

The Radioactive Contaminated Land Regime and recent developments

IN 2006, THE APPLICATION OF THE CONTAMINATED land regime contained in Part 2A of the Environmental Protection Act 1990 (EPA) was significantly extended to the identification and remediation of land contaminated by radioactivity. On 10 December 2007, new regulations were introduced to further modify and extend the application of this new radioactive contaminated land regime to include land contamination arising from a nuclear occurrence from a nuclear-licensed site, which had previously been expressly excluded from the scope of the regime.

This briefing builds upon our previous article of February 2006 (*IHL137*, p56) by outlining the main provisions of the new radioactive contaminated land regime, following both the 2006 and recent 2007 legislative amendments. The English regulations have been used as a focus, although it is recognised that equivalent regulations have been enacted in Wales, Scotland and Northern Ireland. It also reviews the issues which have arisen in reconciling this new legislation regulating nuclear-related environmental damage and liability with the existing regulation regime of the nuclear industry.

BACKGROUND

The contaminated land regime was primarily extended to include radioactivity in order to meet the UK's unfulfilled legal obligation to transpose the requirements contained in the Basic Safety Standards (BSS) Directive (Euratom 96/29), namely Articles 48 and 53, into domestic law, and also to honour ministerial commitments. The BSS Directive, the basis of radiological protection in the UK, aims to protect workers and the public against exposure to ionising radiation and sets out specific requirements for intervention in cases of lasting exposure. The principle of intervention is defined as an action which results in a reduction in the exposure of individuals to radiation. This is distinguished from the principle of 'practices', also contained in the BSS Directive, which relates to a situation that increases an individual's exposure, such as the change in use of land, and is dealt with in the UK through the planning legislative system.

Following an initial consultation paper published in 1998 and a further consultation paper published in July 2005, the Radioactive Contaminated Land (Enabling Powers) (England) Regulations 2005 were introduced to enable the existing regime to be extended to cover land contaminated by radioactivity and new guidance was issued to reflect the changes.

CONTAMINATED LAND REGIME

In brief, the contaminated land regime contained in Part 2A of the EPA 1990 applies a risk-based approach to land remediation, requiring the action taken to be proportionate and appropriate to the risk. The identification of contaminated land is based upon establishing a pollution linkage from a contaminant, through a pathway to a receptor. The regime identifies the 'appropriate' persons to bear responsibility for remediation as those 'who caused or knowingly permitted the substances... to be in, on or under that land' (s78F), based on the 'polluter pays' principle. If the polluter cannot be found, then responsibility shifts to the owner or occupier of the land.

RADIOACTIVE CONTAMINATED LAND (MODIFICATION OF ENACTMENTS) REGULATIONS 2006

The 2006 Regulations modified Part 2A in respect of the identification and remediation of radioactive contaminated land, and amended guidance has also been published by Defra (Circular 01/2006, Environmental Protection Act 1990: Part 2a, Contaminated Land). However, while the identification of radioactive contaminated land is also based on the same concept of risk assessment and the establishment of a significant pollutant linkage (through the existence of a contaminant, pathway and receptor), a number of substantial differences to the original regime have been introduced.

Radioactive contaminated land is defined by the 2006 Regulations as land on which it appears that 'harm is being caused or there is a significant possibility of such harm being caused'. 'Harm' is defined as:

'... lasting exposure to any person resulting from the after-effects of a radiological emergency, past practice or past work activity.'

Therefore, the pollutant linkage is fairly limited as it is only formed if the receptor is human and where lasting exposure gives rise to the radiation doses contained in the statutory guidance. Further receptors such as the wider environment were considered in making the Regulations. However, in response, the Environment Agency concluded that there was:

'The regulations extend the regime to land contamination arising from nuclear occurrence.'

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'...no evidence for a widespread risk to protected ecosystems or of pollution from past activities impacting animals or crops and the government does not consider that there is a need for regulation to address other receptors at this time.'

(See p18, paragraph 73 of Annex 1 to the Defra Circular 01/2006.)

