

# The Ecologist Digest

## Nuclear Power: Bombs, Accidents, and the Arms Race

**CEGB 'tries to hide N-waste':** Aileen Ballantyne. *The Guardian* August 5th 1983.

Ecology and anti-nuclear organisations claimed that new coverings for containers used to carry spent nuclear fuel have been introduced by the Central Electricity Generating Board in an attempt to hide the fact that radioactive material is being transported. The accusation came from Mr. David Fitzpatrick, of the Ecology Party, and Mr. Martin Blond, of Alert London Against Radioactive Materials, a recently formed organisation of anti-nuclear campaigners. Mr. Bond stressed that the new cover made the material look anonymous and just like any standard non-nuclear freight being carried by rail. If this was not the purpose behind the covering, why had it just been introduced after 20 years of carrying spent nuclear fuel in containers without additional covering? "There may well have been some problems we have not yet heard about," he said. A spokesman for the CEGB said that the new coverings had been introduced progressively over the last 14 months—not because of any safety problem nor as a means of camouflaging the contents. The cover was to prevent the accumulation of traffic dust on the exterior of the steel container and to make it quicker and easier to change over the containers, he said. The spokesman added the anti-nuclear groups could not have it both ways. In the past, he said, the CEGB had been criticised for transporting nuclear fuel in clearly identifiable containers because of the terrorist risk—now they were being criticised for the opposite.

**Plumbing fault hits £520m reactor:** Gareth Parry. *The Guardian* August 8th 1983.

The £520 million nuclear power station at Hartlepool started producing electricity for the national grid last week, nine years behind schedule and at five times the original estimated cost. But it had to be switched off again at the weekend, after developing a fault in its "plumbing." "You get these little leaks come along from time to time, but there is no suggestion

that it is anything to do with the building delays," a Central Electricity Generating Board spokesman said. The power station was begun in the days when Mr. Roy Mason, Minister of Power had to try and persuade Lord Robens of the National Coal Board that nuclear stations were the thing of the future. In the event, the Hartlepool Advanced Gas-cooled Reactor was more in the future than anyone could have possibly believed, and it must have been with a considerable sigh of relief that station manager Mr. Phil Parkman threw the switch to supply enough power to supply 50,000 homes last Sunday. The new station, sitting provocatively atop the hard-hit Durham coalfield has had so many "teething" troubles over the years that the latest water leak in a control panel in the turbine hall could be seen as some sort of senile decay. Work stopped in 1970 when the building cost was a mere £89 million after the Inspectorate of Nuclear Installations did not like the look of the concrete "pods" which were to contain the boilers. These were redesigned. Then a number of industrial disputes hampered the building work. The new Advanced Gas-cooled Reactor at the Heysham A nuclear power station has also had to be shut down because of problems at the £500 million plant. The CEGB said that the reactor closed down on July 22 after producing electricity for only 13 days. The start up on July 9 had been six years late.

**Search for caves as nuclear dump sites:** Barrie Clement. *The Times* August 12th 1983.

Nuclear waste may have to be dumped under-ground in Britain after action by three transport unions to stop it being disposed of at sea. A search for suitable sites is being undertaken by the Nuclear Industries Radioactive Waste Executive. The location of potential sites will be announced this autumn when the authority will seek planning permission. The authority argues that it is "more sensible and safer if one disposes of it rather than storing it". Nirex is looking for sites where there are inaccessible underground caverns. The waste in question is made up of gloves and clothing and cleaning materials from medical, industrial and defence laboratories. About 90 per cent of its weight constitutes steel and concrete packaging. Some of the material may be tipped into shallow land burial sites which would cover 100 acres and comprise a series of trenches between 6 and 9 metres deep. The most radioactive material would be sandwiched between backfill and two layers of concrete. Possible sites include clay outcrops which run across England from the south-west coast through the Midlands to the Wash and the Humber. Some of the waste might be too "high grade" for such a reposi-

tory or might have a longer radioactive life. This would be dumped in subterranean caves.

