

# Standard rules SR2017 No1

The Environmental Permitting (England & Wales) Regulations 2016

# SR2017 No1 Unintentional receipt of radioactive materials and radioactive waste by the operator of any facility which uses a radiation detection system

# Introductory note

This introductory note does not form a part of these standard rules.

When referred to in an environmental permit these rules authorise operators of radiation detection systems to keep radioactive materials and accumulate radioactive waste and, after it has subsequently been characterised and quantified, to dispose of the waste by transfer to operators who are themselves permitted to receive and dispose of radioactive wastes of that type and quantity. The following criteria apply:

Category	Relevant criteria (or N/A)
Activity and scale	Discovered radioactive waste that has subsequently been characterised and quantified can be disposed of by transfer to operators who are, themselves permitted to receive and dispose of radioactive wastes of that type and quantity.
	Safe and secure storage for any discovered radioactive waste or material while it is assessed and an appropriate course of action is determined.
Key restrictions Not to be used at sites which are otherwise permitted to receive, accumu dispose of radioactive waste.	
	Not to be used for radioactive waste or material which is a high activity sealed source.
	Not to be used for wastes which arise if a radioactive item is melted or processed.

When radioactive material or radioactive waste is found, the Environment Agency's aim is that it should be brought under a system of control as soon as possible. We expect operators of radiation detection systems to provide safe and secure storage for any discovered radioactive material or radioactive waste while it is assessed and an appropriate course of action is determined. This is intended to ensure that people and the environment are protected from the harmful effects of radiation.

The Health and Safety Executive regulates work with ionising radiation under the Ionising Radiation Regulations 1999 (being revised). Those regulations cover accidents and contingency arrangements, including off-site effects. The Office for Nuclear Regulation regulates transport of radioactive substances.

#### End of introductory note

# **Record of changes**

Version	Date	Change
1.0	March 2018	For issue

# Rules

### 1 Management

#### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
  - (a) in accordance with a written management system that is sufficient to ensure compliance with the conditions of these rules; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 The operator shall maintain records demonstrating compliance with rule 1.1.1.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in these standard rules shall have convenient access to a copy of them kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall manage and operate the activities in consultation with such suitable radioactive waste advisers as are necessary for the purpose of advising the operator as to compliance with these rules.

# 2 **Operations**

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#### 2.1 Permitted activities

Table 2.1 activities			
Activity listed in Schedule 23 of the Environmental Permitting Regulations	Description of activity	Limits of activity	
Schedule 23 Part 2 paragraph 11 (2) (a)	Keeping of radioactive material	Radioactive material, except a high activity sealed source, detected by a radiation detection system at a facility where the operator does not otherwise keep radioactive material under a permit.	
Schedule 23 Part 2 paragraph 11 (2) (b)	Disposal of radioactive waste from the premises	Radioactive waste detected by a radiation detection system at a facility where the operator does not otherwise receive, accumulate or dispose of radioactive waste under a permit, except radioactive waste which is a high activity sealed source or wastes which arise if a radioactive item is melted or processed.	
Schedule 23 Part 2 paragraph 11 (2) (c)	Accumulation of radioactive waste on the premises	Radioactive waste detected by a radiation detection system at a facility where the operator does not otherwise receive, accumulate or dispose of radioactive waste under a permit, except radioactive waste which is a high activity sealed	

2.1.1 The operator is only authorised to carry out the activities specified in table 2.1.

Table 2.1 activities		
Activity listed in Schedule 23 of the Environmental Permitting Regulations	Description of activity	Limits of activity
		source or wastes which arise if a radioactive item is melted or processed.

#### 2.2 Operating techniques

- 2.2.1 The operator shall use the best available techniques to:
  - (a) accumulate radioactive waste, in a form, for a period and in a manner and location so as to minimise the radiological effects on the environment and members of the public;
  - (b) ensure that all relevant parts of the premises are constructed, maintained and used in such a manner that:
    - (i) they do not readily become contaminated; and
    - (ii) any contamination which does occur can be easily removed;
  - (c) prevent:
    - (i) the loss of any radioactive waste; and
    - (ii) access to any radioactive waste by any person not authorised by the operator.
- 2.2.2 The operator shall use the best available techniques in respect of the disposal of radioactive waste to:
  - (a) minimise the volume of radioactive waste disposed of by transfer to other premises; and
  - (b) 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.
- 2.2.3 The operator shall maintain in good repair the systems and equipment provided to:
  - (a) meet the requirements of rules 2.2.1 and 2.2.2; and
  - (b) carry out any monitoring and measurements necessary to determine compliance with these rules.
- 2.2.4 The operator shall check, at an appropriate frequency, the effectiveness of systems, equipment and procedures provided to meet the requirements of rules 2.2.1 and 2.2.2.
- 2.2.5 Any container in which radioactive waste is accumulated shall be clearly and legibly marked with the word 'Radioactive', with the ionising radiation symbol conforming to BS 3510: 1968 or ISO 361 and any other information necessary for the identification of the radioactive waste present.
- 2.2.6 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 these rules.

#### 2.3 Accumulation of radioactive waste

- 2.3.1 There shall be no accumulation of radioactive waste except of the types of radioactive waste specified in table 2.2.
- 2.3.2 The limits on accumulation given in table 2.2 shall not be exceeded.

Table 2.2 Accumulation of radioactive waste	
Specified waste type	Period limit
Waste discovered by radiation detection systems installed at the facility	12 months

2.3.3 The operator shall maintain records of radioactive waste showing:

- (a) the radionuclide present, the date on which accumulation began and the activity on that date;
- (b) its location on the premises;
- (c) 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
- (d) the total activity and volume of radioactive waste present on the premises.

