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## **How to comply with your EPR RSR environmental permit – open sources and receipt, accumulation and disposal of radioactive waste on non-nuclear sites**

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## QUICK GUIDE

This document provides guidance to holders of EPR RSR permits about the conditions included in their permits for the keeping or use of radioactive material in the form of open sources and for the receipt, accumulation and disposal of radioactive waste (except waste sealed sources).

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## Introduction

This guidance note is about how you can ensure that you keep and use radioactive material in the form of open sources, and where relevant, receive, accumulate and dispose of radioactive waste, safely and in a way that protects people and the environment. It explains in general terms your permit conditions, so that you understand what you need to do to comply with those conditions. Its structure is consistent with the current templates for radioactive substances permits under the Environmental Permitting (England and Wales) Regulations 2010 (EPR). It is also relevant to registrations for open sources and authorisations dealing with radioactive waste (except waste sealed sources) that were issued under RSA93 and continue to have effect as environmental permits under EPR. Where we know that there will be different or additional permit conditions in specific circumstances, we say so in this guidance. We may need to develop and use other conditions for use in less common permitting circumstances, so as to ensure that we adopt a proportionate approach. We will revise this guidance if we do so.

How our Radioactive Substances Regulation (RSR) guidance fits together

Government Guidance Core guidance RSR Guidance	
Natural Resources Wales generic Regulatory Guidance Notes (RGNs 1 - 9)  RSR RGN1 Environmental Principles RSR RGN3 The regulation of radioactive substance activities – non-nuclear operators Other Regulatory Guidance Notes ↓↓	
Natural Resources Wales RSR Guidance	
RSR Topic Guidance More detailed guidance on specific regulatory topics	Permit Conditions ↓
	How to comply with your environmental permit

The Government has produced guidance on the EPR ('the Core Guidance') which describes the general permitting and compliance requirements. Specific guidance on Radioactive Substances Regulation (RSR) has also been produced (Environmental Permitting Guidance Radioactive Substances Regulation (RSR)) which confirms how RSR should be applied and implemented, and how particular terms should be interpreted in England and Wales. Where specific requirements for RSR differ from those in the Core Guidance, the RSR Guidance sets out those differences. Therefore you should read the RSR Guidance in conjunction with the Core Guidance.

In our Regulatory Guidance Notes (RGN series documents) we have provided guidance on generic Natural Resources Wales regulatory approaches, stating what we intend to do and how we apply key terms and technical considerations to the activities we regulate under EPR.

We have published our Radioactive Substances Regulation Environmental Principles (REPs) (RGN RSR1) to set out our overall approach to RSR. This forms a consistent and standardised framework for the assessments and judgements that we make when regulating radioactive substances. This framework includes permitting and compliance where we regulate directly, as well as where we act as consultees, advisors or otherwise have influence. We have also provided regulatory guidance on “The regulation of radioactive substances activities on non-nuclear sites” (RGN RSR3).

You should use the guidance in the following ways

You can use this guidance to help you understand your permit and the conditions we consider necessary to regulate your activity, and to identify in broad terms what you should do to comply with the permit. You may wish to consider its content when applying for a permit, to prepare for what you will be expected to do. This guidance refers to other documents for more information. It does not provide detailed technical guidance nor does it set out specific technical standards or measures.

The permit conditions

The RSR non-nuclear permit conditions describe what we want you to achieve but do not normally tell you how to do this. They are generally intended to give you a degree of flexibility. This document sets out the permit conditions for radioactive waste and then provides guidance on how to comply. References to a table in a permit condition refer to the tables you will find in your permit schedules.

In broad terms the conditions are based on the following approach:

- you must use the best available techniques (BAT) to minimise radioactive waste generation, radioactive waste disposals to the environment, and the radiological impact of disposals;
- you may only keep or use radioactive material, and receive, accumulate or dispose of radioactive waste, in the manner and amounts specified in your permit;
- you must have suitable management arrangements, including sufficient competent persons and resources to comply with your permit;
- you must make and keep records demonstrating compliance and provide information to us as requested;

Permits are generally structured as follows, but conditions and schedules may be differently numbered in different permitting circumstances:

Section 1 Management  
Section 2 Operations  
Section 3 Disposal of Radioactive Waste & Monitoring  
Section 4 Information  
Section 5 Interpretation  
Schedules

## **1 – Management**

### **1.1 General management**

**1.1.1** The operator shall manage and operate the activities:

- in accordance with a written management system that is sufficient to ensure compliance with the conditions of this permit; and
- using sufficient competent persons and resources.

### **How to comply**

This condition means that you must put in place and implement management arrangements to ensure that you comply with your permit conditions. We have provided guidance on management arrangements in section 5.1 of the RSR Environmental Principles (RGN RSR1 RSR Environmental Principles).

We will take a proportionate approach, depending on the nature of your operations and the actual and potential impact of such facilities on the public and the environment. If your business is large or complicated it may be best to have a formal environmental management system (EMS). We strongly support systems which either meet the ISO14001 standard or are registered under EMAS (European Community Eco Management and Audit Scheme). For smaller and simpler activities it may be enough to have a basic management system instead of a fully certified EMS. We do not necessarily expect you to set up a standalone system. It may be integrated with any other management system that you already have in place. Useful guidance on management systems generally is given in the ISO 9000 and ISO 14000 series of standards. HSE publish guidance on safety management systems which may be relevant also to environmental considerations (Managing Health and Safety - Five steps to success).

