## MANAGEMENT OF RADIOACTIVE WASTE – CONSULTATION PAPER

### 1 SUMMARY

- 1.1. The Government has published a consultation paper detailing proposals for developing a policy for managing solid radioactive waste in the UK, the aim of which is to command widespread public support. The Government and the Devolved Administrations will conduct a nation-wide debate with the aim of producing a nuclear waste management programme. It is envisaged that an independent and authoritative body will be established to conduct research into and advise the Government regarding, the feasibility of different methods of radioactive waste disposal.
- 1.2. The document also proposes a five-stage programme of action for conducting the consultation and, if deemed appropriate, includes the implementation of legislation.
- 1.3. Should legislation be composed as a result of the consultation process, it is not proposed that Local Authorities will be given a statutory function. However, Local Authorities will be invited to enter into the consultation process prior to any such legislation being implemented.

#### 2 INTRODUCTION

- 2.1. The consultation paper 'Managing Radioactive Waste Safely' has been published by the Department of the Environment, Food and Rural Affairs (DEFRA). It invites comments by 12 March 2002 on the Government's proposals to conduct public consultation regarding the disposal of radioactive waste. A copy of the consultation paper was sent to each Group Leader and another copy placed in the Members' Room.
- 2.2. The aim of the consultation paper is to start the process that will lead to the implementation of a radioactive waste management policy. The document asks specific questions, which have been reproduced in this report. Members are asked to consider the proposed response, detailed below each question.

### 3 PROPOSALS

- 3.1. The consultation document sets out four main proposals on how to conduct and inform the debate on radioactive waste management.
  - To conduct an informed, nation-wide public debate using various innovative methods of consultation.
  - To form and fund a new independent and authoritative advisory body to inform the debate.
  - To form another body to co-ordinate further research which would be funded by the waste producers, or incorporate a research role into the advisory body.
  - To conduct the process in five stages, concluding in 2007 with the potential for new legislation.

### 4 FURTHER CONSIDERATIONS

- 4.1. The document also seeks views on a number of specific radioactive waste management issues.
  - To receive views regarding segregation of UK waste types by half-lives (the time taken by a radioactive substance to lose half of its radioactivity).
  - To consider the Radioactive Waste Management Advisory Committee's (RWMAC) proposals for the management of spent sealed sources:
    - To ring-fence additional resources for the management of historic registered historic sources.
    - To introduce requirements for sales of new sources to provide for their future disposal.
    - To establish an organisation which would be responsible for safe disposal of abandoned radioactive materials.
  - To receive views regarding the link between waste substitution and the availability of a repository or other facility.
  - To receive views regarding the general approach to decommissioning.

- To receive views regarding the policy to be adopted for the longterm management of separated plutonium, including whether some proportion of the UK stockpile should be considered waste.
- To receive views regarding the policy to be adopted for the longterm management of uranium, including whether some proportion should be considered waste.
- To receive any other comments on the content of the consultation paper, including other options for the management of radioactive waste.

#### 5 CONSULTATION DETAIL

- 5.1. A suggested response is shown in italics below each question.
- 5.2. Sections 6 and 7 below deal with the four main proposals on how to conduct and inform the debate.
- 5.3. Section 8 deals with the specific radioactive waste management issues.

# 6. SUITABILITY OF VARIOUS TECHNIQUES, INCLUDING BUILDING ON EXISTING INITIATIVES, TO ENGAGE THE PUBLIC IN THE RADIOACTIVE WASTE DEBATE

- 6.1. The Government is mindful that the topic of radioactive waste disposal is an emotive and technically complex subject and as such wishes to facilitate as informed a public debate as possible. The methods of public consultation put forward for comments in this document are roughly separated into two categories: small groups and large groups.
- 6.2. Smaller groups will allow more focused debates to take place, however, the make-up of the 'public' contingent of any small group needs to accurately reflect the attitudes and opinions of the local population. The population needs to be well informed before a spokesman is designated.
- 6.3. Larger groups would enable the opinions of a wide range of the public to be heard, but can lead to a less focused debate.

### Q1 Your views are invited on the techniques that should be used

The public and their representatives should be informed as well as possible, via such means as the Internet and open houses, so that everyone can make a reasoned judgement. However, these techniques should not be used to enter into a discussion about radioactive waste management, as a more structured approach is required. The information made available to the public should be advertised to the public and must be seen to be independent and authoritative.

