

Application for an environmental permit Part RSR-B4 – New bespoke radioactive substances activity permit (open sources and waste from open sources)



Please read through this part of the form and the part RSR-B4 guidance notes before you fill it in.

It will take less than three hours to fill in this part of the application form.

If you are applying for a new bespoke permit for a radioactive substances activity involving open sources and/or radioactive waste from open sources on a non-nuclear site, fill in this part of the form, together with parts RSR-A and RSR-F. If you also want to make on-site disposals of solid waste to land, also fill in part RSR-B5. If you need a permit to store radioactive materials in transit complete part RSR-B2.

For security reasons, do not refer to sealed sources on this part of the form. There is a separate part (RSR-B2) for radioactive substances activities involving sealed sources.

Contents

- 1 Other applications
- 2 About the activities
- 3 Using open sources on the premises
- 4 Radioactive waste
- 5 Accumulation of radioactive waste from open sources
- 6 Waste disposal
- 7 Transfer of waste to another person
- 8 Receipt of waste
- 9 Use of mobile radioactive apparatus in the form of open sources
- 10 How to contact us

1 Other applications

1a Have you recently made, or do you intend to make, an application for an environmental permit to operate a regulated facility, other than for a radioactive substances activity, on the premises?

No

Yes

2 About the activities

2a Tick the relevant boxes to show which radioactive substances activities you are applying for

Schedule 23 Part 2 paragraph reference	Description	
5(2)(a)	Keep or use radioactive material on premises used for the purposes of an undertaking	<input type="checkbox"/>
5(2)(b)	Dispose of radioactive waste on or from premises used for the purposes of an undertaking	<input type="checkbox"/>
5(2)(c)	Accumulate radioactive waste on or from premises used for the purposes of an undertaking	<input type="checkbox"/>
5(4)(a)	Receive radioactive waste for the purposes of disposing of it	<input type="checkbox"/>
5(5)(a)	Keep or use mobile radioactive apparatus for testing, measuring or otherwise investigating any of the characteristics of substances or articles	<input type="checkbox"/>
5(5)(b)	Keep or use mobile radioactive apparatus for releasing quantities of radioactive material into the environment or introducing such material into organisms	<input type="checkbox"/>

2b Describe how and why you intend to use the open sources

2 About the activities, continued

2c Where and how will you store the open sources when they are not in use?

3 Using open sources on the premises

Only answer this section if you are applying for an activity described in Schedule 23, Part 2, paragraph 5(2)(a), 5(5)(a) or 5(5)(b) involving open sources.

3a Give details of the open sources that you will keep or use on the premises

Radionuclide	Maximum activity at any one time (in becquerels)

4 Radioactive waste

4a Enclose your assessment of how you plan to use the ‘best available techniques’ to reduce the amount of radioactive waste you create and have to dispose of

Document reference

4b Do you have an emergency role under the National Arrangements for Incidents Involving Radioactivity (NAIR) or RADS SAFE schemes?

No

Yes

4c Do you want us to include the standard conditions for organisations taking part in NAIR or RADS SAFE on this permit?

No

Yes

5 Accumulation of radioactive waste from open sources

5a Why do you plan to accumulate radioactive waste?

5b How do you plan to accumulate radioactive waste?

5 Accumulation of radioactive waste from open sources, continued

5c Give the chemical and physical details of the radioactive waste

--

5d How will you measure the activity of all the types of the radioactive waste?

--

5e Give the following details of the gaseous waste you will accumulate

Radionuclides	Activity limits	Maximum period

5f What is the maximum volume of gaseous waste you will accumulate at any time?

Cubic metres

5g Give the following details of the aqueous liquid waste you will accumulate

Radionuclides	Activity limits	Maximum period

5h What is the maximum volume of aqueous waste you will accumulate at any time?

Cubic metres

5i Give the following details of the organic liquid waste you will accumulate

Radionuclides	Activity limits	Maximum period

5j What is the maximum volume of organic liquid waste you will accumulate at any time?

Cubic metres

5k Give the following details of the very low-level waste (VLLW) you will accumulate

Cubic metres	Maximum period

5 Accumulation of radioactive waste from open sources, continued

If you plan to accumulate the VLLW for more than two weeks before you dispose of it tell us why you need the extra time

5l Give the following details of low-level solid waste (other than VLLW) you will accumulate

Radionuclides	Activity limits	Maximum period

5m What is the maximum volume of low-level waste you will accumulate at any time?

Cubic metres

6 Waste disposal

Note that the guidance for part RSR-B4 is especially important for this section. This section covers the types of radioactive waste specified below. Tick all relevant boxes:

- Gaseous waste
- Aqueous waste
- Solid waste to be incinerated on the premises
- Organic liquid waste to be incinerated on the premises

6a Provide a description of your arrangements for disposing of radioactive waste by the above means

Document reference

See guidance notes.