**Plan to step up A-waste dumping:** Paul Brown. *The Guardian* September 1st 1983.

Ministry of Defence plans to dump plutonium-contaminated waste from nuclear weapons production into the sea have been revealed in minutes leaked to environmental groups. Up to now Britain has only dumped low level waste from civil uses in hospitals and laboratories, but the MoD wants to reduce its ever-increasing pile of high level waste from military activities. The minutes are from a meeting between the MoD and the Ministry of Agriculture. Officials from Agriculture expressed reservation about the plan but said that it could be done using different containers than the low-level waste. The MoD talked about dumping 500 grammes of plutonium at a time more than twice the maximum safety limit in international agreements. Mr. Peter Wilkinson, director of Greenpeace, said "For the Ministry of Defence to actively consider dumping this amount of plutonium into the sea without any knowledge of what is happening to it is irresponsible. What is particularly sensitive about it is that it is waste from the nuclear weapon industry and not for peaceful purposes. Considering one thousandth of a gramme of plutonium inhaled can cause cancer think what damage this amount could do."

**Scientist goes to tribunal:** *The Guardian* September 8th 1983.

An appeal has been launched to help Dr. Ross Hesketh, who used to work for the Central Electricity Generating Board, to take his case against dismissal to the industrial tribunal. Dr. Hesketh was dismissed in June after questioning the CEGB's role and Government statements on the export of civil plutonium to the US, and after revealing that international safeguards applied in Britain and the US are inadequate to prevent diversion of civil material into weapons use.

## Drugs and Food Additives

**GPs warned of new arthritis drug risk:** Andrew Veitch. *The Guardian* August 16th 1983.

Doctors have been alerted to the hazards of a new arthritis drug, Osmosin, after reports that 200

patients have suffered serious side-effects ranging from severe headaches to perforated bowels. The Committee on Safety of Medicines has warned doctors that the high rate of adverse reactions suggests that Osmosin is no safer than conventional drugs, and that the new preparation may cause more damage to certain areas of the bowel. Encouraged by a big advertising campaign claiming that the drug is "well tolerated," GP's have issued nearly half a million prescriptions for Osmosin since it was launched in December. The manufacturers, Merck, Sharp & Dohme, are monitoring the problem but their director of medical services, Dr. John Young, said yesterday that tests showed that Osmosin produced fewer side-effects than conventional indomethacin. The number of adverse reactions reported to the committee by doctors through the yellow card system was not surprising in the wake of the Opren affair, Dr. Young said. The CSM has issued warnings on two other drugs. Pexid, a drug for the relief of serious angina made by Merrell, has been associated with 10 deaths from liver failure and should now only be prescribed by hospital specialists, and then only as a last resort, says the committee. Another drug, Zelmid, an anti-depressant made by Astra, is being monitored after 300 reports of adverse reactions including convulsions, liver damage, and severe neurological disorders, known as the Guillain-Barré syndrome.

**Drug firm offered cash, GP claims:** Andrew Veitch. *The Guardian* August 17th 1983.

A GP has claimed that he was offered £100 or £120 to prescribe the new arthritis drug, Osmosin, to four patients and fill in some questionnaires. Dr. George Morris, a north London GP and former Department of Health adviser, said he was approached by a representative of the manufacturers, Merck Sharp & Dohme, while they were running an advertising campaign promoting their new product. It is the third allegation in less than a year that drug companies have offered money to GP's to take part in what are described as clinical trials. The payment of large sums for this work has been condemned by the Association of British Pharmaceutical Industry and the British Medical Association. Dr. Morris said: "I have no particular skills in rheumatology. If they asked me I am sure they asked every other GP. He added, in an interview on Channel 4 News "Obviously the intention of this was not bribery, but I think when you are dealing with a new drug this sort of promotional activity does not seem appropriate. I think the manufacturers will regret this." A spokesman for the manufacturers said last night, "We would have made no payment that was not in accord with the code of practice for clinical trials."

**Opren fears played down:** Elaine Potter. *The Sunday Times* August 28th 1983.

Only six months before Britain banned the anti-arthritis drug Opren, a British government official