Regional Sustainable Development Frameworks, Research Panels and a similar approach to that of the UK Centre for Economic and Environmental Development (CEED) Consensus Conference are the most suitable means of consulting the public. The views of Local Authorities, as democratically elected bodies, should also be sought.

- 6.4. The Department of the Environment, Food and Rural Affairs (DEFRA) has established a research project to run alongside this consultation process to discover the extent of current knowledge about management of long-lived radioactive waste and highlight those areas into which another body will conduct research. A steering group comprising of representatives from the public, Government Departments, Local Authorities, Non-Governmental Organisations and waste producers will oversee the project.
- 6.5. The Radioactive Waste Management Advisory Committee (RWMAC), which is a Government appointed non-departmental multi-disciplinary team, has routinely published reports and advised Local Authorities and other public bodies about radioactive waste issues since 1978.
- 6.6. The options are to keep RWMAC, albeit in a restructured format, or create a new advisory body, which may also incorporate a research coordination role. The co-ordinating body may then contract out the research.

### Q2 Your views are invited on the formation of a new advisory body and its funding

RMWAC should be modified to accommodate the new role with funding for further research, whether by an independent contracted centre or other organisation, based upon the 'polluter pays principle'. Both public and private waste producers would therefore provide funding, which should be in proportion to the quantities of waste each produces.

It is essential, however, that all affected parties are represented at the highest levels of the new body, and other international policies are monitored, in order to ensure a holistic approach to the research is secured and maintained. Should a Liabilities Management Authority be established, it should take advice directly from RWMAC and also report management data back to it.

Q3 Your views are invited on whether to combine the advisory and research co-ordination roles, and on which type of organisation could take on this co-ordination role

Refer to Question 2, above.

### 7. PROGRAMME FOR IDENTIFICATION AND IMPLEMENTATION OF A RADIOACTIVE WASTE STRATEGY

7.1. The programme for action outlined in this document consists of five stages, of which this consultation is the first. The programme sets out a timeframe for the stages (see below), which incorporates research into waste management options, followed by consultation on the outcomes. This will be followed by consultation on the preferred waste management option and, if necessary, the introduction of legislation.

Stage 1	Consultation on the proposed programme; Consideration of responses; plan the next stag	2001-2 le
Stage 2	Research and public debate on the options; recommend the best option/combination	2002-4
Stage 3	Public consultation on the preferred option	2005
Stage 4	Announcement of the chosen option; public consultation on how option implemented	2006 I
Stage 5	Legislation, if needed	2007

- 7.2. The Health and Safety Executive (HSE) is the body responsible for regulating radioactive waste on licensed nuclear sites. It currently works under a Memorandum of Understanding with the Environment Agency/Scottish Environmental Protection Agency (EA/SEPA), who regulate waste disposal from the site, on points of mutual interest. At this time, the EA/SEPA do not have any statutory powers over waste storage on the site until the licensee applies for disposal.
- 7.3. The EA/SEPA are responsible for regulating both storage and disposal of wastes on unlicensed sites such as universities and hospitals.

7.4. The House of Lords Select Committee on Science and Technology has recommended that the EA/SEPA be given a new statutory power over the storage of wastes on nuclear licensed sites.

### Q4 Your views are invited on this programme for action, and the regulatory arrangements required to implement it

The Council agrees that wastes held in an untreated state must be made passively safe as soon as is practicable, without ruling out any long-term management options. Subject to the duration of Stage 2 (Research stage), the programme for action outlined in this consultation is satisfactory (refer to paragraph 7.1.).

During the review of regulatory arrangements, the Government should ensure radioactive waste is held safe and secure and that any arising changes in legislation or regulation is specific, enforceable and avoids duplication of powers, in order to ensure maximum safety of the public and the environment.

#### 8. RADIOACTIVE WASTE MANAGEMENT ISSUES

- 8.1. There are currently many methods of radioactive waste classification in use by individual EU Member States. In 1998, an EU Classification system, based upon that of the International Atomic Energy Authority, was proposed which would facilitate the compilation of an EU waste inventory.
- 8.2. Although not identical to any other country, the UK's current Classification system is similar to that of Japan, Russia, Spain, Sweden and Switzerland.

### Q5 Your views are invited on the principle of segregating UK waste types by half-lives

The Council believes that the Government should actively seek the use of a single categorisation of radioactive waste materials. The UK may wish to adopt the proposed EU Classification system, to run alongside that of its own during a transition period.