We expect you to:

- Plan – establish the processes necessary to achieve compliance with the permit conditions
- Do – implement those processes
- Check – monitor those processes to ensure that compliance is being achieved
- Act – take action to improve those processes where failures or weaknesses are identified.

We expect your management system, as a minimum, to include:

- the definition of roles, responsibilities and authorities (for the Chief Executive, or equivalent, downward through all relevant posts in the organisation);
- identification of resources required (in terms of staff, facilities and equipment);
- identification of training needs for:
  - staff directly involved in work with open sources or waste;
  - staff who are not directly involved but whose work has the potential to impact on achieving compliance with the permit conditions;
- procedures for procurement, operation and maintenance of equipment and systems associated with the use of open sources and/or managing the receipt, accumulation and disposal of radioactive waste;
- procedures for dealing with incidents and accidents involving open sources or radioactive waste (see below);
- record-keeping arrangements (see 1.1.2 and section 4);
- arrangements for checking compliance (including correcting and learning from any non-compliances identified).

By 'accidents', we mean loss or theft of an open source or waste, or its escape from its containment during circumstances you did not plan to happen. You must consider how to reduce the risk of accidents.

By 'incidents', we mean any equipment breaking down or systems failing, and anything which could have resulted in an accident. You must investigate any incident that happens and keep a record of the investigation. You must be able to:

- detect incidents and investigate the causes;
- decide what you need to do to return to normal and stop it happening again.

Condition 1.1.1(b) means that all your staff must have clearly defined roles and responsibilities, with instructions covering what they should and should not do in their job. Staff who manage, supervise or work with open sources or radioactive waste must:

- understand the conditions of the permit;
- have the skills and ability to carry out their job;
- be given training appropriate to the nature of the work and the needs of the individual;
- be given sufficient time, facilities and equipment to carry out their work in accordance with these rules;
- know when they need to seek help and where to find it.

We expect instructions to staff to:

- provide direction on how equipment and/or open sources or radioactive waste are to be used or managed to achieve the work objective;
- address the precautions to be taken as part of that work to ensure their safe management and compliance with the permit;
- cover work that directly involves the use of open sources or the management of waste, and other work having the potential to affect safe management (for example, cleaning operations).

**1.1.2** The operator shall maintain records demonstrating compliance with condition 1.1.1.

### **How to comply**

You must make and keep reliable records showing how you have implemented your management arrangements. These are an essential part of your management system. The records must show what sort of management system you have, how you meet each of the conditions, and the evidence that you have met them.

Amongst other things, you should record:

- when and what maintenance has been carried out on relevant equipment;
- what you have done to make sure your staff have the right skills to do their jobs (including: the date and content of training they received; who provided the training; and how that training met their needs);
- any accidents (including the extent and location of any on or off-site contamination, and the actions taken to clean it up).

Section 4 of the permit tells you how to keep the records.

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**1.1.3** Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

### **How to comply**

Under this condition, you must make it easy for your staff to read your permit. They should also have ready access to the policies, procedures or work instructions they need to ensure that they act so as to comply with the permit. Making documents available electronically (for example, on a local computer network) is acceptable, provided that there are sufficient access points and the system is reliable.

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**1.1.4** The operator shall manage and operate the activities in consultation with such suitable radioactive waste advisors as are necessary for the purpose of advising the operator as to compliance with this permit.

### **How to comply**

This condition will be included only where the permit authorises the disposal of radioactive waste. There is a requirement under article 47 of the Euratom Basic

Safety Standards Directive – Directive 96/29 Euratom (BSSD) that operators appoint advisers, known as qualified experts, to advise them on radiological protection. In the UK we call the qualified expert for radioactive waste management and environmental radiation protection a 'Radioactive Waste Adviser' (RWA) and the UK Environment Agencies have set up a scheme defining the roles of RWAs. The details of the scheme including the appointment of RWAs and their syllabus is published on the SEPA website under “Radioactive Waste advisors” and is not repeated here.

Condition 1.1.4 requires you to appoint suitable RWA(s) and to consult them as appropriate in accordance with the scheme, to meet the BSSD requirement. The process of approving RWAs is set out in the scheme. You will need to be able to show that your RWAs are suitable to give relevant advice on the your business, that it that they have the specific knowledge, experience and competence required for giving advice on the particular radioactive waste management and environmental radiation protection issues for which the permit holder is making the appointment.

We expect you to maintain records showing when you consulted a RWA and how you acted upon that advice.

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## **2 Operations**

### **2.1 Permitted activities**

**2.1.1** The operator is only authorised to carry on the activities specified in Schedule 1, Table S1.1 (the “activities”).

#### **How to comply**

Under this condition, you can carry on only the specified radioactive substances activities, and only in relation to the justified practices or other work activities specified in the final column of Table S1.1. In general, you will need to apply for a variation if you wish to change the nature of the activities, practices or work activities undertaken.

You may also work within the provisions of one or more exemption orders – noting that most extant orders provide for conditional exemption only. None of the conditions of the permit apply to radioactive materials or waste that you hold under the terms of an exemption order.

(Note that the Hospitals Exemption Order cannot be used:

for the keeping or use of radioactive material where a permit allowing this is in force in respect of the premises;

for the accumulation and/or disposal of waste where a permit allowing this is in force in respect of the premises.)