told the makers, Dista Products, that there were "no serious concerns" about the drug—even though doctors had by then reported the deaths of 25 patients using it. This has been disclosed in a sworn statement by Dr. Ian Shedden, former vice-president of research at Dista's US parent company, Eli Lilly. By February last year, doctors in Britain had already reported the deaths of 25 Opren patients. However, Shedden says that at a meeting in London on February 10, officials of the Department of Health and Social Security agreed with the claims made by representatives of Dista that the deaths "were not necessarily drug-related" and were not unexpected "in relation to this class of chemical agent." At the time of that meeting the US Food and Drug Administration was considering whether to license Opren for sale in the United States. Shedden, who came to know about 29 deaths among European users (including the 25 in Britain) did not report them to the FDA until after it had approved the drug, in April last year. He says in his statement that because the occasional death of an Opren patient was "expected", he believed there was no need to do so. Eli Lilly has told American newspapers that it did not report the deaths in Europe to the FDA because "the reports of deaths that we received contained sketchy and incomplete data and described adverse drug reaction of doubtful relationship to benoxaprofen (Opren's generic name). These reports of deaths were not unexpected. They did not indicate that benoxaprofen was any less safe than any other drug for arthritis that was on the market." American drug regulations require that the sponsor of a medicine that is still under investigation "properly investigate and report . . . any findings associated with the use of the drug that may suggest significant hazard. . . If the finding is alarming it shall be reported immediately." FDA investigators have inspected Eli Lilly's records and recommended that the company face criminal prosecution for failing to report the deaths. The US Justice Department has taken steps to open a grand-jury inquiry.

**Drug licence probe:** Oliver Gillie. *The Sunday Times* September 4th 1983.

A German expert is questioning whether Osmosin, the anti-arthritis drug withdrawn in Britain, in August was adequately tested before being licensed. The first suggestion that the drug might be dangerous came from Britain, where 15 patients taking it have died, but it was in Germany that it was suspended first. Dr. Ulrich Meobius, editor of *Arznei Telegram*, a drug journal, brought pressure on the government there to have the manufacturer suspend the drug. He says Osmosin "was not tested on large enough numbers of people before it was released in order to pick up serious side-effects. And the drug was not tested in the right way on animals." The US based drug company, Merck, Sharp & Dohme, withdrew Osmosin in Germany after the government had

threatened to ban the drug if the company did not act. Hours later, suspension followed in Britain. The German authorities' action was prompted by the knowledge that 15 deaths and 400 cases of severe adverse reactions (bowel problems, headache, dizziness) had been reported to the British Committee on Safety of Medicines. About 500,000 prescriptions for Osmosin have been dispensed since the drug was launched in Britain, in December 1982, so it may have been taken by about 80,000 people. In this number of patients, 15 deaths is not excessive for a drug of this kind, says Dr. Bill Inman, director of a drug surveillance organisation at the University of Southampton. Inman says "Osmosin is probably not much more dangerous than aspirin." Osmosin was tested on dogs in the form of a suppository. Meobius, the German doctor, says a test on cats would probably have been more reliable. However, Dr. Bill Currie, a medical director of Merck, Sharp and Dohme, says the company did not think the cat test was any more reliable. He says it expects to start selling the drug in Britain again within two months after the Committee on Safety of Medicines has heard its case.

**Sweetener health study reopened:** Andrew Veitch. *The Guardian* September 7th 1983.

The Government's food safety experts are to reopen their investigation into the new artificial sweetener aspartame. They will meet next month to examine evidence of possible health risks to more than a million people—evidence which was not available when they approved the product in March. Regulations legalising aspartame's use as a sweetener, Canderel, and as an additive in food and drink, came into force on September 6th. Mr. Jack Ashley, one of the Labour MP's calling for its ban pending an investigation, said "If there is any doubt about safety there should be an emergency meeting." The Department of Health has insisted over the last six days that its experts had seen the new evidence, published by Professor Richard Wurtman in the *Lancet* and the *New England Journal of Medicine*, and sent to the US Food and Drug Administration, and that the findings had not changed its opinion. However, the department confirmed: "The NEJM report will be considered at the next meeting of the toxicity sub-committee meeting in October." Firms who plan to use aspartame in food and drink have been asked to warn specialists treating the 1,200 children who suffer from a mental disorder, phenylketonuria. Aspartame contains phenylalanine which these children must avoid to develop normally. The manufacturers, Searle, are selling aspartame as a sweetener for diet drinks, cereals and chewing gum. "Parents will have to look at the labels of everything they buy," said a consultant for the Phenylketonuria Society. "It would help if manufacturers would tell us in advance that a popular brand will contain aspartame. We will be able to alert people before an accident happens. Cakes, sweets and drinks that had previously been permitted might

now be dangerous to these children, the consultant said. Searle has said that its brand of aspartame, Canderel, will be labelled as containing phenylalanine.

