CONFIDENTIAL

P 02054

From: J B UNWIN
9 May 1986

Prime Minister
The bulletin attached to this is clear, and reassuring. See particularly the background note. DK 9/5.

MR NORGROVE

CHERNOBYL

The Prime Minister may wish to see the attached copy of the bulletin being issued this afternoon by the DOE on Chernobyl. It will be supplemented by appropriate background briefing and is aimed particularly at the weekend press. I have instructed that copies should be sent this evening to all relevant Departmental Press Offices and also made available to Ministers in their weekend boxes.

2. Until further notice similar bulletins will be issued by the DOE Information Centre daily, after clearance at my daily CCU meeting. I have also arranged separately for Mr Baker, as the lead spokesman, to be fully briefed by the FCO on relevant external developments. There have been some further worrying reports about developments in the affected reactor, but no hard news and the FCO are instructing our ambassador in Moscow to take further steps to obtain information.

3. I should briefly mention EC developments. There is still no decision on the proposed EC ban on selected food imports from the USSR, Hungary, Poland, Rumania, Bulgaria, Czechoslovakia and Yugoslavia. The FCO advise, however, that a decision may be reached tomorrow which would take immediate effect. As a precautionary measure, therefore, I have asked DHSS to instruct the ports to hold any such cargoes during the weekend pending testing. Otherwise it would not be possible to comply with the decision during the weekend. If the EC decision is taken tomorrow, this instruction can then formally be confirmed. We shall, however, review developments at a meeting of the CCU at 2 pm tomorrow, and again as necessary during the weekend and on Monday.

J B UNWIN

Cabinet Office

DOE BULLETIN NO 3: ISSUED 9 MAY 1986

DEPARTMENT OF THE ENVIRONMENT INFORMATION FOLLOWING CHERNOBYL INCIDENT

Levels of radioactivity in the UK today remain well below any which would require action to be considered. It is still safe to drink milk and tapwater and eat vegetables and milk products. There is no need to take iodine tablets.

Latest results of milk sampling show that levels of iodine 131, which was initially the most significant radionuclide, are continuing to fall. This means that the most significant radionuclide is now radiocaesium. However, levels of this are also well below those upon which action would need to be taken and are showing indications of falling. Levels of radioactivity in vegetables remain very low.

Radiation dose rates out of doors have fallen and are now back to normal in the south of England and are still falling in the north.

Analysis of further samples from public drinking water supplies confirms that activity levels are very low and a small fraction of the level at which action would be required. Activity levels in rain water are still very low.

Any remnants of the radioactive clouds have moved away from the UK to the North Sea. Concentrations of radioactivity in air over the UK are now very low and less than one hundredth of the peak values last weekend.

Department of Transport advise that there is no present or potential hazard to seafarers as a result of the Chernobyl nuclear incident. Expert advice also confirms that no risk is likely to arise from the carriage or handling of goods being imported from the countries affected by the Chernobyl incident.

Health checks for crew members returning from the Baltic can be arranged at suitable hospitals and a list of these is being sent to Port Health Authorities.

The Master of any vessel which has visited a Baltic port in the Soviet Union or Poland and who wishes to arrange for a check to be made on radiation levels on his vessel or cargo should contact DTp, Radioactive Materials Transport Division, Tel 01 212 7247, or outside office hours DTp Duty Clerk on 01 212 7071.

Further Information

Members of the public can ring the DOE information room on 01 212 3434 (ask for Public Inquiries), Monday to Friday, between 09.00 and 17.30 where inquiry staff will put callers in touch with subject experts in the DOE and other Government departments as appropriate. From 17.30 to 19.30 and over the weekend ring 01 212 4571.

Public inquiry points for other Government departments are:

MAFF (food and milk)	930 1196/233 5309
DHSS (general health)	407 5522 (public inquiry unit)
FCO (travel)	213 6660
Scottish Office	031 225 6977
	031 557 3926/031 556 7264/031 556 9949
Welsh Office (Cardiff)	0222 823224

Attached is a technical review of levels of radiation in the UK from the accident at Chernobyl.

DOE Media Inquiries:	01 212 3493/4/5/6
Out of hours:	01 212 7132

LEVELS OF RADIOACTIVITY IN THE UK FROM THE ACCIDENT AT CHERNOBYL

At a result of the accident at Chernobyl higher levels of radioactivity than normal have been found on the ground and in air, rainwater, and milk in the United Kingdom. Radioactivity itself is measured in Becquerels, but its effect on people is measured by the standard international unit of radiation dose, the Sievert (Sv), which takes account of the different effects of different types of radiation.

Most of the radiation that people receive comes from the natural environment and has always been there: it comes from the earth itself, the air and outer space. Nearly 80% of the total radiation dose each year in people in the UK is of natural origin; and nearly all of the rest comes from medical uses. Less than 1% of the total results from the generation of nuclear power.

The total average dose to individual members of the public in the UK in 1985 from natural background and medical applications, taken together was about 2 thousandths of a Sievert, which is 2 milli-Sieverts of 2mSv. For most individuals the range was between 1mSv and 10 mSv, the differences being due to local differences in the natural background environment.

This total was made up as follows:

Cosmic radiation This varies with height above sea level	0.3mSv
Terrestrial radiation This varies with the soil and rock type	0.4mSV
Internal radiation Radioactivity occurs naturally in the human body and is also taken in from ordinary food and water	0.4mSv
Radon and thoron in the air This varies with rock type, being high in granite areas	0.8mSv
Medical applications	0.2mSv
TOTAL - rounded	2mSv

For comparison, one typical chest X-ray given a dose of 0.1mSv. The current average annual dose from earlier atmospheric nuclear weapons tests is 0.01mSv, compared with a peak annual dose in the 1960s and 0.1mSv. Flying to and from the USA will also give a dose of about 0.1mSv.

This information gives a standard against which to compare the extra radiation doses caused by Chernobyl. On the basis of information available to the Department of the Environment by 8 May 1986 these can be summarised as follows.

The figures show the extra dose to the average member of the public calculated from radiation measurements taken between 2 and 8 May. They are given both in mSv and as a percentage of the annual background dose of 2mSv.

Source of radiation	Dose to average member of the public	% of normal annual exposure
Radioactivity in the air dose over 1 week	0.008mSv	0.3%
Radioactivity deposited on the ground - dose over 1 week	0.0003mSv	0.01%
Radioactivity in rainwater used for drinking - dose over 1 week	0.050mSv	2%
Radioactivity in tapwater - dose over 1 week	0.002mSv	0.1%
Radioactivity in milk - dose from drinking for 1 day at the peak level	0.003mSv	0.1%

The figures shown above are averages across the country. In the most affected areas, exposures resulting from consuming water and milk could be up to 10 times higher than those shown above. Even for these, the total extra annual dose does not exceed 2% of the normal background, except if rainwater is used for drinking; which is why the Government have warned people not to drink fresh rainwater over long periods.

The dose levels shown in paragraph 6 will fall unless there were a major further release from Chernobyl.

This information will be updated and expanded in later bulletins.