Discharge of radioactive gas or aqueous liquid and incineration of waste on the premises

6b Indicate which discharge points or routes you plan to use

Tick all relevant boxes:

- A chimney
- A fume cupboard vent
- Other gaseous discharge
- An incinerator stack
- A public sewer
- A river or stream
- A lake, pond or reservoir
- An estuary
- The sea
- Your own sewage treatment works
- Other aqueous disposal

6c Provide your assessment of the risk of radiation from the waste you plan to discharge

Document reference

6 Waste disposal, continued

6d State the limits you need for discharge of gaseous waste

Radionuclides	Daily disposal limits	Annual disposal limits

6e State the limits you need for discharge of aqueous waste

Radionuclides	Monthly disposal limits

Disposal of waste by incineration on the premises

6f What type(s) of incinerator do you have on the premises?

6g What will you do if your incinerator breaks down?

6h Give the following details of organic liquid waste you will incinerate

Radionuclides	Daily disposal limits	Monthly disposal limits

6i Give the following details of solid waste you will incinerate

Radionuclides	Daily disposal limits	Monthly disposal limits

7 Transfer of waste to another person

This section covers the types of radioactive waste specified below.

Tick all relevant boxes:

- Organic liquid waste
- Solid waste
- Very low-level waste
- Solid waste for the Low-Level Waste Repository (LLWR) at Drigg

7a Provide a description of your arrangements for transferring radioactive waste to another person

Document reference

See guidance notes.

Organic liquid and solid waste

7b Give the following details of your plans to transfer organic liquid waste

Radionuclides	Annual disposal limits

7c Give the following details of your plans to transfer solid waste (excluding VLLW)

Radionuclides	Annual disposal limits (in becquerels)

7d Confirm whether you have contracts in place for another organisation to receive all of your organic liquid and solid waste (excluding VLLW)

Yes

No

7e Describe contingency arrangements should your planned transfer routes for organic liquid or solid waste become unavailable

7f Do you intend to transfer solid waste (excluding VLLW) to a landfill site?

Yes

No

If you do then we will contact you for further details of your proposal. See guidance notes.

Disposal of organic liquid or solid waste by other means

7g Describe any other method you intend to use to dispose of liquid organic or solid waste

Attach your description and radiological assessment.

Document reference

7 Transfer of waste to another person, continued

Disposal of very low-level waste

7h What is the maximum amount of VLLW you plan to dispose of in a month with your normal rubbish? _____ cubic metres

7i Tell us how you plan to dispose of the VLLW

It will go to a landfill site under my control

A local authority (or their contractor) will collect it

Another contractor will take it to landfill

Other

Give details below; for example, tell us who will accept it and what they will do with it

Disposal of solid wastes by transfer for the purposes of final disposal at the Low-Level Waste Repository (LLWR) at Drigg

7j Confirm that you have attached a document of agreement from the site operator to receive your waste

Confirmed

Document reference _____

7k Will any consignment of waste for the LLWR contain alpha-emitting radionuclides in excess of 4 gigabecquerels per tonne or all other radionuclides in excess of 12 gigabecquerels per tonne?

Yes

No

7l What is the chemical and physical nature of the waste for the LLWR?

Document reference _____

7m What is the maximum annual disposal activity (at the time of transfer) for the LLWR for each of the following?

Radionuclides	Annual activity limit (in becquerels)
Uranium	
Radium 226 plus thorium 232	
Other alpha-emitters ¹	
Carbon 14	
Iodine 129	
Tritium	
Cobalt 60	
Others ²	

Notes

¹ 'Other alpha-emitters' in this section means alpha-emitting radionuclides with half-lives greater than three months, excluding uranium, radium 226 and thorium 232.

² 'Others' in this schedule means: beta-emitting radionuclides with half-lives greater than three months excluding carbon 14, iodine 129 and tritium and any other radionuclides specified in writing by the Environment Agency.

8 Receipt of waste

8a Provide details of the origin, nature and quantity of waste from open sources to be accepted onto the premises, and how you will manage and dispose of it

Do not answer this question if the only radioactive waste that you will receive from elsewhere is that which may arise as a result of your participation in NAIR or RADSAFE.

Document reference _____

9 Use of mobile radioactive apparatus in the form of open sources

Only answer this question if you are applying for an activity described in Schedule 23, Part 2, paragraph 5(5)(a) or 5(5)(b).

9a Fill in the table below with details of the radioactive material that you will use in mobile form

Radionuclides	Maximum amount ¹	Maximum daily release

¹ This is the total radioactivity of the specified radionuclide to be used for the environmental study.

9b Where will the mobile radioactive apparatus be used (address or Ordnance Survey map reference if none)?

9c Is it within a 5 km radius of any environmentally sensitive site?

For example, an SSSI, SAC or SPA.

No

Yes Please give details

9d What is the size of the area where the radioactivity is to be used?

9 Use of mobile radioactive apparatus in the form of open sources, continued

9e Which council or unitary authority is the area in?

9f How long will the source be used for?

9g Give the frequency of use over the period

9h Will the use release radioactive materials into the environment?

No

Yes

9i What measures will be in place to avoid human or animal contact with the radioactive materials when being used?

9j Provide your assessment of the risk of radiation from the use of mobile radioactive apparatus to release radioactivity to the environment

Document reference

Now fill in part RSR-F.

10 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 08708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 08702 422 549 (Monday to Friday, 8am to 6pm)

Email: enquiries@environment-agency.gov.uk

Website: www.environment-agency.gov.uk

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, please tell us how we can improve it.

Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form? _____

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please

No thank you

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No

Yes Amount received

£ _____