

repurified its stock (leukocyte interferon is always contaminated with various other proteins besides interferon) and if the toxicity trials — to be performed on dogs — are completed successfully. This may take two months, he estimates.

There is anxiety, however, about non-French interferon, over which Flamant's council and the minister himself have little or no control. The council deals specifically and solely with IPP interferon because it arose as a *quid pro quo* when the government first offered a guaranteed market to IPP for its product. Having guaranteed the cash, the government also wanted to ensure proper statistical control of the trials and so established the council.

Anglo-Australian bomb tests

Government traces victims

Canberra

It seems that the dust has not settled over Maralinga or at a site 200 kilometres to the north of it called Emu, both in South Australia, nor over the Monte Bello Islands off the coast of Western Australia. It was in these remote spots that the British government conducted a series of 12 atom bomb tests between 1952 and 1957 (see table). In addition, in the following six years, weapon experiments involving radioactive fallout, though not from explosions, were undertaken at the testing range of Maralinga — an aboriginal word meaning "field of thunder".

The federal government is now trying to trace people associated with the tests, some 15,000 in all, in order to establish if there might be a link between mortality and morbidity of this group and the tests. On 22 October, the Minister for National Development and Energy, Senator Sir John Carrick, announced that questionnaires seeking medical data were sent to all the 8,000 people whose whereabouts are known through sifting administrative records, and he appealed for help to find the rest. The Department of National Development and Energy, which is conducting the survey, is also unearthing death certificates for information on the number and causes of death among this population. Furthermore, the government

But non-French interferon enters the country with no more than an import licence — and some of it, it is suspected, without any licence at all. This foreign interferon is being used for phase 1 and phase 2 human trials without any control, and with little knowledge on the part of the ministry.

It is therefore being suggested that the foreign interferon material, and other experimental drugs as well, should be controlled under a comprehensive oversight scheme. Thus questions raised over the purity of a particular kind of French interferon may also affect other drugs, both French and foreign.

Robert Walgate

commissioned an independent body of experts, the Australian Ionising Radiation Advisory Council (AIRAC), to examine the adequacy of safety precautions at the time and the possibility of ill effects from fallout. This report, now in its final draft, was expected to be released in a month but it will now be delayed until next year, partly because it contains some classified information awaiting clearance by British authorities.

The survey is both a response to and an attempt to allay growing public disquiet in the past three years over newspaper reports, mainly from South Australia, of illness and death among servicemen involved in the tests. Another story, just as alarming, which may not be apocryphal, is about a tribe of the Pitjantjara aboriginals wandering into ground zeros during the tests unbeknown to the British. An attempt by the South Australian Health Commission to authenticate that claim only served to highlight the difficulties of obtaining information from a small nomadic and dispersed group and the lack of control data for comparison.

Of the many compensation claims lodged at the office of the commissioner for employee compensation, liability has been acknowledged in 5 cases — 3 for deaths from cancer, 1 for the aggravation of an existing nervous complaint, and 1 for

a thyroid disease. The largest sum, A\$32,000, was paid to the widow of Mr Frank Eaglen who died of cancer. Claimants are aided by the fact that the onus of proof rests with the government.

Australia and the United Kingdom agreed to establish a testing range at Maralinga in August 1954 and it was approved by cabinet in May 1955. Subsequently the Atomic Weapons Safety Committee was instituted, whose job it was to ensure that the tests were conducted to the satisfaction of the Australian government. This committee of scientists had the power to veto, until the moment of firing, any test not meeting its safety criteria. After its closure, the range was partially decontaminated in 1964 and again in 1967 (operation "Brumby") by British teams. However, as a consequence of Australia's ratification of the nuclear non-proliferation treaty, Britain was asked to "repatriate" half a kilogramme of plutonium existing as a single discrete mass buried at Maralinga and the material was removed in 1979, the same year in which the Department of National Development and Energy completed a programme of waste management and rehabilitation in accordance with AIRAC recommendations.

Vimala Sarma

Radiation exposure

Unions agree

A scheme for compensating the dependants of radiation workers who have died from cancer has been agreed between British Nuclear Fuels Ltd (BNFL) and its trade and staff unions. The scheme will apply to present and past employees, but requires that dependants will be eligible for compensation only if there is evidence that the cancer may have been caused by occupational radiation exposure.

British Nuclear Fuels is the publicly owned monopoly for reprocessing and fabricating nuclear fuel. The distinctive feature of the new agreement is that compensation will be determined by the probability that a cancer has been induced by radiation, thus avoiding the "all or nothing" conundrum that has complicated earlier legal cases.

The scheme is hailed as a "pioneering deal" by Mr John Edmonds, National Energy Officer of the General and Municipal Workers Union (the main union involved in the negotiations). It is certainly a unique scheme in the nuclear industry, although large employers in other industries run compensation schemes that work along similar lines. Previous claims in respect of radiation-induced disease made through the courts have resulted in very long delays in payments; several substantial out of court settlements have been made.

The new procedure is voluntary, but the unions involved will recommend claimants to make use of the scheme. The option of taking a case to court instead is not

UK atomic tests in Australia 1952-57

Code	Location	Firing site	Date	Size
Hurricane	Monte Bello	Off Trimouille Island	3 Oct 1952	Kilotonne
Totem I	Emu	—	15 Oct 1953	Kilotonne
Totem II	Emu	—	27 Oct 1953	Kilotonne
Mosaic G1	Monte Bello	Trimouille Island	16 May 1956	Kilotonne
Mosaic G2	Monte Bello	Alpha Island	19 June 1956	Kilotonne
Buffalo	Maralinga	One Tree	27 Sept 1956	Kilotonne
Buffalo	Maralinga	Marcoo	4 Oct 1956	Low yield
Buffalo	Maralinga	Kite	11 Oct 1956	Low yield
Buffalo	Maralinga	Breakaway	22 Oct 1956	Kilotonne
Antler	Maralinga	Tadje	14 Sept 1957	Low yield
Antler	Maralinga	Biak	25 Sept 1957	Kilotonne
Antler	Maralinga	Taranaki	9 Oct 1957	Kilotonne

Source: Australian Ionising Radiation Advisory Council Reports Nos 4, 5 and 7 tabled in the House of Representatives on 30 May 1979, 13 November 1979 and 22 May 1980 respectively.