

EXECUTIVE NOTE

THE RADIOACTIVE CONTAMINATED LAND (SCOTLAND) REGULATIONS 2007 - SSI/2007/179

The above instrument was made in exercise of the powers conferred by sections 78A and 78YC of the Environmental Protection Act 1990. The instrument is subject to negative resolution procedure.

Policy Objectives

This instrument has two purposes, described below, but the main reason for implementing a radioactively contaminated land regime in Scotland is to allow the Scottish Environment Protection Agency (SEPA) to deal with radioactively contaminated land arising from past practices using radioactive materials. These Regulations do not extend to radioactive contamination on or caused by a nuclear licensed site. Such contamination is to be dealt with under GB Regulations, which will have the effect of extending the Scottish Regulations to such sites subject the liability capping provisions of the Paris and Brussels Convention on third party liability for nuclear occurrences. The intention is that those GB Regulations will be introduced by the Department for Environment, Food and Rural Affairs and will use powers under Section 57(1) of the Scotland Act.

- **Radioactively Contaminated Land Regime.** In Scotland, we currently have no comprehensive legislative framework for dealing with land that has been contaminated with radioactivity. The Executive and SEPA currently rely on Section 30 of the Radioactive Substances Act 1993 (RSA) to dispose of radioactive waste. There is no satisfactory mechanism, however, through the existing regulatory framework to pursue the polluter for the recovery of costs of monitoring or any subsequent remediation.
- **Ensure transposition of Articles 48 and 53 of Council Directive 96/29/Euratom of 13 May 1996 laying down the Basic Safety Standards (BSS) Directive** for the protection of the health workers and the general public against the dangers arising from ionizing radiation. Articles 48 and 53 require intervention to be taken in the cases of radiological emergencies or in cases of lasting exposure from the after-effects of a radiological emergency or a past or old practice or work activity, including the demarcation of land, the carrying out of necessary monitoring, and access to and restriction of access to land. These Regulations will close down, for Scotland, the present infraction against the UK for failure to fully transpose the above BSS requirements.

Consultation

A public consultation was held between On 31 October 2005, and 23 January 2006. We consulted on our proposals to bring radioactivity into the scope of the existing contaminated land regime, under Part IIA of the Environment Protection Act 1990. The consultation was sent to over 280 addresses, including local authorities, political parties and MSPs, NHS Trusts and Health Boards, Nuclear Decommissioning Authority, industry, environmental interest groups and regulators. 33 responses were received. The majority of local authorities that responded to the consultation were in favour of the SEPA undertaking the duty for

inspection and designation in Scotland. In addition, this consultation also invited specific comments on the draft high level guidance to be issued to the SEPA. Many respondents challenged how this could be made transparent. We have accepted this view and have initiated steps to prepare more detailed guidance in conjunction with SEPA which will be subject to consultation and Parliamentary scrutiny.

Financial Effects

The instrument has no financial effects on the Scottish Executive. The most affected body will be SEPA, which will be responsible for enforcing the provisions of the regime. There will be some effect on local authorities, which will be required to pass on information to SEPA. There will be an effect on the occupiers or owners of land investigated and or designated as being radioactively contaminated. In the event that remediation is required, there will be a further effect on the same bodies and groups. The costs to SEPA have been estimated from the staffing resource it plans to allocate to the new duties that arise from the proposed regime. That staffing resource is set out in SEPA's internal planning process and is paid for by grant-in-aid from the Scottish Executive. In the event of any remediation, it will be the polluter who will be liable for related costs.

Further information is set out in the attached Regulatory Impact Assessment.

Scottish Executive Environment & Rural Affairs Department

06 March 2007

THE RADIOACTIVELY CONTAMINATED LAND (SCOTLAND) REGULATIONS 2007

Scottish Executive Environment and Rural Affairs Department

PARTIAL FINAL REGULATORY IMPACT ASSESSMENT (RIA)

1. Extension of Part IIA of the Environmental Protection Act 1990 to include radioactivity

1.1 This regulatory impact assessment (RIA) considers the potential impacts of the proposed Radioactive Contaminated Land (Scotland) Regulations 2007, the Radioactive Contaminated Land (Scotland) Regulations 2007 (referred to as the RCL Regulations) and associated modifications to the existing Statutory Guidance set out in SE Circular 1/2000, Environmental Protection Act 1990: Part IIA Contaminated Land.

2. Purpose and intended effect of measure

- **Objective**

2.1 Part IIA of the Environmental Protection Act 1990 (EPA90) was introduced to provide an improved system for the identification and remediation of land where contamination is causing unacceptable risks to human health or the wider environment, assessed in the context of the current use and circumstances of the land. By virtue of section 78YC of that Act, the regime does not apply in relation to harm, or pollution of controlled waters, so far as attributable to any radioactivity possessed by any substance.