**Debendox makers win again:** Andrew Veitch. *The Guardian* September 8th 1983.

A US Jury's award of £500,000 damages to 12 year old Mary Oxendine, who had claimed that the morning sickness drug Debendox taken by her mother was responsible for her birth defects, has been overturned by Superior Court Judge, Joseph Hannon in the District of Columbia. Seventeen British parents are suing the manufacturers, Merrell-Dow, in the US courts. Merrell-Dow has to date successfully defended the only two cases to reach trial.

## Pesticides

**Companies defy Brazilian Pesticide Law:** Catherine Caufield. *New Scientist* August 11th 1983.

A new and tough pesticide law is being broken by multinational agrochemical companies including ICI, Shell, Dow Chemical, Bayer, Hoechst and Ciba-Geigy in the Brazilian state of Rio Grande do Sul. The companies refuse to give state officials data on the toxicity of their pesticides, as the law requires. Magda Renner of the Women's Democratic Action Group told *New Scientist* that "Not one of them has complied with the law." The law, unanimously approved by the state legislature in April, bans all organo-chlorine pesticides and all those "not authorised in their country of origin" and requires farmers to obtain a prescription from an agronomist before using any other pesticide, even if it is already approved by the Federal Ministry of Agriculture. But Brazil's pesticide industry association, ANDEF, says that pesticide control is a federal, not a state responsibility. ANDEF says the law breaches commercial confidentiality. Others say it reflects wide public concern about misuse of pesticides in Brazil, which is the world's fifth largest pesticide consumer. The government claims that its pesticide registration regulations are among the strictest in the world. The Ministry of Agriculture must examine all pesticides before they can be sold in Brazil. Nonetheless, according to leading environmentalist Jose Lutzenburger, Brazil has virtually no effective controls on how pesticides are applied. "I myself have seen DDT used in the fish market in Recife to kill flies on fish being sold for human consumption. This sort of thing is happening all over the place." "Aldrin, dieldrin, heptachlor, paraquat, and lots of other substances that are banned or severely restricted elsewhere are freely available and uncontrolled

in Brazil," said Roque Sevilla, Latin American co-ordinator of the Pesticides Action Network. Every week Brazil's Agriculture Department analyses samples of vegetables and fruits on sale at the main market in Sao Paulo. For the past three years, the department has kept the results secret. The last report, from 1979 data, showed that 10 per cent of the vegetables analysed and 13.5 per cent of the fruit, contained residues of banned pesticides.

**Vietnam veterans battle in court:** Trevor Fishlock. *The Times* August 25th 1983.

In what promises to be a *cause célèbre*, 20,000 ex-servicemen are suing the makers of agent orange, the defoliant sprayed on jungles by the Americans during the Vietnam War to deny cover to their enemies. The men claim they were harmed by handling it. In the Vietnam veterans' case, expected to start next year, the leading defendant is the Dow Chemical Company of Michigan, the largest supplier of agent orange. It is now trying to improve an image stained by the dioxin scare. Dow led the field in dioxin detection and control in the 1960's. When its chief toxicologist found that dioxin had "a tremendous potential for producing (the skin complaint) chloracne and systematic injury" it reduced dioxin levels in its herbicide 2,4,5T, an ingredient of agent orange, and urged other firms, Monsanto and Diamon Shamrock, also suppliers of agent orange, to follow suit. The judge in the agent orange case says they did not act on Dow's warning. But Dow failed to tell the Government what it knew about dioxin for almost five years. It evidently thought manufacturers should set their own good house-keeping standards rather than have them imposed by law.

**Rural doctors 'ignorant of pesticide poison signs':** *The Times*, August 30th, 1983.

Most rural doctors would not recognise the symptoms of poisoning by pesticides and other agricultural chemicals because they have not been alerted to them, a farmworkers union official claims. Writing in the latest issue of *Footloose*, an environmental and outdoor activities magazine, Mr. Christopher Kaufman, who is responsible for public relations for the agricultural and allied workers' section of the Transport and General Workers' Union, accuses the Government of continuing to allow many chemicals banned in other EEC countries and in the United States, to be sold to farmers and gardeners. Mr. Kaufman cites in particular the controversial dioxin-based weedkiller 2,4,5-T on which the European Commission recommended a ban last year. Although the immediate effects of exposure to spray drift, such as watering eyes, dizziness, headaches and nausea, are known, there may be serious long term effects which do not show for many years, he says.



