Application for an environmental permit

Form RSR-B4 – New or varied bespoke radioactive substances activity permit (unsealed sources and waste from unsealed sources)

Environment Agency

Read through this form and the RSR-B4 guidance notes before you fill it in.

It should take less than two hours to fill in this application form.

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

Only fill in the sections relevant to your application. If you are applying to vary (change) an existing permit for unsealed sources and/or radioactive waste you should only fill in the sections which cover the changes you are seeking.

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

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1 Other applications

1a Is this an application for:

☐ New permit (i.e. you don't currently have an RSR unsealed source permit)

☐ Variation to an existing unsealed source permit

Please give the permit number:

Note – You cannot vary a standard rules permit.

1b 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	
11(2)(a)	Keep or use radioactive material on premises used for the purposes of an undertaking	☐
11(2)(b)	Dispose of radioactive waste on or from premises used for the purposes of an undertaking	☐
11(2)(c)	Accumulate radioactive waste on or from premises used for the purposes of an undertaking	☐
11(4)(a)	Receive radioactive waste for the purposes of disposing of it	☐
11(5)(a)	Keep or use mobile radioactive apparatus for testing, measuring or otherwise investigating any of the characteristics of substances or articles	☐
11(5)(b)	Keep or use mobile radioactive apparatus for releasing quantities of radioactive material into the environment or introducing such material into organisms	☐

2b Describe your reasons for keeping, using, accumulating or disposing of unsealed sources.

2c If you are applying to vary an existing permit describe the changes you are seeking and the reasons for them.

2d Describe how and why you intend to use the unsealed sources.

2 About the activities, continued

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

3 Using unsealed sources on the premises

Only answer this section if you are applying for an activity described in Schedule 23, Part 2, paragraph 11(2)(a), 11(5)(a) or 11(5)(b) involving unsealed sources. For mobile radioactive apparatus in the form of unsealed sources, see question 9.

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

Radionuclide (you may use the groups of radionuclides specified in the guidance document for this part of the form)	Maximum activity at any one time (in becquerels)

4 Radioactive waste

You may use the groups of radionuclides specified in the guidance document for this part of the form.

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

4 Radioactive waste, continued

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

- ☐ No
- ☐ Yes

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

- ☐ No
- ☐ Yes

5 Accumulation of radioactive waste from unsealed sources

5a Why do you plan to accumulate radioactive waste?

5b How do you plan to accumulate radioactive waste?

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

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

5 Accumulation of radioactive waste from unsealed sources, continued

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

Radionuclides or groups of radionuclides	Activity limit	Volume limit	Period limit

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

Radionuclides or groups of radionuclides	Activity limit	Volume limit	Period limit

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

Radionuclides or groups of radionuclides	Activity limit	Volume limit	Period limit

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

Cubic metres	Maximum period

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.

5 Accumulation of radioactive waste from unsealed sources, continued

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

Radionuclides or groups of radionuclides	Activity limit	Volume limit	Period limit

6 Radioactive 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
- ☐ 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 Radioactive waste disposal, continued

6d Only answer this question if your activity can be described as one of the operations in the Transboundary Radioactive Contamination Direction (England) 2020 and you meet the criteria for providing a transboundary radiation dose assessment as described in the RSR-B4 guidance notes.

If required, provide a prospective dose assessment for the most exposed members of the public in Member States of the European Union and/or Norway.

Document reference

6e State the limits you need for discharge of gaseous waste to air.

Disposal outlet ref	Radionuclides or group	Annual limit	Daily limit

6f State the limits you need for discharge of aqueous waste to sewer or water.

Disposal outlet ref	Radionuclides or group	Annual limit	Monthly limit

Disposal of waste by incineration on the premises

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

6 Radioactive waste disposal, continued

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

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

Radionuclides	Monthly limit	Daily limit

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

Radionuclides	Monthly limit	Daily limit

Disposal of organic liquid or solid waste by other means

6k 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

This section covers the types of radioactive waste specified below. You do not need to include any radioactive waste that you intend to dispose of under an exemption

Tick all relevant boxes:

- ☐ Solid waste
- ☐ Organic liquid waste
- ☐ Aqueous liquid waste
- ☐ Very low-level waste (where not exempt)

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

Document reference

See guidance notes.

Solid waste and organic or aqueous liquid waste

7b Give the following details of your plans to transfer solid waste (excluding exempt waste).

Specified waste type	Person to whom transfer will be made	Purpose of transfer	Radionuclides or group	Annual limit
Solid waste				
Solid waste				
Solid waste				
Solid waste				

7c Give the following details of your plans to transfer organic or aqueous liquid waste.

Specified waste type	Person to whom transfer will be made	Purpose of transfer	Radionuclides or group	Annual limit
Organic/aqueous* liquid waste				
Organic/aqueous* liquid waste				
Organic/aqueous* liquid waste				
Organic/aqueous* liquid waste				

*Delete as appropriate

7 Transfer of waste to another person, continued

7d Confirm whether you have contracts in place for another organisation to receive all your organic liquid and solid waste, and any aqueous liquid waste, that you intend to dispose by transfer

- ☐ Yes
- ☐ No

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

7f Do you intend to transfer solid waste to a landfill site?

- ☐ Yes
- ☐ No

Provide details of your proposals

Disposal of very low-level waste (VLLW)

Fill in this section only if the disposal of VLLW will not be exempt – see guidance.

7g. Tell us how you plan to dispose of the VLLW.

Give details below

8 Receipt of waste

8a Provide details of the origin, nature and quantity of waste from unsealed 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 unsealed sources

Only answer this question if you are applying for an activity described in Schedule 23, Part 2, paragraph 11(5)(a) or 11(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.

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

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

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?

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

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

Please send all parts of your filled-in application form and supporting documents to our Radioactive Substances Regulation Permit Support Team as described in form RSR Part-F.

Support:

If you need help filling in this form, please contact the person who sent it to you or contact us using the methods described in Part RSR-F, which is available at:

Application for a RSR environmental permit: part RSR-F – GOV.UK (www.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 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

Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.

10 How to contact us, continued

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

☐ No

☐ Yes

Amount received

£