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**2.1.2** Only radioactive material in the form of open sources comprising the radionuclides specified in Schedule 1, Table S1.2, together with any associated decay products present in amounts not exceeding those which could be present through radioactive decay of the specified radionuclides, shall be kept or used on the premises.

### **How to comply**

We think this condition is self-explanatory and guidance is unnecessary.

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**2.1.3** The activity of each radionuclide kept or used on the premises shall not exceed the relevant maximum activity specified in Schedule 1, Table S1.2.

### **How to comply**

The activity limit applies to the parent radionuclide - no account needs to be taken of the radioactivity of any decay products as provided for in condition 2.1.2.

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## **2.2 The site**

**2.2.1** The activities shall not extend beyond the site, being the land shown edged in green on the site plan at Schedule 5 to this permit.

### **How to comply**

Where the permit does not authorise the receipt, accumulation or disposal of radioactive waste, the condition will refer to Schedule 3.

You must carry out the activities only within the area of land shown on the site plan. If you wish to expand that area, you will need to apply for a variation. If you wish to reduce the area, you will need to apply for a partial surrender. RSR RGN 3 and the relevant parts of the application form give advice on these processes.

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## **2.3 Operating techniques**

**2.3.1** The operator shall use the best available techniques:

- to minimise the activity of radioactive material kept or used on the premises;
- to minimise the period over which radioactive waste is accumulated;
- to minimise the activity of radioactive waste produced on the premises that will require to be disposed of on or from the premises;

- to ensure that all relevant parts of the premises are constructed, maintained and used in such a manner that:
- they do not readily become contaminated; and
- any contamination which does occur can be easily removed; (e) to prevent:
- the loss of any radioactive material or radioactive waste; and
- access to any radioactive material or radioactive waste by any person not authorised by the operator.

**2.3.2** The operator shall use the best available techniques in respect of the disposal of radioactive waste pursuant to this permit to:

- minimise the activity of gaseous and aqueous radioactive waste disposed of by discharge to the environment;
- minimise the volume of radioactive waste disposed of by transfer to other premises; and
- dispose of radioactive waste at times, in a form, and in a manner so as to minimise the radiological effects on the environment and members of the public.

### **How to comply**

Where the permit does not authorise the accumulation or disposal of radioactive waste,

2.3.1(b) and 2.3.1(c) will be omitted and the conditions re-numbered accordingly – and 2.3.1(e) will refer only to radioactive material. 2.3.2 will be included only where the permit authorises the disposal of radioactive waste.

'Best available techniques' (BAT) is broadly equivalent to 'best practicable means' (BPM) – the term we previously used.

Condition 2.3.1 is primarily about using BAT to minimise the generation of radioactive waste. For waste that has to be generated, condition 2.3.2 then requires you to use BAT to minimise the activity of that part of the waste that is disposed of, in gaseous or aqueous form, by discharge to the environment, and to minimise the volume of that part that is disposed of by transfer to other premises. It also requires you to use BAT to dispose of waste in a way which minimises its radiological impact – for example, by ensuring good dispersion of gaseous waste.

To identify the best available techniques (BAT) you need to make a judgement between options by comparing benefits in terms of safety and environmental protection and costs in terms of time, effort or money. BAT is the point at which the detriments from implementing further techniques become grossly disproportionate to the benefits gained. 'Techniques' is defined to include 'both the technology used and the way in which the installation is designed, built, maintained, operated and dismantled'.

We expect the type and quantity of radioactive material you keep to be consistent with your business needs and the material to be used efficiently and effectively – and so reduce the potential to generate radioactive waste. You must also use BAT when you accumulate waste because inadequately planned and managed waste accumulation can lead to the generation of secondary waste, increasing the volume of waste that needs to be disposed of. Inadequate access, security and contamination controls may lead to the unnecessary generation of primary and secondary radioactive waste.

It may not be sufficient to comply with your authorised accumulation period; you should optimise your accumulation of waste and arrange for its transfer as soon as reasonably practicable. As part of this, where you routinely create waste that is to be disposed of by transfer, you should have arrangements in place such as a valid contract for that transfer at all times. Where such waste is created only intermittently, you may set up an arrangement that caters for each transfer individually – this should be in place prior to creation of the waste, or, where the physical quantities are small (that is, less than a sensible 'consignment' size) you should be confident, prior to creating waste, that you can put your arrangements in place by the time you've accumulated sufficient quantity for a consignment.

Equally, you must continue to work to reduce your disposals of radioactive waste where there are techniques which would allow you to do so.

We will provide separate, specific guidance on BAT – in partnership with others where that is appropriate – addressing aspects of all the BAT conditions (2.3.1 – 2.3.5). In the interim, you should refer to our previous guidance on BPM, which is available from us on request.

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**2.3.3** The operator shall use the best available techniques to:

- exclude all entrained solids, gases and non-aqueous liquids from radioactive aqueous waste prior to discharge to the environment;
- ensure that any discharge of radioactive gas to the atmosphere is made in a manner which prevents its entry into any building; and
- ensure that any residual ash is disposed of as very low level waste in accordance with this permit.

### **How to comply**

Where the permit does not authorise the disposal of radioactive waste this condition will be omitted. Part (c) will be included only where the permit authorises disposal of waste by incineration on the premises.