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# Acid Rain

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**Acid rain kills fish in Welsh rivers:** Geoffrey Lean. *The Observer* September 25th 1983.

Acid rain is killing rivers, lakes and streams in Wales. Most of the principality is in danger from the pollution. Unpublished official documents obtained by *The Observer* last week show that all the fish and most of the other life in important mountain waters in Dyfed have been killed. The Welsh Water Authority is seriously worried that the whole of upland Wales from Snowdonia to Carmarthen could be affected. This new evidence of widespread damage in Britain follows last week's *Observer* disclosures that scores of lochs in Galloway, south west Scotland, are being turned acid, and that the Government has remained silent for years about the extent of the problem. The Government has insisted for years that acid rain was doing no serious harm to Britain, in the face of growing international pressure to cut back the sulphur emissions from factories and power stations which cause the pollution. Britain is the main European exporter of such pollution to other countries—thousands of lakes in Scandinavia have already been poisoned. The new evidence is particularly alarming because rainfall in Wales is less acidic than anywhere else in the country. Together with the Scottish revelations it suggests that large areas of the country are beginning to suffer from the same fate as Scandinavia.

**£5m research on ways to curb pollution by acid rain:**

Andrew Moncur. *The Guardian* September 6th 1983. A £5 million research project inspired by anxiety about damage to Scandinavian fisheries from acid rain, and funded by the possible culprits in Britain, has been launched. The results of the five-year programme could be used to justify a switch from coal-fired to nuclear-powered stations. So the Central Electricity Generating Board has bent over backwards to ensure that the research is carried out by scientists of impeccable objectivity. The Royal Society of London has taken a rare decision to direct the programme, in collaboration with learned societies in Norway and Sweden. The project is being jointly funded by the CEB, which accounts for about half the polluting sulphur dioxide emitted in the United Kingdom, and the National Coal Board, whose biggest customer is the generating board. There is strong political pressure to check the long-range dumping of wind-blown sulphur in southern Scandinavia, where it has been suspected of reducing forest growth and harming fish. A ministerial meeting in Stockholm last year proposed anti-pollution measures which would mean a big cut in

sulphur dioxide emissions in Britain. Sir Walter Marshall, chairman of the CEB, said that it was vital that research should be carried out before major and costly decisions were taken, affecting all electricity consumers and changing the balance of economic advantage between coal and the nuclear alternative. "For those who would argue for action now and research later, I would simply point out that to achieve the threefold reduction in sulphur dioxide emissions in the UK that has been called for would entail a very high capital cost—probably in excess of £4,000 million," he said. There would also be an annual cost of about £700 million. The Royal Society has been promised total independence in the direction of the programme and results will be published without restriction.

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# Asbestos

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**Health and Safety ban on asbestos:** Penny Chorlton. *The Guardian* August 24th 1983.

The Health and Safety Commission has decided to ban the most dangerous types of asbestos, the blue and brown, and to require everyone removing asbestos to work under strict control and licence. After a 9½-hour meeting called to discuss how the asbestos problem should be tackled, Mr. Bill Simpson, the commission chairman, said: 'All the medical doubts are over and we've got to get the limits down to as low as possible.' The commission has recommended that from August 1st 1984 there should be a ban not only on the importation of raw blue and brown asbestos but also on the manufacture of all products using the toxic materials. It has also recommended that the present limits on the less dangerous white asbestos should be halved to 0.5 fibres per millilitre. It is four years since the Advisory Committee on Asbestos recommended banning blue asbestos.

**Killer dust limits are far too mild:** Geoffrey Lean. *The Observer* August 28th 1983.

New limits for asbestos dust levels will do little to improve workers' safety, an inquiry by *The Observer* has established. The inquiry, which has drawn on several sets of confidential Health and Safety documents, also shows that:

- (1) There was a top-level attempt to suppress a report by one of the executive's most senior officers calling for tougher controls.
- (2) The asbestos industry is riddled with horrifying abuses which needlessly expose workers to dangerous levels of the killer dust.
- (3) The executive's enforcement effort is often in-

effective, and may illegally weaken government regulations.

(4) There are long delays in executive approval for vital safety equipment urgently needed on the factory floor.

