CHAPTER 5

RADIOACTIVE WASTE

Contents

INTRODUCTION

1 The MOD is committed to complying with legislation and, so far as is reasonably practicable, with national policies relating to the management of radioactive waste and decommissioning. Details of national policy on the management of radioactive waste can be found on the Department of Energy and Climate Change (DECC) website.

2 MOD in managing radioactive waste is committed to delivering the commitments in the Secretary of State's Policy Statement on Safety Health and Environmental Protection. In particular radioactive waste management practices must be framed in the context of the MOD's policies and management arrangements on sustainable development and the environment. These are detailed in JSP 418 "Sustainable Development and Environment Manual" available on the Defence Intranet and on the World Wide Web.

3 As a general policy, managers and waste owners must:

3.1 Ensure through the use of best practical means[1], that due consideration is given to not creating waste; or where this is not reasonably practical, minimising the generation of radioactive waste at every stage of any activity involving radioactive materials;

3.2 Carefully consider decay storage, recycling and/or reuse of materials[2] and incineration as an alternative to declaring them as waste;

3.3 Ensure through the use of best practical means, that risks and doses to people now and in the future are kept as low as reasonably practical;

3.4 Ensure through the use of best practical means, that harm to the environment now and in the future so far as is practical is minimised;

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[1] The BPM principle has most recently been defined by a statement of the UK Government and the devolved administrations' policy on the decommissioning of nuclear facilities http://www.scotland.gov.uk/Publications/2004/09/19915/42728

Essentially, it requires operators to take all reasonably practicable measures in the design and operational management of their facilities to minimise discharges and disposals of radioactive waste, so as to achieve a high standard of protection for the public and the environment.

BPM is applied to such aspects as minimising waste creation, abating discharges and monitoring plant, discharges and the environment. It takes account of such factors as the availability and cost of relevant measures, operator safety and the benefits of reduced discharges and disposals.

If the operator is using BPM, radiation risks to the public and the environment will be as low as reasonably achievable (ALARA).

[2] This requirement is contained in the Policy for the long management of solid low level radioactive waste in the United Kingdom http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/nuclear/radioactivity/waste/low/low.aspx

3.5 Ensure from the conceptual stage, that for all activities involving radioactive substances, the method of eventual disposal has been considered and resources provided, this includes where required, the provision of decommissioning plans;

3.6 Establish performance indicators to demonstrate the extent to which these policy requirements are being achieved; and

3.7 Conform, where reasonably practicable, to the environment agencies risk screening and appraisal methodologies.

4 At the direction of the Sustainable Development and Environment Board, SSDC may carry out top level audits to determine compliance with these policy requirements and where necessary, functional audits of specific areas and activities.

UK RADIOACTIVE WASTE INVENTORY

5 Waste owners are required to provide timely and accurate information about the radioactive waste they hold and projected future radioactive waste arisings to the organisation contracted by DECC/NDA to produce the UK Radioactive Waste Inventory. DES SM SW-pd4 coordinates the collation of this information across MOD and ensures that the required information is provided in the required form and by the due date.

RADIOACTIVE WASTE OWNERSHIP

6 Because the Secretary of State (SofS) is accountable for and responsible for the safe management of defence related radioactive wastes it is generally MOD policy to retain title of defence related radioactive waste. Advice should be sought from SSDC where the transfer of title of radioactive waste to another party is being considered, in order that advice on the legal implications can be sought (Euratom, IAEA treaty obligations etc).

RADIOACTIVE SUBSTANCES ACT 1993 AND DEFENCE RELATED ACTIVITIES

7 The Radioactive Substances Act 1993 (RSA93) does not apply by virtue of subsection 2 of section 42 of RSA93 in respect of premises occupied on behalf of the Crown for Royal Naval, Military or Royal Air Force purposes. Advice on the interpretation of the extent of this disapplication in a particular circumstance should be sought, in the first instance, from the Radiation Protection Adviser. Where they are unable to resolve the issue, SSDC should be consulted.

8 To fulfil the requirements of SofS's policy statement, MOD has established formal arrangements with the environmental regulators that describe the arrangements to establish a degree of control equivalent to that in the civil sector. The MOU between MOD and the EA covering radioactive substances can be found in JSP 815, Annex N

9 Unless items can be disposed of under local regulations overseas with agreement of the countries relevant bodies radioactive waste is to be returned to the UK and disposed of in accordance with UK legislation and the agreement of the UK regulators.

DISCHARGES TO THE ENVIRONMENT

10 Waste owners and managers are to ensure the proactive publication of information about discharges to the environment of radioactive substances as required by the "Environmental Information Regulations".

11 It is MOD policy to provide information about radioactive discharges to the environment for inclusion in the Environment Agency's National Pollution Inventory; DGSM provides data to the Environment Agency. SSDC currently coordinates the inclusion of data for inclusion in the Radioactivity in Food and the Environment Reports (RIFE Reports) produced by the Food Standards Agency. These reports can be found at http://www.food.gov.uk/science/surveillance/radiosurv/

UK STRATEGY FOR RADIOACTIVE DISCHARGES

12 The MOD is bound by the national commitments in the UK Strategy for Radioactive Discharges 2001-2020, which sets out how the UK will implement the OSPAR radioactive discharge strategy. This strategy can be found on the DECC website:

http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/nuclear/radioactivity/government/discharges/strategy/strategy.aspx

The strategy requires:

12.1 Progressive and substantial reduction of radioactive discharges and discharge limits, to achieve the strategy targets for each;

12.2 Progressive reduction of human exposure to ionising radiation arising from radioactive discharges, as a consequence of reductions in discharges, such that a representative member of a critical group of the general public will be exposed to an estimated mean dose of no more than 0.02 millisieverts (mSv) a year from liquid radioactive discharges to the marine environment made from 2020 onwards;

12.3 Progressive reduction of concentrations of radionuclides in the marine environment resulting from radioactive discharges, such that by 2020 they add close to zero to historic levels. (The terms "close to zero" and "historic levels" are not defined in the OSPAR Strategy and the OSPAR Commission is continuing to work on establishing agreed definitions).

13 This strategy recognises that, within the policy of progressive reduction, some flexibility will need to be maintained to safeguard other key Government objectives including the operational capabilities of the armed forces.

14 The Defence sector targets in the national strategy are:

14.1 By 2020, tritium discharges from the defence sector are expected to be reduced from 0.7 TBq to 0.4 TBq a year; and

14.2 Other beta/gamma discharges are expected to be reduced from 0.005 to 0.003 TBq a year.

15 SSDC is the focal point for the collation of data for submission to DECC for the national strategy.

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