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Pollution of the sea by the discharge of atomic waste

Report
Committee on Legal Affairs and Human Rights
Rapporteur: Mr Hermod LANNUNG, Denmark

A. Draft Order

The Assembly,

Having noted the Legal Committee's Report on pollution of the sea by the discharge of atomic waste;

Considering that, according to this Report, action by the Council of Europe in this field no longer appears to be called for;

Considering that it is nevertheless desirable to follow developments in this matter, with particular reference to the safety of European countries,

Instructs the Legal Committee to keep itself informed of developments in this matter and, if necessary, to report to the Assembly in due course.

B. Explanatory Memorandum

1.

1. At its meeting of 13th January 1958, the Legal Committee expressed the view that the subject of the Motion for a Recommendation contained in Doc. 725, namely the dangers arising from pollution of the sea by the discharge of atomic waste, should be dealt with on the world scale rather than by a regional organisation. It therefore decided, through the good offices of the Secretariat-General, to ask international organisations competent in atomic energy matters for information on the subject.

2. Your Committee is able to state that a number of international organisations are already engaged upon the subject of atomic waste and the prevention of the dangers to which it may give rise. These are the United Nations, which has referred the matter to its Scientific Committee on the effects of radiation, the International Atomic Energy Agency, the European Agency for Nuclear Energy set up by 0. E. E. C, Euratom, the Geneva Conference on the Law of the Sea, and the second International Conference on the peaceful uses of atomic energy.

United Nations Scientific Committee on the effects of radiation

This Committee has set up a Working Party on the effects of atomic waste discharged into the sea. The report now being prepared by the Working Party will probably make a valuable contribution to the solution of the problem under consideration.

It is interesting to note, moreover, that this Committee has invited all Member States of the United Nations and its Specialised Agencies to submit an annual report to the U. N. Secretary-General on the discharge of atomic waste into the sea, indicating the nature and degree of concentration of such waste and the date and place of its discharge.

International Atomic Energy Agency

This Agency, with headquarters at Vienna, has not yet completed its internal organisation and has therefore been unable to furnish precise information. It has, however, advised the Secretary- General of the Council of Europe that its Health and Security Division has been instructed to ensure, in future, that the discharge of atomic waste into the sea presents no danger for mankind; the Legal Division of the Agency will study the legal aspect of this problem.

European Agency for Nuclear Energy (O.E.E.C.)

O.E.E.C. has informed us that the question of the pollution of the sea by the discharge of atomic waste is on the programme of the Subcommittee on Health and Security of its European Agency for Nuclear Energy. This Agency is, on the one hand, to work out basic figures establishing maximum concentrations allowable for the discharge of radio-active waste and, on the other, to study the question of establishing joint control of such waste disposal.

The Agency deals with all these questions in collaboration with Euratom, taking into account the world surveys to be made by the International Atomic Energy Agency in Vienna.

As the OEEC Agency is of recent creation, it is not yet able to supply information on the substance of the problem, but it has promised to keep the Council of Europe informed of the progress of its work and the conclusions it reaches.

Euratom

Under the Euratom Treaty, the Community is to establish and ensure the application of uniform safety standards to protect the health of workers and of the general public (Article 2). In view of the importance of the question, the Treaty devotes a special Chapter to it.

The main provisions of this Chapter are concerned with setting up a single system of basic standards valid for all territories under the jurisdiction of the six Member States (Articles 30, 31 and 32). These establish the legislative, statutory and administrative provisions required to ensure compliance with the basic standards decided upon. The Committee has, however, a right to make recommendations in order to ensure, the harmonisation of the provisions applicable in the Community (Article 33).

The Treaty also provides for the necessary facilities to be set up, by each Member State, for the permanent control of the level of radioactivity in the atmosphere, water and soil, as well as special provisions for dealing with experiments of a " particularly dangerous " nature and the control of plans for the disposal of any kind of radio-active waste (Article 34 to 37). In each case, the Committee is able to intervene where appropriate; further, in the event of emergency, it may have recourse to an emergency procedure of great speed: a directive may be sent to the offending Member State, followed, if the offender does not comply within the prescribed period, by immediate reference to the Community's Court of Justice (Article 38).

Lastly, the Committee is directed to establish within the Joint Nuclear Research Centre, a section for documentation on, and study of, health protection (Article 39). In the same connection, the initial research programme of the Community provides for a special radio-biological laboratory to be set up at the Centre, and one of the items of expenditure listed as essential to the success of the programme is a sum of 3.1 million EPU units for radio-biological research to be carried out under contract outside the Centre.

The health protection measures taken by Euratom therefore constitute a systematic and effective system; for instance, the procedure for fixing basic standards, a matter of surprising complexity, does in fact meet the need for the maximum precautions and the closest contact on the technical, economic, social and political planes (Article 31). The same procedure will be applied to the revision of standards, thus providing a permanent opportunity for adjustment to unforeseen technical developments (Article 32). Lastly, it should be stressed that the Treaty insists on speed of execution, since Article 218 provides for the Council's final decision on the fixing of standards to be taken within a period of one year after the coming into force of the Treaty.

United Nations Conference on the Law of the Sea

The question of the pollution of the sea by the discharge of atomic waste was also on the Agenda of the above Conference at Geneva, which ended on 28th April 1958. The preliminary draft Convention on the Law of the Sea contains a provision on this subject. More detailed information will be supplied as soon as possible by the European Office of the United Nations.

Second International Conference on the peaceful uses of atomic energy

This Conference of scientific leaders which is to take place during the second half of this year will also consider the progress achieved in security and, hence, the problem of the pollution of the sea.