Last week the Health and Safety Commission, the executive's governing body, approved new measures, widely hailed as tough controls on asbestos dust in factories. The measures did go further than expected, in the face of strong opposition to change from industry representatives on the commission. They banned the use of the two most dangerous forms of the mineral, blue and brown asbestos, and halved the maximum permitted level of the dust in factories to 500,000 fibres in each cubic metre of air from next August. But no blue asbestos has been used in Britain since the late 1960's and only 16 tons of brown asbestos fibre were imported last year. Furthermore detailed confidential executive figures show that 85 per cent of manufacturing industry already achieves or betters the new limit. A report presented at the meeting, produced by both management and trade union representatives of the industry under the chairmanship of Mr. Stephen Grant, senior director of the executive in Scotland, points to a limit of 200,000 fibres per cubic metre. This was rejected. But the confidential figures show that 73 per cent of British industry already achieves this much lower dust level and much of the rest is within striking distance of it. Last week, Mr. Grant broke a self-imposed silence to speak to *The Observer*. He said that much more of the industry would come near to his proposed limit if it stopped a proliferation of bad practices which needlessly expose workers to dust. He found many examples where industry failed to take safety precautions, though they are well known, and implemented in many factories. He reports exhaust machinery, which is supposed to remove the dust, 'churning out asbestos fibres into the workshop air' and vacuum cleaners becoming 'distributors' of the killer dust. In some factories, protective clothing was not cleaned often enough so that workers moving about in contaminated overalls became 'walking bonfires of asbestos dust.' Contaminated clothing has been taken home, though it is well known that workers' families have contracted killer diseases from just such a source. These practices, and many other abuses detailed in the unpublished report, survive, although asbestos has been at the top of the executive's danger list for about eight years. The executive is now setting up a working group to issue urgent guidance on how to avoid these abuses; but senior officials admit that this should have been done earlier. The officials insist that better inspection and enforcement by the executive would not have improved the situation, but Mr. Grant disagrees. His report alleges that the executive has issued guidance which has eroded strict standards laid down in government regulations on asbestos control. 'We have reached the stage where the teeth of the asbestos regulations have been effectively extracted by well-intentioned guidance.' The commission has agreed to publish

the Grant report, but only after several attempts to suppress it. On May 10, Mr. Bill Simpson, the commission's chairman, wrote to Mr. Grant urging him to reconvene his group and amend the report, which 'undermined' the commission's position.

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## Toxic Wastes

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**US steps up trade in toxic wastes:** Christopher Joyce. *New Scientist* August 11th 1983.

American companies are shipping hazardous wastes to Britain and elsewhere for disposal. Since 1980, tough new laws in the US have meant that it is cheaper or more convenient to export the wastes than to dispose of them at home. The export deals involve shipments of hazardous wastes such as cadmium and lead oxides, vinyl stillpot sludge, xylene and toluene wastes, leaded steel dust and pickle liquor from steelmaking, and several highly toxic chlorinated compounds. The US government does not require details of how much is shipped or how often transfers are made. In Britain, Capper Pass in Humberside has taken shiploads of lead flue dust solids from Federated Metals in San Francisco and wastes from Weirton Steel in West Virginia. A spokesman for the Capper Pass company told *New Scientist* that the company smelts imported waste to recover metals, mostly tin, copper and lead. The slag that is left is used for building roads. He refused to identify the byproducts. Englehard Industries, a mineral mining company in New Jersey, has exported cadmium and lead oxide wastes from its manufacturing process to a subsidiary in Sheffield called Sheffield Smelting. The waste is refined and remains in Britain, and all transactions have customs clearance, said a spokesman. Englehard also ships to Johnson-Matthey Chemical, in Middlesex. And a division of ITT, America's giant telecommunications company, ships tin plating sludge, a corrosive waste, to Brookside Metal, in Watford, for reclamation. Since November 1980, the EPA and the State Department have notified US embassies in countries receiving waste of the first shipment of a particular waste each year. The embassies tell authorities in those countries of that shipment. After that, no government records are kept. Groups in America such as the Environmental Defense Fund, have pressed the EPA to require written consent for each shipment from the governments of receiving countries. One of their concerns is that without official government acknowledgement of the trade, the public abroad would never know that US waste is going into their countries. Originally, the American government was hostile to this idea. But two incidents made it reconsider. First, in 1980, a Mexican company run by



an American, Clarence Nugent, dumped 5,000 tonnes of Mercury cinders down an abandoned mine shaft in Mexico. Nugent has since served two years in a Mexican gaol. The second involved Weirton Steel. In 1981, Weirton told the EPA it was to ship a cyanide mixture of metal electroplating waste to Ferroaleaciones Espanolas in Bilbao, Spain. However, the Spanish consignee changed its mind and Weirton shipped to Britain's Capper Pass instead. Spanish government officials began "raising a fuss" about the deal, according to US government documents, and in 1982 word of the export reached the Spanish press.