In addition, unlike under the contaminated land regime, water can only be treated as a pathway for radioactivity and not as a receptor. However, the 2006 Regulations do provide the power to the Secretary of State to legislate in relation to the pollution of controlled waters at a later date. This also allows the government to take into account the current developments taking place under the European Water Framework Directive (2000/60/EC) before considering how a significance test for pollution of controlled waters might be applied to the regime, both for radioactive and non-radioactive contamination.

Inspection

The duty to inspect land which may be contaminated with radioactivity is placed, as before, on the local authority. However, this differs from the original regime as, in relation to radioactive contaminated land, the duty only exists if the local authority has reasonable grounds for conducting the initial inspection and determining whether the land is contaminated. For example, reasonable grounds exist where the local authority is aware of relevant information relating to the former land use, past practices, work activities or levels of contamination present on the site that are capable of causing lasting exposure giving rise to the specified radiation doses. In Scotland, this duty rests with the Scottish Environment Protection Agency, and not with the local authority, which is required to notify SEPA of any land which it considers may be contaminated.

Designation

The power to designate the site as contaminated also remains with the local authority. However, on designation, the site becomes a special site which is then regulated by the Environment Agency. Prior to such designation, the Environment Agency also has a role to assist the local authority in the initial inspection and advise in relation to desk-based studies, instruction of contractors etc. The regime differs again in Scotland where designation of the site rests with SEPA.

Intervention

Designation of a site does not automatically lead to clean-up and removal of the radioactivity present. In considering remediation, the

Environment Agency is required to take into account the cost and the seriousness of the harm in question. Through the principles implemented in the regime from the BSS Directive, the Environment Agency will need to consider whether intervention that would result in reducing the exposure of the radiation to a human receptor is required. However, intervention may only be taken where it is justified and optimised. Therefore, the Environment Agency, as part of the process, is also required to consider whether the benefit of undertaking the remediation justifies the potential harm and how such remediation can be optimised in order to maximise the potential benefit. In practice, as a minimum, remediation will include demarcation of the land, monitoring of the harm and controlling access.

If remediation is undertaken and the contaminated soil removed, the application of other legislation, such as the Radioactive Substances Act 1993 (RSA), which regulates the accumulation and disposal of radioactive waste, will also need to be considered. The application of the RSA is dependent upon the levels of radioactivity present. Due to this, even though the RSA does not directly regulate radioactive contaminated land, it may influence the level of remediation as landowners or developers may choose to remediate the land to levels of contamination low enough so any soil excavated in the future will not require further regulation under the RSA.

As contained in the original regime, responsibility for remediation rests with the 'appropriate' persons – defined as those 'who caused or knowingly permitted the substances... to be in, on or under that land' (s78F EPA 1990) – based on the polluter pays principle. As above, if the polluter cannot be found, then responsibility shifts to the owner or occupier of the land. This is one of the principles that has been difficult to align with existing nuclear liability legislation, which places sole responsibility on the site licence-holder and is discussed further below.

RADIOACTIVE CONTAMINATED LAND (MODIFICATION OF ENACTMENTS) REGULATIONS 2007

The 2006 Regulations specifically excluded damage already regulated by the Nuclear Installations Act 1965 (NIA) – that is, damage to human health or property caused by nuclear matter on, or being transported from, a nuclear-licensed site. Therefore, any radioactive contamination from those sites and the liabilities arising from this would be dealt with, as in the past, purely by the existing nuclear regime. However, this has now been modified by the 2007 Regulations.

The new Regulations further extend the modifications to Part 2A of the EPA to include 'land contaminated by a nuclear occurrence' in the definition of radioactive contaminated land. This was in order to complete the implementation of the BSS Directive and means that Part 2A now applies to all radioactivity, including radioactive contamination emanating from a nuclear-licensed site that was previously excluded. It is also useful to note that the 2007 modifications made to the regime do not change the way in which Part 2A works for non-radioactive contamination, with the exception of the change to appeals procedures for remediation notices served by the local authority.