Entrainment of non-aqueous substances within aqueous discharges can result in the concentration of radioactivity. The environmental impacts will be higher than if

appropriate processes and waste management are in place. They should be excluded to the extent that is required to meet BAT. However, you do not need to treat aqueous waste containing human excreta, where this is discharged to a public sewer.

We think part (b) of this condition is self-explanatory, and guidance is unnecessary.

Part (c) is aimed at ensuring that incinerator residues can be readily disposed of. You should manage the inputs of radioactive and non-radioactive waste to the incinerator to achieve the required concentrations in residual ash.

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**2.3.4** The operator shall maintain in good repair the systems and equipment provided:

- to meet the requirements of conditions 2.3.1, 2.3.2 and 2.3.3; and
- to carry out any monitoring and measurements necessary to determine compliance with the conditions of this permit.

### **How to comply**

Where the permit does not authorise the disposal of radioactive waste, this condition will be numbered 2.3.2 and (a) will refer only to 2.3.1.

This condition recognises that poor maintenance of plant, instrumentation or infrastructure can lead to the unnecessary production of radioactive waste. You must ensure that the techniques you use remain capable of delivering your BAT obligations.

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**2.3.5** The operator shall check, at an appropriate frequency, the effectiveness of systems, equipment and procedures provided to meet the requirements of conditions 2.3.1, 2.3.2 and 2.3.3.

### **How to comply**

Where the permit does not authorise the disposal of radioactive waste, this condition will be numbered 2.3.3 and (a) will refer only to 2.3.1

This condition means that you must regularly check that your techniques are continuing to achieve what they were designed or expected to achieve.

**2.3.6** Any container in which radioactive material or radioactive waste is stored shall be clearly and legibly marked with the word 'Radioactive', with the ionising radiation symbol conforming with BS 3510:1968 or ISO 361:1975 and any other information necessary for the identification of the radioactive material or radioactive waste present.

### **How to comply**

Where the permit does not authorise the disposal of radioactive waste, this condition will be numbered 2.3.4 and will refer only to radioactive material.

It is important that radioactive substances are clearly, easily and readily identified as such – so that your staff, and in some circumstances, others, know that they must use your management arrangements when working with or near them. Identification must show how each container links to your source or waste records – this will help ensure that waste is disposed of by the appropriate route at the appropriate time. Adequate identification will also be important should your radioactive substances be involved in an accident or incident.

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**2.3.7** The operator shall have and comply with appropriate criteria for the acceptance into service of systems, equipment and procedures for carrying out any monitoring and measurements necessary to determine compliance with the conditions of this permit.

### **How to comply**

Where the permit does not authorise the disposal of radioactive waste, this condition will be numbered 2.3.5.

You should:

- establish acceptable tolerances for the results to be obtained from monitoring and measuring systems, equipment and procedures;
- carry out checks to ensure that these tolerances are met before such systems, equipment and procedures are brought into service (including for the first time or after repair).

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**2.3.8** The operator shall post copies of this permit on the premises, in such characters and in such positions to be conveniently read by persons who have duties on the premises which are or could be affected by the matters set out in this permit.

### **How to comply**

Where the permit does not authorise the disposal of radioactive waste, this condition will be numbered 2.3.6.

This condition reflects a statutory obligation (EPR Schedule 23, Part 5, paragraph 1(1)(a)). It requires the permit to be physically posted on the premises.

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**2.3.9** The operator shall maintain records of open radioactive sources showing:

- the radionuclide present, the date on which it was received and the activity on that date;
- so far as is reasonably practicable its location on the premises;
- if it has been removed from the premises, the date of removal, the activity on that date and the name and address of the person to whom it was transferred; and
- the activity present on the premises at the end of each calendar month.

### **How to comply**

Where the permit does not authorise the disposal of radioactive waste, this condition will be numbered 2.3.7.

You must make a record whenever you obtain radioactive material, and update it whenever you change its normal location or send it to someone else. For the purposes of this condition, the location of radioactive material may be described in general terms, for example 'Chemistry Department'. But separate, regularly-updated records of the specific location and the usage of the radioactive material should be kept, with the aim of preventing the loss of radioactive material – see the information sheet on controlling radioactive substances (sheet irp8) that we wrote with the Health and Safety Executive (HSE). You can get this from the HSE's website: [www.hse.gov.uk/pubns/irp8.pdf](http://www.hse.gov.uk/pubns/irp8.pdf).

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**2.3.10** Where the operator treats patients who are subsequently transferred for care at another premises, it shall:

- ensure that relevant advice, consistent with the Medical and Dental Guidance Notes (ISBN 1-903613-09-4), is given to staff at those other premises so that their arrangements are informed by its contents; and
- maintain records sufficient to identify the premises subsequently caring for a treated patient.

### **How to comply**

This condition will only be included where the operator's business involves the treatment of patients who may be subsequently transferred for care at other premises.

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**2.3.11** The operator shall ensure that:

all radioactive material used for activity reference A5 in Schedule 1, Table S1.1 is kept and used only on the premises in Schedule 1, Table S1.5;  
prior to the use of radioactive material on any premises, a written assessment is made of the arrangements on those premises and that written rules for the use of the material are provided to each person who will be using it;  
all records required by this permit are kept at the premises in Schedule 1, Table S1.6; and  
arrangements are in place to ensure the person responsible for the administration has both the necessary resources available and appropriate training to enable any spillage of radionuclides to be cleaned up and the area decontaminated.

