Science Foundation is already a "going concern", and that it has been successful in engaging the interest of people by means of the score or more of seminars which have been held in the past two years. He also claimed that the postgraduate seminars being held this academic year at the Imperial College of Science and Technology are a promise of what the foundation will be able to do when it has more money to spend. Among the projects planned for the years ahead are the publication of a journal, the setting up of a research unit at Imperial College under the wing of Lord Jackson (lately Sir Willis Jackson), head of the Department of Electrical Engineering, and the sponsoring of research at other universities.

Of the £282,000 mentioned in the appeal, roughly £50,000 would be spent (over four years) on administration and the salaries of senior staff. A total of £139,000 would be spent on research, roughly £50,000 at the unit at Imperial College. International activities are estimated to cost £57,000 and the accumulation of a library and the publications of newsletters a further £21,000. Mr. Maurice Goldsmith, the director of the foundation, said on the telephone last week that the unit at Imperial College would be chiefly concerned with problems of "technological forecasting" and with manpower studies. He said that the Science of Science Foundation would be perfectly happy if the unit were to be financed by the University Grants Committee or by some other body after the initial period of development. In supporting research at other universities, the foundation has in mind the provision of assistance to the various units for science policy now established at half a dozen British universities. Mr. Goldsmith said that many of these units would welcome a new source of funds so as to increase the scope of their research. The relationship between the foundation and the other sources of finance for work of this kind seems not yet to have been defined. Mr. Goldsmith suggested that if his foundation was able to persuade other grant-giving bodies to increase their support for research in this field, that would be as valuable as money in his own bank. He seems to be cheerful about the prospects of success, and confident that four years with money to spend would enable the foundation to acquire such a reputation that permanent financing would be comparatively simple.