2.2 Following widespread consultation in Scotland, Contaminated Land (Scotland) Regulations 2005 came into force. They make changes to EPA90 and to the Contaminated Land (Scotland) Regulations 2000. Those changes have the effect of replacing references to “controlled waters” with references to “the Water Environment”. This is in response to the provisions of the Water Environment and Water Services (Scotland) Act 2003.

2.3 The Part IIA regime is to be extended to include radioactivity. Where contamination is causing lasting exposure to radiation, above defined exposure limits, such land will be determined as being a special site and to be radioactively contaminated for the purposes of the Part IIA regime. It may then be subject to appropriate remediation.

2.4 The modified regime also transposes fully Articles 48 and 53 of Title IX of Council Directive 96/29/EURATOM laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation, referred to in the RIA as the Basic Safety Standards.

- **Background**

2.5 Radioactive substances have been used in a wide variety of applications in the UK since the early part of the twentieth century. In certain instances, the use and subsequent disposal of radioactive substances may have resulted in contamination of land on which those activities were undertaken. At present, no regulatory regime provides an efficient and

effective means of identifying and removing unacceptable radiological risks to human health or the environment, arising from the legacy of radioactive contaminated land.

2.5 Separate arrangements under the Nuclear Installations Act 1965 are in place which effectively deals with the issue of radioactively contaminated land on nuclear licensed sites. It is not expected that the Regulations will have any impact on such sites. For this reason the analysis, including the cost and benefit analysis, contained in this RIA does not include any consideration of nuclear sites.

- **Rationale for Government intervention**

2.7 A study produced on behalf of the Environment Agency, Department for Environment Food and Rural Affairs (Defra) and the Welsh Assembly Government has suggested that radioactive substances might have been used, handled or disposed of on up to 50,000 sites within England and Wales (although the study notes that there are substantial uncertainties associated with this figure). However, the vast majority of activities undertaken on these sites would not have resulted in the contamination of land with radioactive substances and only a very small proportion of those that were contaminated are likely to be contaminated to such a degree that they could present an unacceptable risk to human health or the wider environment.

2.8 The Environment Agency study concluded that between 150 and 250 sites within England and Wales might have accommodated activities that could have resulted in radioactive contamination that could in turn give rise to lasting exposure. Whether or not a particular site could give rise to lasting exposure would depend upon its circumstances, but it was expected that the actual number of such sites within England and Wales would be only a small percentage of that 150-250 range of potential sites. This percentage is assumed to be not more than 10% for the purposes of this partial RIA.

2.9 Proportionately, it is likely that there will be fewer sites than that in Scotland. Nevertheless, it is considered appropriate to extend the provisions of Part IIA to include radioactivity to ensure the completeness of the regime and to remove any danger of infraction by the European Commission for failure to transpose parts of Articles 48 and 53 of the Basic Safety Standards.

3. Consultation

- **Within Government**

3.1 Defra established a Steering Group to consider the proposal to extend the provisions of the Part IIA regime to include radioactivity. That comprised representatives from the Scottish Executive, the Environment Agency, the Welsh Assembly Government, the Food Standards Agency, SEPA, the Chartered Institute of Environmental Health, the Department of Trade and Industry, the Health and Safety Executive and the former National Radiological Protection Board (now the Radiation Protection Division within the Health Protection Agency's Centre for Radiation).

- **Public Consultation**

3.2 The proposals for the radioactively contaminated land regime were subject to full public consultation over a twelve week period. All responses will be analysed and taken into account. Responses have informed this RIA.

4. Options

4.1 In Scotland, a number of alternative options for dealing with radioactively contaminated land were considered. For the purposes of cost and benefit analysis as required for a regulatory impact assessment, the options need to be compared against a baseline, or 'do-nothing' option. The options considered were:

option 1- do nothing;

option 2- modify Part IIA, placing the obligation for initial assessment and determination that land is to be designated as being radioactively contaminated on local authorities;

option 3 - modify Part IIA, but placing the obligation for initial assessment and determination on the Scottish Environment Protection Agency (SEPA); or

option 4 - modify the Radioactive Substances Act 1993.

4.2 Option 1 was the baseline against which the chosen option can be compared. It would not involve any implementation or policy costs but it would not result in the identification and removal of unacceptable risks to human health and the wider environment from radioactive contaminated land. It might also lead to infraction proceedings with the costs and dangers associated with that. It is not considered further.

4.3 Option 2 would involve local authorities being required to adopt a proactive approach to the inspection of their areas for the purpose of identifying land meriting detailed inspection, as currently exists under Part IIA. It is likely that there will be relatively few sites in Scotland to be designated as special sites. We believe that it is unlikely that local authorities will have specialised expertise on radioactive matters and so the costs of providing sufficient detailed guidance and training, to acquire expertise that may never be required, led us to consider option 3 to be the more cost effective. This is because SEPA already possesses such specialised expertise as a result of its regulatory duties under the provisions of the Radioactive Substances Act 1993.