### **How to comply**

This condition will be included only where the operator carries out mobile positron emission tomography (PET).

Mobile PET Operators must ensure that they plan, manage and carry out their work consistent with the circumstances at each of the premises at which they are authorised to do it, and in co-operation with the organisation in control of those premises. They must ensure that their staff are capable of responding appropriately to incidents.

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**2.3.12** The operator shall only dispose of solid and liquid waste if:

- it is transferred to a person specified in Schedule 1, Table S1.5 at the relevant premises;
- it is transferred on the day of its production to the person on whose premises it has been produced;
- the person to whom the operator transfers waste receives, prior to the first transfer of waste, a copy of this permit together with written rules for the
- accumulation and disposal of the waste;
- the person to whom the operator transfers waste accumulates the waste for a minimum period of 72 hours and, as soon as reasonably practicable thereafter, disposes of the waste by the means used for the disposal of nonradioactive wastes of a similar nature; and
- the person to whom the operator transfers waste complies with conditions 2.3.1 (d) – (e), 4.1.1 and 4.3.1, as if he were the operator.

## **How to comply**

This condition will be included only where the operator carries out mobile positron emission tomography.

Mobile PET Operators must ensure that the radioactive waste they generate is subsequently managed at the premises where it originated, in accordance with the requirements of this condition. They must provide sufficient information to the transferee, to enable that to happen.

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### **2.4 Pre-operational conditions**

**2.4.1** The activities shall not be brought into operation until the measures specified in Schedule 1, Table S1.3 have been completed.

**2.4.2** Written notification of the date of completion of each measure shall be sent to Natural Resources Wales within 14 days of the completion of each such requirement.

## **How to comply**

We do not expect to set pre-operational conditions often. But we will do so where they are necessary to ensure that an operator is in a position to meet the other conditions of its permit – where a permit is issued prior to construction of a facility, for example.

You may begin the activities when you have satisfied pre-operational conditions – and obtained our agreement if that is specified in Schedule 1, Table S1.3.

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### **2.5 Improvement programme**

**2.5.1** The operator shall complete the improvements specified in Schedule 1, Table S1.4 by the date specified in that table unless otherwise agreed in writing by Natural Resources Wales.

**2.5.2** Except in the case of an improvement which consists only of a submission to Natural Resources Wales, the operator shall notify Natural Resources Wales within 14 days of completion of each improvement.

## **How to comply**

If we set an improvement programme, this will generally be aimed at securing high standards – rather than reaching an adequate standard.

You may continue with your activities whilst you satisfy an improvement programme requirement – we will review your progress and completion of the requirements during our compliance inspections.

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## **2.6 Receipt of radioactive waste**

Where the permit authorises only the use of open sources, this section will be omitted. Where the receipt of radioactive waste is not authorised, this section will include only a condition 2.6.1 confirming that. And where waste is received as a result of an operator's participation in NAIR or Radsafe, appropriate conditions will be included.

### **2.6.1 The operator shall:**

- only accept radioactive waste which this permit allows the operator to accumulate or dispose of;
- for each type of radioactive waste that the operator is prepared to receive, produce a written specification of the information required to enable the disposal of that type of radioactive waste in compliance with this permit;
- provide that written specification to any person from whom the operator is prepared to receive radioactive waste of that type;
- only accept a consignment of radioactive waste that is accompanied by a legible note providing the specified information; and
- keep a copy of any such note received.

### **How to comply**

The purpose of this condition is: to facilitate the transfer of radioactive waste between waste consignors and consignees; to ensure adequate exchange of information; to ensure the waste is disposed of in accordance with permit conditions; and to ensure the maintenance of records of transfers of radioactive waste.

The written specification required by (b) should cover matters such as radioactivity content, chemical composition and packaging, as necessary to ensure you only receive radioactive waste which you can, in turn, dispose of in accordance with your permit conditions.

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**2.6.2** The provisions of conditions 2.6.1 (b) to (e) do not apply to any radioactive waste collected as a result of the operator's participation in the National Arrangements for Incidents involving Radioactivity or in the Radsafe scheme.

**2.6.3** Where radioactive waste is received as a result of its participation in the National Arrangements for Incidents involving Radioactivity or in the Radsafe

scheme, the operator shall notify Natural Resources Wales of the circumstances and the nature of the waste.

## **How to comply**

These conditions will be included only where relevant.

These conditions acknowledge that waste received as a result of participation in NAIR or Radsafe may initially be of uncertain origin and characteristics. We think these conditions are self-explanatory and guidance is unnecessary.

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**2.6.4** Before the operator first receives radioactive waste from a consignor for the purpose of final disposal of that waste from or on the premises, the operator shall, at the earliest opportunity, inform the local authority, in whose area of responsibility the premises is situated, of the origin and nature of the radioactive waste.

**2.6.5** The provisions of condition 2.6.4 do not apply:

- where the waste consignor is exempt from the requirement to hold an environmental permit for the disposal of radioactive waste;
- to the extent that it would require the disclosure of information relating to sealed radioactive sources;
- to VLLW.

## **How to comply**

We will include these conditions only where the permit authorises the final disposal of radioactive waste.