- 8.3. Following an examination into small users, RWMAC have made recommendations relating to the management of spent sealed sources. These are:
  - a) The Government should consider ring-fencing additional resources for health and education sectors so that they can manage historic redundant registered sources

- b) Arrangements should be put in place such that all sales of new sources include provision for future disposal
- c) In the UK, a dedicated organisation should be given responsibility for taking abandoned sources under control
- Q6 Your views are invited on RWMAC's proposals for the management of spent sealed sources

The Council supports RWMAC's proposals

- 8.4. British Nuclear Fuels Limited (BNFL) currently operates a system of returning all wastes from reprocessing back to the customer. These wastes are generally Low and Intermediate Level Wastes. Waste substitution involves returning a smaller amount of radiologically equivalent High Level Waste to the customer instead, therefore reducing the volume and frequency of radioactive waste movements.
- 8.5. It is proposed that if waste substitution is permitted, the resulting Low Level Waste is disposed of in Drigg, Cumbria and the Intermediate Level Waste is stored at Sellafield whilst long-term management options are decided upon.
  - Q7 Your views are invited on the link between waste substitution and the availability of a repository or other facility

A long-term management strategy for Low and Intermediate Level Waste must be adopted before waste substitution takes place. Waste substitution should only be employed where no novel waste problems or any overall detriment is caused by its use.

- 8.5. The Health and Safety Executive (HSE) are the Authority responsible for overseeing the decommissioning process. A strategy for the decommissioning of a nuclear facility must be agreed with the HSE, who review each licensee's strategy every five years. Factors to be considered in the decommissioning strategy are age, type and condition of the facility, the level of radioactivity and the type and concentration of radionucleides present.
- 8.6. Early decommissioning can have the advantages of using current employees and knowledge, and avoid maintenance and security costs for an unused facility. However, it does produce greater quantities of radioactive waste, particularly Intermediate Level Waste. There are currently no Intermediate Level Waste disposal facilities in the UK.

### Q8 Your views are invited on the general approach to decommissioning

The Council agrees that the licensee should propose the decommissioning programme, but the programme must be agreed in writing with the HSE subject to the conclusions of an environmental impact assessment, taking into account the type of facility, the nature of its radioactive inventory, costs of options in terms of finance and resources, and, most importantly, the techniques used to ensure the safety of workers, the public and the environment.

- 8.7. Neither Uranium or Plutonium are currently categorised as waste. However, this consultation requests views on how each should be treated should part or all of the current UK stockpiles be re-categorised as such.
- 8.8. Both uranium and plutonium have the potential to be recycled in the energy-producing sector, either as MOX fuel or in the case of uranium as fresh fuel. Reprocessed uranium stored as uranium oxide is regarded as passively safe and depleted uranium can be stored similarly. Plutonium is already stored under international safeguards. However, the build-up of americium-241 (Am241), an isotope formed during the decay of plutonium-241 renders plutonium less useful as a reactor fuel over time. In order for it to be used as such, plutonium can be treated to remove Am241, but it may not always be economically viable to do so.
  - Q9 Your views are invited on the policy to be adopted for the long-term management of separated plutonium, including whether some proportion of the UK stockpile should be considered waste

The potential for most of each stockpile to either be recycled or used in MOX fuel, should be investigated fully. The advisory and/or research body proposed in Questions 3 and 4 should be charged with conducting such an investigation. The separated plutonium currently not considered suitable for use in MOX fuel should remain in safe, secure stores under international safeguards until such time as a conclusion has been reached. It is the belief of this Council that discharges and waste generation should be kept to a minimum wherever possible.

Q10 Your views are invited on the policy to be adopted for the long-term management of uranium, including whether some proportion should now be considered waste

Refer to Question 9, above.

### 9 ENVIRONMENTAL IMPLICATIONS

9.1. There are currently no direct environmental implications for Rochford District. However, Members were previously consulted on the content of the Environmental Statement for the decommissioning of Bradwell Nuclear Power Station.

### 10 RESOURCE IMPLICATIONS

10.1. No direct resource implications are indicated within this consultation document. District Councillors and Council Officers may be involved in the next consultation stage.

### 11 RECOMMENDATION

It is proposed that the Committee RESOLVES

That, subject to Members' comments, the responses detailed within this report are made to the consultation paper 'Managing Radioactive Waste Safely'. (HHHCC)

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