A number of issues were raised before implementing the 2007 extension of the regime, as reconciling the new concept of radioactive contaminated land to an existing nuclear liability regime has not been straightforward. Primarily, nuclear incidents are already subject to the Paris Convention, implemented and regulated in the UK by the NIA. There was therefore a need to structure how the radioactive contaminated land regime would lie alongside the nuclear regime without leading to contradiction, confusion or to claims arising under two differing liability regimes for contamination or damage caused.

NUCLEAR INSTALLATIONS ACT 1965 AND RADIOACTIVE CONTAMINATED LAND

In brief, the NIA governs the licensing and regulation of nuclear-licensed sites, which are regulated by the Health and Safety Executive's Nuclear Installations Inspectorate (NII), and specifies the duties of the operator of the site. It implements the Paris Convention on third-party liability in the field of nuclear energy into UK legislation. The NIA, based on the Paris Convention, operates a strict liability regime, which governs liability for damage resulting from the use of radioactive materials on, or the transport of nuclear material from, a licensed site.

Section 7 of the NIA imposes a duty on the site licence-holder not to cause:

'... injury to any person or damage to any property of any person other than the licensee, being injury or damage arising out of or resulting from the radioactive properties, or a combination of those and any toxic, explosive or other hazardous properties, of that nuclear matter; and no ionising radiations emitted during the period of the licensee's responsibility...'

This means that liability for such damage cannot be apportioned away from the site licence-holder to

contractors or third parties through a contractual agreement, with sole responsibility lying with the site licence-holder. The NIA also makes provision for the payment of compensation for damage caused.

Conversely, the contaminated land regime focuses on the polluter by defining the 'appropriate person' responsible for remediation as those who 'caused or knowingly permitted' the contamination or if the polluter cannot be found, the responsibility shifts to the owner or occupier. This wide group of potentially liable persons directly conflicts with the strict channelling of liability for damage to human health to the site licensee as established under the Paris convention and the NIA.

The 2007 Regulations address this issue by excluding contaminated land which falls exclusively within a nuclear-licensed site. The operator of the site will therefore remain liable for the heads of damage as currently provided for under the NIA. Where the licence operator cannot be made liable, the liability for remediation will fall to the Secretary of State as the appropriate person.

Furthermore, the Paris Convention requires the site licensee to ensure that sufficient financial protection is provided in order to cover its liability under the NIA. The site licensee's liability is currently capped at £140m and is underwritten in compliance with the legislation by insurance. Any liability going beyond this amount is placed on the government. However, no identical provision exists in the contaminated land regime and the establishment of such a provision has proved difficult. The initial aim of the drafting was to introduce an insurance requirement for liabilities under the new Regulations to parallel the arrangements for insurance as required by the Paris Convention. However, it has not proved possible to secure commercial insurance or another form of financial guarantee from the current insurers before the enactment of the 2007 Regulations.

Even though this created a significant obstacle to reconciliation of the two regimes, the UK came under increasing pressure of infraction proceedings from the European Commission in relation to non-implementation of the BSS Directive and could not further delay. Therefore, as a solution, albeit only for the time being, the 2007 Regulations place an obligation on the Secretary of State to be responsible for any contamination occurring off-site which arises from a nuclear occurrence on site and where the operator cannot be held liable under the NIA. It is felt that this leaves the option open to be addressed at a later date.

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Therefore, this issue may be more appropriate to consider in line with the amendments to the Paris Convention introduced under the Amending Protocol which have yet to be implemented into UK law. These include extending the heads of damage and therefore operator liability, for example, to damage to the environment and remediation of such damage, economic loss and preventative measures. Again, the same issues of financial mechanisms to underwrite the operator's liability for these extended heads of damage will need to be resolved.

Alongside the developments in international nuclear liability, trying to establish new rules on nuclear-related environmental damage and liability separately from the nuclear liability regime was likely to be fraught with difficulty. The application of the new radioactive contaminated land regulations will be watched with interest, particularly in light of the future changes to be made to the NIA further extending liability for nuclear incidents.

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