4.4 Option 3 still requires some involvement of the local authorities, based on their detailed local knowledge of their areas. They have a duty to inform SEPA if, as a result of any investigation under the existing Part IIA regime for contaminated land, they identify land that might be contaminated with radioactivity. That, however, should not require specialised expertise in radiological protection issues. On balance, option 3 seemed the preferable approach and we are consulting on our proposal that the radioactively contaminated land regime is dealt with in this manner, rather than by option 2.

4.5 The primary aim of the Radioactive Substances Act 1993 is to regulate the keeping and use of radioactive substances, to make provision for the disposal and accumulation of

radioactive waste and to control radiation exposure resulting from radioactive wastes entering the environment. The provisions required to implement a radioactively contaminated land regime would not sit well within this permit-based regime. Moreover, the Act does not address issues of remediation or the liability for remediation

5. Costs and benefits

- **Sector and groups affected**

5.1 The most affected body will be SEPA, which will be responsible for enforcing the provisions of the regime. There will be some effect on local authorities, who will be required to pass on information to SEPA. There will be an effect on the occupiers or owners of land investigated and or designated as being radioactively contaminated. In the event that remediation is required, there will be a further effect on the same bodies and groups.

- **Benefits**

5.2 The benefits are that:

- the public can be reassured that land that may potentially pose a risk is not being left unregulated,
- all forms of contamination on land are brought into the regulatory framework,
- land, designated as radioactively contaminated for the purposes of the Part IIA regime, will be brought under regulatory control,
- where lasting exposure from such radioactive contamination is likely, the level of harm caused by that land will be monitored,
- where contamination is suspected, entry to land can be made for monitoring purposes, using the entry powers of the Environmental Protection Act 1990,
- where land is designated, remediation will be possible if required,
- the strategic approach to inspection will install confidence that all areas of radioactively contaminated land will, over time, be identified and dealt with, and that areas have not been overlooked,
- any danger of infraction by the Commission for failure to transpose parts of Articles 48 and 53 of the Basic Safety Standards will be avoided, and with it the considerable cost penalties that could occur.

- **Costs**

5.3 The costs to SEPA have been estimated from the staffing resource it plans to allocate to the new duties that arise from the proposed regime. That staffing resource is set out in SEPA's internal planning process and is paid for by grant-in-aid from the Scottish Executive. It is the equivalent of half a person per year from the specialised radioactive waste teams and a similar resource from the "conventionally" contaminated land teams. That amounts to some £50,000 per year, including overheads. On the basis that the regime does not require SEPA to investigate all potentially radioactively contaminated land sites on a particular time scale, it is assumed that the level of SEPA resource required will continue at that annual level for the next few years. In addition, there will be costs associated with any monitoring carried out by, or on behalf of, SEPA. Those are likely to vary considerably on a site-by-site basis but could add as much as some few thousands of pounds per year to SEPA's costs.

5.4 There may be costs to local authorities, associated with the provision of relevant information to SEPA, both as a result of SEPA seeking relevant information when it is carrying out an investigation and also if, as a result of any investigation under the existing Part IIA regime for contaminated land, they identify land that might be contaminated with radioactivity. Those costs are likely to be very limited.

5.5 In order to be designated as radioactively contaminated, land will need to meet a strict set of criteria of causing a significant risk of exposure to humans. It is not possible to say definitively how many sites will contain land that is designated but, as concluded in paragraph 2.8, the number is likely to be small. It is also likely that not all designated land will require remediation because in order for remediation to be considered necessary, the benefits of that intervention, in particular of the reduction in dose to humans, must outweigh the harm and economic and social costs associated with it. It is likely then that in many cases, it may be considered better to leave the contamination where it is and so remediation may be the exception rather than the rule. A further unknown in the costs of remediation is that they are likely to be site specific and vary with the nature of any contamination and the extent of the contamination that might require remediation.

5.6 Where remediation does take place, the costs might be recovered from the polluter, if known, or the occupier/owner of the land. Under some circumstances, the costs might be paid by SEPA, in which case they are likely to be recovered from the Scottish Executive. As indicated in the Defra RIA the remediation costs could range from £20k to more than £10 million. In terms of a cost burden on industry generally, it is expected that the numbers of sites requiring remediation will be very low. Moreover, the experience to date of remediation suggests that the lower cost estimate is typical for industrial sites and the higher more typical of large sites formerly or still in public ownership.