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## Marine Pollution

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**Poison washed ashore:** *The Guardian* September 1st 1983.

Four people have been admitted to hospital in Bayonne, near the Spanish border, after being contaminated by toxic waste from barrels washed ashore from Spain. More than 150 drums of industrial waste, washed out to sea by floods which swept the Basque country have been found on French Atlantic beaches. Of the drums, all marked with a skull and crossbones sign, 20 have been found to contain sodium cyanide. Some of the drums were taken home by people who apparently believed they contained fuel oil.

**UN finds many beaches in Med are 'dangerous':** Geoffrey Lean. *The Observer* August 28th 1983.

One quarter of all the Mediterranean's beaches are dangerously filthy, and nearly all its mussels and oysters are unsafe to eat, according to the most detailed pollution survey ever made of the sea. The survey is the result of four years of intensive monitoring by laboratories and scientists throughout the region. It has been co-ordinated by the United Nations Environment Programme, which has brought together the Mediterranean nations in an attempt to clean up their sea. Typhoid, paratyphoid, dysentery, polio, viral hepatitis and food poisoning are endemic in the area and there are periodic outbreaks of cholera. Most of the disease is caused by sewage. Eighty-five per cent of the waste from the sea's 120 coastal cities is simply flushed out into the waters where holidaymakers and residents bathe and fish. Shellfish, usually grown amid pollution and sometimes 'freshened up' in the market place by being doused with filthy water, pose perhaps the greatest danger of all. The UN Study shows that 96 per cent of the mussels and oysters in the area are grown in dirty water, and should on no account be eaten raw. This means, officials say, that oysters from the Mediterranean should almost always be

avoided. Mussels that are cooked before consumption are safer. The officials discount claims made earlier this year by a French consumer organisation that the country's Mediterranean beaches have been cleaned up. An international agreement to tackle the most serious source of pollution, at a cost of £6 billion, has just entered into force as it has now been ratified by six countries, Algeria, Egypt, France, Monaco, Tunisia and Turkey. The treaty, which was signed three years ago after four years of negotiation, promises to clean up discharges of sewage, industrial waste and other pollution from the land.

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## Heavy Metal Pollution

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**Cadmium in the diet poses health danger:** Robin McKie. *The Observer* September 25th 1983.

Most people in Britain may be facing a health risk from cadmium. British scientists have warned that amounts of the toxic metal in food and the soil may be three or four times the danger level for humans. Their claim directly contradicts widespread interpretation of a Ministry of Agriculture report, which suggests that cadmium in the average UK diet is well below 'tolerable' safety standards. Average weekly food intakes of cadmium are only 140 micrograms, according to the Ministry's report—well below the 400 microgram level set as safe by the World Health Organisation. However, the scientists—based at three different research centres—argue that extra factors put many people at risk. Smokers, pregnant women, children, people living in cadmium 'hot-spots', and some industrial workers are likely to absorb much more cadmium than other people. In many cases their intakes could rise beyond the 400 microgram danger level. More important, the group also challenges the safety of this level. Their own research has shown that even tiny amounts of cadmium can cause kidney damage in mice, starlings and seabirds. Dr. Marion Kendall, of the anatomy department at St. Thomas Hospital, London believes a safe dietary intake should only be a third or quarter of the current WHO level. If correct, this would mean that most British people are now consuming cadmium in quantities well above safe limits. Cadmium is widely used in the manufacture of batteries, paint, television sets, fertilisers and other products, and its take-up in the body is also linked to smoking. Its use has increased widely over the past two decades, and it is present in the soil and in most foods. In excess, cadmium can cause kidney and liver disease, which in some cases can lead to death.



## Zygon Journal of Religion & Science

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