Final disposal includes the incineration or burial of radioactive waste on the premises, and discharge to the environment of the bulk of the radioactivity in waste (directly or following treatment of the waste).

You should provide the local authority with:

- your name and address;
- the name and address (registered or principal office) of the consignor;
- a description of the type of radioactive waste to be received using the normal waste descriptions (for example, solid low level waste, combustible solid waste, combustible organic liquid waste);
- the date on which that radioactive waste is expected to be received for the first time.

'Local authority' in this context means the unitary authority or, in two-tier areas, both tiers of local authority (usually district council and county council). You should contact the relevant authority/authorities to establish where the information should be sent.

You should inform the local authority as soon as you have made arrangements for the first transfer of waste. You need only inform them of the first consignment of waste; you do not need to inform them of any subsequent transfers from the same consignor. You do not need to provide information in relation to any consignor from whom you were receiving waste prior to 6 April 2010, nor in any of the circumstances specified in 2.6.5. For reasons of national security, it is particularly important that you do not provide the local authority with any information about any proposed receipt of sealed radioactive sources for final disposal.

[Note: You should check whether the acceptance of radioactive waste from a new consignor falls within the terms of your planning permission. You should contact the relevant local authority if you have any questions.]

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## **2.7 Accumulation of radioactive waste**

Where the permit authorises only the use of open sources this section will be omitted.

**2.7.1** There shall be no accumulation of radioactive waste except of the types of radioactive waste specified in Schedule 2, Table S2.1.

**2.7.2** The limits on accumulation given in Schedule 2 shall not be exceeded.

### **How to comply**

Where we have agreed that the operator may receive waste under the NAIR or Radsafe scheme, the Schedule will provide suitable authorisation.

Limits will usually be set on the radioactivity of specified radionuclides, or groups of radionuclides, in the accumulated waste and the time period for which it is accumulated.

The activity limit applies to the parent radionuclide - no account needs to be taken of the radioactivity of any decay products as provided for in condition 2.1.2.

Where waste is accumulated on a short-term basis at the point of work, prior to its transfer to a main store, you should normally consider the period of accumulation (for comparison with the limit) as commencing at the point of transfer to the store. This is only acceptable where waste is held at the point of work for a reasonable time, taking into account the overall hazard presented by the quantity, type and throughput of waste and the radiation types and activities. We would not normally expect waste to be held at the point of work for longer than one week.

### **3 – Disposals of radioactive waste and monitoring**

Where the permit authorises only the use of open sources section 3.1 will be omitted. Where waste is received as a result of an operator's participation in NAIR or Radsafe appropriate conditions will be included.

#### **3.1 Disposals of radioactive waste**

**3.1.1** There shall be no disposals of radioactive waste except of the types of radioactive waste and by the disposal routes specified in Schedule 3.

#### **How to comply**

The Schedule will specify which waste types, disposal routes and transferees are authorised, together with any radionuclide or quantity limits.

Where disposal of waste by transfer is permitted, the Schedule will usually specify the transfer route in general terms. For example, for combustible waste, it may say that such waste may be transferred to 'the holder of a permit under the Environmental Permitting Regulations to receive and dispose of radioactive waste by incineration'. This means that you are not restricted to transferring combustible waste to any particular company or site that you identified in your application to us, but can enter into a contract with any suitable incinerator operator. However, you must satisfy yourself that the proposed transferee holds a permit that allows him to incinerate radioactive waste containing the radionuclides present in your waste. You should:

- ask the proposed transferee for a copy of his current permit (or permits where the transfer may be to any of several sites under his control);
- check with Natural Resources Wales if you have any doubts about its validity;
- check and note that the permit covers your proposed disposal.
- You should repeat this exercise at least every two years, if you use the transfer route on a long-term basis.

Where you dispose of waste by transfer, it is permissible to use a third party carrier to transport the waste to the transferee's site, but you should take reasonable steps to ensure that each consignment arrives at the expected destination. You should:

- choose a reputable carrier;
- give clear instructions to the carrier as to where and when the waste is to be delivered
- (reflecting your prior arrangements with the transferee);
- inform the transferee when the waste has been collected;
- confirm with the transferee that the waste has been received at the expected time and investigate what has happened, if not.

Where we have agreed that the operator may receive radioactive waste under the NAIR or Radsafe schemes, the Schedule will usually specify that such waste may be disposed of by transferring it to 'a person whom Natural Resources Wales has agreed in writing may receive that radioactive waste'. If you do receive any such

waste, you should discuss with us how you propose to dispose of it, so that we may agree appropriate arrangements with you.

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**3.1.2** The limits on disposals given in Schedule 3 shall not be exceeded.

### **How to comply**

Where a limit is set on the radioactivity of a specified radionuclide in a waste type authorised for disposal, it applies to the parent radionuclide - no account needs to be taken of the radioactivity of any decay products (as described in condition 2.1.2) present. The limits apply to the total radioactivity of the specified radionuclide or group of radionuclides in the specified waste type in all the waste disposed of by that route in the specified time period.

You must have suitable arrangements in place to assess the radioactive content of all disposals, in order to demonstrate compliance with the limits. The arrangements may rely on measurement, calculation or estimation (as defined in our Pollution Inventory reporting form, PI(RAS,)) as appropriate to the nature of the waste and the disposal route.