6. Small/Micro Firms Impact Test

6.1 The impact of the existing Part IIA regime on small firms was considered in the RIA undertaken during the production of The Contaminated Land (Scotland) Regulations 2000 and the Statutory Guidance in Circular 02/2000. The modification of the regime to include radioactivity is not considered to affect the outcome of that impact test. As outlined in paragraph 5.6 it is most likely that radioactively contaminated land sites will have been, or are still large sites in public ownership. Therefore there is unlikely to be any impact on small firms in Scotland.

6.2 The costs to business can only be estimated in very general terms. As explained in paragraphs 5.5 and 5.6, the costs to business are concerned with remediation, where that is required. Sites containing land that might require remediation are considered to be few in number and the costs considered to be typically in the few tens of thousands of pounds. Whilst the costs borne by an individual small business, in the unlikely event that it is subject to a remediation notice, may be considerable, it will be afforded the same level of protection against hardship (including closure or insolvency) as it is under the existing Part IIA regime. There is no evidence that land owned or occupied by small businesses is more likely to require remediation than land in any other ownership or occupancy and so the proposals will not affect the small business sector disproportionately.

6.3 Some small businesses might benefit from increased work, those being consultancies, remediation specialists and analysts.

7. Legal Aid Impact Test

7. This will have no bearing on the Radioactively Contaminated Land Regime.

Competition Assessment

8.1 In its consultation on its proposals to extend the Part IIA regime, Defra carried out an initial competition filter test to determine whether the proposals would have an effect on competition in affected markets. It considered issues such as the impact of the new Regulations on the market share, the market structure, the set-up costs of new, potential and existing firms, operating costs, technological advances and the price, quality, range and location of products. It concluded that the proposals would have little or no effect on competition. There are no issues particular to Scotland that effect that initial test and so it is concluded that the proposals will have little or no effect on competition in Scotland.

9. Test Run of Business Forms

9.1 The administration of the Radioactively Contaminated Land Regime for Scotland will be managed by SEPA. SEPA will in the course of identifying and designating land develop appropriate datasets, systems and procedures consistent with those that have been used by the existing Part IIA operators of special sites.

10. Enforcement, sanctions and monitoring

10.1 The existing enforcement arrangements under the Part IIA regime will apply to the proposed extension of the regime to include radioactivity. This means that, as for any other Special Site under the Part IIA regime in Scotland, SEPA will be the enforcing authority. This could mean applying an enforcement notice to remediate the land and failure to comply with a remediation notice, without reasonable excuse, will be an offence. On conviction, this offence would attract a lump sum fine, plus a daily fine for each day on which failure to comply with the remediation notice continues after conviction.

10.2 The Scottish Executive Environment and Rural Affairs Department with SEPA will monitor the operation of the Regulations closely and will keep them under review.

11. Implementation and Delivery Plan

11.1 As described in paragraph 10.1, SEPA will have responsibility for the enforcement of radioactively contaminated land. SEPA shall use its existing arrangements for the implementation and enforcement of the existing contaminated land regime for designating special sites. The Executive will be issuing detailed Statutory Guidance to SEPA and local authorities in October 2007 which will provide clarification on certain aspects of the regime with regards to delineation of roles and responsibilities, application to the water environment, the interface between the RCL Regulations 2007 and the existing Part IIA, i.e. homogenous and heterogeneous contamination to prevent dual regulation.

11.2 Draft Regulation 5 section 78(BB)(4) makes the provision for guidance to be issued to SEPA. The RCL Regulations have a commencement date of 31 October 2007 which is

necessary to enable the Statutory Guidance to be laid for consideration in the Scottish Parliament.

12. Post-implementation review

12.1 The Executive plans to review the effectiveness of the Radioactively Contaminated Land Regime within 10 years of its introduction; i.e. by 2017. This will include performance monitoring.

13. Summary and recommendations

13.1 The proposed amendments to Part IIA of the 1990 Act, to extend the provisions to include radioactivity, are required to:

- provide system for the identification and remediation of land where contamination is causing prolonged exposures to radiation and where intervention is liable to be justified. These include applying both the “polluter pays” and sustainable development principles;
- apply only to radioactivity arising from substances which have been processed as part of a past practice or work activity;
- consider what remediation is reasonable, where remediation includes intervention, the enforcing authority must consider the cost and harm (including social cost) of any intervention, whether the benefit of the intervention justifies the harm caused by the intervention and how the intervention can be optimised so that the net benefit can be maximised.
- monitor exposure if radioactive contamination is suspected and demarcate affected land and regulate access

13.2 In light of the public consultation, which demonstrates that in general terms the proposals were welcomed by consultees, it is our recommendation that we proceed with making the draft Regulations which will have the effect of implementing Option 3.

14. Regulatory Quality Declaration

I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.

Signed.....
Date.....

Ross Finnie
Minister for Environment and Rural Development
Scottish Executive