3. Before it contacted most of the international organisations mentioned above, your Committee had its attention drawn to their activities by the Office of the French High Commissioner for Atomic Energy, and, thanks to Lord Stonehaven, United Kingdom Representative to the Consultative Assembly, by the United Kingdom Atomic Energy Authority. The latter was also good enough to supply information concerning United Kingdom legislation governing the disposal of atomic waste. The communication in question will be found attached.

4. Since a number of international organisations are dealing with the danger of atomic waste, including the problem of the pollution of the sea, your Committee considers that there is no longer any justification for action by the Council of Europe in this field. It therefore proposes that no further action be taken on the motion for a Recommendation contained in Doc. 725. Should the Assembly so desire, your Committee is prepared, however, to follow developments and to supply periodical information on the progress and results of the work of the above-mentioned organisations on the discharge of atomic waste into the sea.

Appendix

Ocean disposals of radioactive waste A. Technical and administrative aspects of U. K. disposal

The only large scale disposals of radioactivity into the sea up to date have been made by the Atomic Energy Authority whose activities are controlled by special legislation embodied in the Atomic Energy Authority Act 1954. The relevant sections of this Act read as follows:

" 5 (3) It shall be the duty of the Authority to secure that no ionising radiations from anything on any premises occupied by them, or from any waste discharged (in whatever form) on or from any premises occupied by them, cause any hurt to any person or any damage to any property, whether he or it is on any such premises or elsewhere.

5 (4) The following provisions shall, for the period of seven years beginning with the day of the passing of this Act, have effect as respects waste discharged (in whatever form) on or from any premises occupied by the Authority :

a. no radioactive waste shall be discharged otherwise than in accordance with authorisations to be given by the Minister of Housing and Local Government and the Minister of Agriculture and Fisheries, after consultation, in each case, with such local authorities, river boards, local fisheries committees or other public or local authorities as appear to the Minister in question to be proper to be consulted by him;

b. the said authorisations may be given subject to compliance with such conditions and requirements as the Minister in question thinks fit;

c. any person authorised in that behalf by either of the said Ministers may enter and inspect such parts of any premises occupied by the Authority and take or cause to be taken such samples of waste which is being discharged or awaiting discharge thereon or therefrom as may appear necessary for ascertaining whether any breach of any such condition or requirement is or is likely to be committed."

It will be seen therefore that the Authority are not only under statutory obligation to ensure that no damage arises from any waste discharged from their establishments but that before they can begin to discharge any radioactive waste they must obtain an authorisation from both the Minister of Housing and Local Government and the Minister of Agriculture, Fisheries and Food, who must in their turn consult the local authorities concerned before granting the authorisation. The Ministers also exercise the right of sending inspectors on regular visits to ensure that regulations are complied with.

Hitherto the only discharge into the sea of radioactive waste in significant quantities has been from the Authority's establishment at Windscale on the Cumberland coast. The discharge in this case has consisted of the milder radioactive waste products of nuclear fission and is made through a pipe reaching 3 kilometres out to sea.

Before the statutory authorisations were granted by the Ministers concerned careful hydro-graphic studies covering diffusion and tidal streams "were made and problems arising from the movement 'of edible fish and the use of edible seaweed were closely studied.

During the ten years following the granting of the authorisations there has been flose monitoring of the discharge atWindscale. Outgoing •effluent is sampled during discharge daily and in addition bulk samples are getting a detailed chemical analysis every month. The results of these analyses are used to control total discharge and provide information contributing to the study of the effects of waste disposal in coastal waters. Samples of fish, seaweed, the seabed and shore sand are also taken and monitored.

The results over the past ten years have •shown that activity levels have remained well below permissible levels in all cases and that there has been no tendency for activity to build up over a period of years.

The Authority are at present seeking authorisations for the discharge of waste into the sea from their establishments at Winfrith Heath in Dorset and Dounreay in the North of Scotland. The preliminary investigations in both these cases are following the same lines as those which proved so successful at Windscale.

"With further development in the nuclear field it is possible that in the future other organisations apart from the Atomic Energy Authority will wish to dispose of radioactive waste into the sea. In the present state of legislation this would be covered by the numerous provisions of the Factories Acts governing the disposal of all forms of noxious waste. The situation is being studied and further legislation on this point may result. In the meantime the only organisations apart from the Atomic Energy Authority who will be seeking approval to dispose of significant radioactive waste into the sea in the near future arc the Central Electricity Generating

Board and the South of Scotland Electricity Board who are in process of building nuclear power stations at various places on the coast of Britain. The Boards have undertaken in this matter to be bound by the same restrictions as are imposed on the Atomic Energy Authority by Statute.

Apart from the disposal of waste direct from the Establishment to the sea by pipeline there is some dumping of radioactive wastes in steel, or concrete and steel drums into the Hurd Deeps and the Atlantic Deeps. This dumping is also subject to authorisations from the Ministers of Housing and Local Government and Agriculture, Fisheries and Food, which control the amount to be dumped yearly, the exact position of dumping and, in the case of the Atlantic Deeps, the minimum depth at which the dumping may be made. The drums sunk in the Hurd Deep contain mildly radioactive waste which, if exposed, would quickly disperse and become diluted to an extent indistinguishable from the radioactivity present in seawater. The material deposited in the Atlantic Deeps is waste of higher radioactivity. It is contained in concrete blocks surrounded by a mild steel shell and is dropped at such a depth as is far below that of any possible trawling operation.

In all cases the cargo is accompanied by a responsible officer from the Atomic Energy Establishment, Harwell, who certifies to the Ministry of Agriculture, Fisheries and Food as to the tonnage dumped and that all containers sank. He also supplies an extract from the ship's log giving the area of dumping.