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**3.1.3** The operator shall ensure that the transfer of radioactive waste, including, where practicable, for radioactive waste collected as a result of the operator's participation in the National Arrangements for Incidents involving Radioactivity or in the Radsafe scheme:

- is in accordance with the directions of the person to whom the radioactive waste is transferred that are necessary to enable that person to comply with all relevant regulatory requirements;
- is done using a suitable container constructed and maintained so as to prevent the loss of waste; and
- so far as is reasonably practicable, is not subject to delays in transit and is accepted at the premises of the person to whom the operator transfers waste.

### **How to comply**

The requirements of the person to whom the radioactive waste is transferred may address matters not related to the radioactivity of the waste.

You will be compliant with (b) if you use a container that meets the requirements of the current UK legislation on the transport of radioactive material.

You should arrange for transfers of radioactive waste to be made, so far as reasonably practicable:

- by the most direct route;

- at a date and time agreed beforehand with the transferee.
- 

#### **3.1.4 The operator shall:**

- ensure that the person to whom radioactive waste is transferred receives at the time of transfer of each consignment a clear and legible note signed on the operator's behalf:
- stating the total activity in the consignment of each relevant radionuclide or group of radionuclides listed in the relevant table in Schedule 3; or
- stating, when no relevant radionuclide or group of radionuclides is specified in Schedule 3, the total activity in the consignment of each radionuclide or group of radionuclides as listed in the written specification of the person to whom the radioactive waste is transferred.
- obtain a note signed on behalf of the person to whom radioactive waste is transferred, at the time of transfer, stating:
- that the transfer has taken place; and
- the date of receipt of the radioactive waste.
- keep a copy of any note issued under condition 3.1.4(a) and any note received under condition 3.1.4(b).

#### **How to comply**

We think (a) and (c) are self-explanatory and guidance is unnecessary.

To comply with (b):

- it is advisable to include appropriate requirements in your contract with the transferee;
- the note must be signed by a person at the receiving site, confirming that the consignment has been received – it is not sufficient for the note to be signed by the driver transporting the consignment, even if he is employed by the transferee;
- you should have arrangements in place to ensure that non-receipt of a note is quickly recognised and chased up with the transferee.

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**3.1.5** If required by Natural Resources Wales, the operator shall ensure that any consignment or part of any consignment of radioactive waste found, following transfer, not to be in accordance with the conditions of this permit:

- is packaged in accordance with the relevant legislation; and
- is returned as soon as is reasonably practicable to the operator's site.

#### **How to comply**

Under this condition we may require you to take back waste if the transfer has been found not to be in compliance with the conditions of your permit. We will set out that requirement in writing. You would then be responsible for any (re)packaging of the waste to enable it to be returned to you.

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**3.1.6** The operator shall, not later than 14 days after the end of each month or within such longer period as Natural Resources Wales may approve in writing, record all disposals of radioactive waste made during that month.

### **How to comply**

Where the disposal is by transfer, the records should include the date of transfer, the radioactivity on that date and the name and address of the person to whom it was transferred.

For other disposals, the records should include:

- the date of each disposal;
  - the radioactive content of each disposal (in terms of each relevant radionuclide/group of radionuclides specified in the schedule);
  - the type of waste and the disposal route;
  - the total radioactivity (in terms of each relevant radionuclide/group of radionuclides specified in the schedule) in all disposals made by that route during the month.
- 

**3.1.7** Where the operator disposes of radioactive waste which was received as a result of the operator's participation in the National Arrangements for Incidents involving Radioactivity or in the Radsafe scheme, it shall notify Natural Resources Wales of the manner and date of disposal.

### **How to comply**

This condition will only be included where we have agreed that the operator may receive waste under the NAIR or Radsafe scheme.

We think this condition is self-explanatory and guidance is unnecessary.

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## **3.2 Monitoring**

Where the permit does not authorise the disposal of radioactive waste, the conditions in this section will be numbered 3.1.1 – 3.1.4

**3.2.1** If required by Natural Resources Wales, the operator shall

take such samples and conduct such measurements, tests, surveys, analyses and calculations, including environmental measurements and assessments, at such times and using such methods and equipment as Natural Resources Wales specifies; and

keep samples, provide samples, or dispatch samples for tests at a laboratory, as Natural Resources Wales specifies, and ensure that the samples or residues thereof are collected from the laboratory within three months of receiving written notification that testing and repackaging in accordance with the relevant legislation are complete.

### **How to comply**

We will not normally require samples to be taken or retained or specific measurements to be made. Where we do, we will set out the outcomes we expect you to secure. If we require you to send samples to others, you must arrange to take them back, unless the recipient agrees to dispose of them.

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**3.2.2** The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

### **How to comply**

Where we require you to make specific monitoring arrangements, or you rely on monitoring to demonstrate compliance with any of the conditions of the permit, you must make and keep records as specified in this condition.

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**3.2.3** The operator shall carry out:

- regular calibration, at an appropriate frequency, of systems and equipment provided for carrying out any monitoring and measurements necessary to determine compliance with the conditions of this permit; and
- regular checking, at an appropriate frequency, that such systems and equipment are serviceable and correctly used.

### **How to comply**

This condition applies where you rely on monitoring or measurement to determine compliance with any condition of the permit.

Calibration should be carried out, as a minimum, at the frequency recommended by the manufacturer, supplier or installer.