# 3 Disposals of radioactive waste and monitoring

#### 3.1 Disposals of radioactive waste

3.1.1 There shall be no disposals of radioactive waste except of the types and by the disposal routes specified in table 3.1.

Table 3.1 disposal of radioactive waste			
Waste type	Disposal route	Purpose of transfer	
Radioactive waste accumulated under these rules	Transfer to the holder of an environmental permit allowing the receipt and disposal of radioactive waste of the content and quantity to be transferred.	<ul> <li>For any one or more of:</li> <li>Treatment</li> <li>Onward transfer for treatment or disposal</li> <li>Incineration</li> <li>Final disposal</li> </ul>	

3.1.2 The operator shall ensure that the transfer of radioactive waste:

- (a) 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;
- (b) is done using a suitable container constructed and maintained so as to prevent the loss of waste; and
- (c) 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.
- 3.1.3 The operator shall:
  - (a) 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 radionuclide or group of radionuclides as listed in the written specification of the person to whom the radioactive waste is transferred;
  - (b) 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
  - (c) keep a copy of any note issue under rule 3.1.3 (a) and any note received under rule 3.1.3 (b).
- 3.1.4 If required by the Environment Agency, the operator shall ensure that any consignment or part of any consignment of radioactive waste found, following transfer, not to be in accordance with these rules:
  - (a) is packaged in accordance with the relevant legislation; and
  - (b) is returned as soon as is reasonably practicable to the operator's site.

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

#### 3.2 Monitoring

- 3.2.1 If required by the Environment Agency, the operator shall:
  - (a) 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 the Environment Agency may specify; and
  - (b) keep samples, provide samples, or dispatch samples for tests at a laboratory, as the Environment Agency 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.
- 3.2.2 The operator shall maintain records of all monitoring required by these rules 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.
- 3.2.3 The operator shall carry out:
  - (a) regular calibration, at an appropriate frequency, of systems and equipment provided for carrying out monitoring and measurements necessary to determine compliance with these rules; and
  - (b) regular checking, at an appropriate frequency, that such systems and equipment are serviceable and correctly used.

#### 4 Information

#### 4.1 Records

- 4.1.1 All records required to be made by these standard rules shall:
  - (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained until notified in writing by the Environment Agency that records no longer need to be retained.
- 4.1.2 The operator shall maintain convenient access, in either electronic or hard copy, to the records, plans and management system required to be maintained by these standard rules.

#### 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by these standard rules to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 The operator shall supply such information in relation to:
  - (a) the disposals of radioactive waste; and
  - (b) the samples, tests, surveys, analysis and calculations, environmental monitoring and assessments undertaken in condition 3.2.1.

In such format and within such timescales as the Environment Agency may specify in writing.

#### 4.3 Notifications

- 4.3.1 The Environment Agency shall be notified without delay following:
  - (a) 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;
  - (b) the breach of a limit specified in these rules; or
  - (c) any significant adverse environmental effects; or
  - (d) any escape of accumulated radioactive waste, or
  - (e) any melting of or other metallurgical operation on an orphan source; or
  - (f) any radioactive material or waste detected by a radiation detection system as agreed in writing by the Environment Agency.
- 4.3.2 Written confirmation of actual or potential pollution incidents and breaches of these rules shall be submitted within 24 hours.
- 4.3.3 The Environment Agency 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:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) 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:

- (c) any change in the operator's name or address; and
- (d) any steps taken with a view to the dissolution of the operator.

In any other case:

- (e) The death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) 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 of them being in a partnership, dissolving the partnership.
- 4.3.4 If the operator believes or has reasonable grounds for believing that radioactive waste has been lost or stolen, the operator shall:
  - (a) without delay inform the Police and the Environment Agency;
  - (b) make all reasonable efforts to recover that radioactive waste; and
  - (c) as soon as is practicable report the circumstances in writing to the Environment Agency.

#### 4.4 Interpretation

- 4.4.1 In these standard rules, except where otherwise specified, words and expressions defined in the 'Environmental Permitting Regulations' in relation to radioactive substances regulation shall have the same meanings when used in the rules as they have in those regulations.
- 4.4.2 In these rules references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone and subsequently confirmed in writing.

Term	Means	
Best available techniques	"Best available techniques" means the latest stage of development (state of the art) of processes, of facilities or of methods of operation which indicate the practical suitability of a particular measure for limiting discharges, emissions and waste. In determining whether a set of processes, facilities and methods of operation constitute best available techniques in general or individual cases, special consideration shall be given to:	
	<ul> <li>(a) Comparable processes, facilities or methods of operation which have recently been successfully tried out;</li> </ul>	
	<ul> <li>(b) Technological advances and changes in scientific knowledge and understanding;</li> </ul>	
	(c) The economic feasibility of such techniques;	
	(d) Time limits for installation in both new and existing plants; and	
	(e) The nature and volume of the discharges and emissions concerned.	
Environment	All, or any, of the media of air, water (to include sewers and drains) and land.	
Environmental permit	A permit granted under the Environmental Permitting Regulations.	
Environmental Permitting Regulations	The Environmental Permitting (England and Wales) Regulations 2016.	
Radioactive waste adviser	Subject to the transitional arrangements in the Agencies' Scheme for Radioactive Waste Advisers ("the scheme"), either an individual certified under the Scheme and appointed in writing by the operator, or those individuals advising the operator under the operators arrangements for "corporate radioactive waste adviser" as approved under the Scheme. The Scheme is published at:	
	http://www.sepa.org.uk/radioactive_substances/radioactive_waste_advisers.aspx	
Samples	Includes samples that have been prepared or treated to enable measurements of activity to be made.	
Techniques	Includes both the technology used and the way in which the installation is designed, built, maintained, operated and dismantled.	

#### End of standard rules