The frequency of checks for serviceability will depend on the nature of the equipment and the conditions in which it is used. Portable equipment should be given at least a visual check prior to each use. Installed equipment, particularly if not readily accessible, should preferably be alarmed or fail 'safe'.

Checking that equipment is used correctly should be a routine feature of management supervision.

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## **4 – Information**

### **4.1 Records**

**4.1.1** All records required to be made by this permit shall:

- be legible;
- be made as soon as reasonably practicable;
- if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- be retained until notified in writing by Natural Resources Wales that records no longer need to be retained.

**4.1.2** The operator shall:

- retain records made in accordance with any previous relevant permit issued to the operator and related to the premises covered by this permit; and
- retain records transferred to the operator, which were made in accordance with any previous relevant permit related to the premises covered by this permit.

**4.1.3** The operator shall keep on site all records, plans and the management system required by this permit, unless otherwise agreed in writing by Natural Resources Wales.

### **How to Comply**

Your records must be clear and up-to-date. We may request you to supply us with copies as part of our compliance inspection work. You must keep any records made under relevant permits previously issued for your premises covering radioactive substances activities. All the records must be kept on the premises, so that they're available for our inspection, unless we agree to you keeping them somewhere else.

'Making a record' in some cases may simply mean retaining copies of correspondence. For example, we expect you to keep the confirmation that an appropriate permit is in force, supplied by any person to whom you have transferred or intend to transfer waste.

We require you to retain records until you have surrendered your permit, unless we specify otherwise. You should approach your local regulator if you wish to get rid of

any of your records - we will only agree to this where we are satisfied that the information is no longer needed.

Records may be kept in hardcopy or electronic form. Electronic records must remain accessible up to the point where you are notified that they may be destroyed.

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## **4.2 Reporting**

**4.2.1** The operator shall send all reports and notifications required by this permit to Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.

### **How to comply**

Under condition 4.2.1, whenever you need to speak or write to us, you should use the contact details in the letter we sent you with your permit. We shall write to you if our details change.

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**4.2.2** The operator shall supply such information in relation to

- the disposals of radioactive waste; and
- the samples, tests, surveys, analysis and calculations, environmental monitoring and assessments undertaken under conditions 3.2.1;
- in such format and within such timescales as Natural Resources Wales may specify in writing.

### **How to comply**

Where the permit does not authorise the disposal of radioactive waste, the cross-reference will be to condition 3.1.1.

Where the permit authorises the disposal of radioactive waste, we will use this condition to require you to provide information for our pollution inventory (see [www.environmentagency.gov.uk/pi](http://www.environmentagency.gov.uk/pi)). The details will be set out in a specification provided with your permit.

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## **4.3 Notifications**

**4.3.1** Natural Resources Wales shall be notified without delay following the detection of:

- any malfunction, breakdown or failure of equipment or techniques or accident, which has caused, is causing or may cause significant pollution or may generate significant amounts of radioactive waste;

- the breach of a limit specified in this permit; or
- any significant adverse environmental effects; or (d) any escape of accumulated radioactive waste.

**4.3.2** Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in Schedule 4 within the time period specified in that Schedule.

### **How to comply**

Where the permit does not authorise the accumulation of radioactive waste, (b) and (d) will be omitted and the conditions re-numbered accordingly.

Under these conditions, you must tell us if things go wrong. The phrase 'without delay' emphasises that you must notify us about any such event as an immediate priority. It is particularly important that you contact us urgently if there is any non-compliance with security requirements.

During normal working hours you may be able to contact your local regulator or the local Natural Resources Wales office. You can also use our incident hotline 0800 807060. Calls are free and the hotline operates 24 hours a day, seven days a week.

You should follow up your initial notification with a written report, setting out the circumstances of the event and any actions you took, or plan to take, to mitigate or recover the situation or to prevent a recurrence. Under normal circumstances this report should be provided shortly after an event occurring, when your initial investigation into the incident has been completed. A more detailed or revised report may follow at a later date if a lengthy investigation is necessary.

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**4.3.3** Natural Resources Wales shall be notified in writing, at least 21 days in advance or, where this is not possible, without delay, of the operator's intention to cease to keep or use radioactive material, or to cease to accumulate or dispose of radioactive waste.

### **How to comply**

Where the permit authorises only the keeping and use of radioactive material, the condition will reflect that.

This will allow us to discuss with you your plans to apply to surrender your permit.

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**4.3.4** Natural Resources Wales shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- any change in the operator's trading name, registered name or registered office address; and
- any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
  - any change in the operator's name or address; and
  - any steps taken with a view to the dissolution of the operator. (c) In any other case:
    - the death of any of the named operators (where the operator consists of more than one named individual); and
    - any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case them being in a partnership, dissolving the partnership.

### **How to comply**

We think this condition is self-explanatory and guidance is unnecessary.

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**4.3.5** If the operator believes or has reasonable grounds for believing that radioactive material or radioactive waste have been lost or stolen he shall: without delay inform the Police and Natural Resources Wales; make all reasonable efforts to recover that radioactive material or radioactive waste; and as soon as is practicable report the circumstances in writing to Natural Resources Wales.

### **How to comply**

Where the permit authorises only the keeping and use of radioactive material, the condition will reflect that.

In these circumstances, you need to notify the police so that they can investigate criminal action, investigate the possibility of criminal action (apparent loss might be undetected theft) and so they may take action to protect the public.

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