

How to apply for an environmental permit Part RSR-B2 – New bespoke radioactive substances activity permit (sealed sources)

Guidance notes

Please read these guidance notes carefully before you fill in the form.

Complete part RSR-B2 if you are applying for a new bespoke permit for a radioactive substances activity involving sealed sources and/or waste sealed sources. If you want to make on-site disposals of solid waste to land, also fill in part RSR-B5.

Do not complete part RSR-B2 if your maximum holding of sealed sources is security category 5 and you can comply with the relevant standard rules. Instead use part RSR-B1 and the guidance for that (which explains what we mean by security category 5). You do not need a permit for the use of sources which are within the scope of an exemption order, provided you can comply with all of the conditions in such an order.

The Environment Agency has also published additional details on radioactive substances regulation in its Radioactive Substances Guidance (RASAG) and 'How to Comply' documents.

Where you see the term 'document reference' on the form, give the document references here and send the documents with the application form when you've completed it.

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Once details of sealed sources are put onto part RSR-B2, the form becomes subject to national security restrictions at an 'Official – Sensitive' level.

The marking 'Official – Sensitive' on a completed application form is in accordance with the Government Security Classification Policy. The unauthorised disclosure of the information it contains could facilitate the commission of serious crime – in particular by terrorists. It is for use only by those people within your organisation who need reasonable access to it, to ensure compliance with the conditions of the permit, and trusted contacts who advise you – such as your Radiation Protection Adviser.

- **Do not copy it to other parties without consulting Natural Resources Wales.**
- **Lock it in a secure cabinet or container when it is not in use.**
- **Make those who access it aware of the marking and the need to protect the information from unauthorised disclosure and loss.**
- **If you move it around, use a sealed envelope and do not mark the envelope 'Official – Sensitive'. If you post it, use 'Royal Mail special delivery next day'.**
- **You should safeguard electronic copies of the data against unauthorised access. You should not email it.**

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?

This will enable us to coordinate our determination work.

2 About the activities involving sealed sources

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

If you wish to be able to receive radioactive waste, you must apply to do so, even if you only intend to do this as a result of your participation in the National Arrangements for Incidents Involving Radioactivity (NAIR) or RADSAFE schemes.

You should not apply to accumulate or dispose of radioactive waste if you can do so under the terms of an exemption order.

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

We need to know:

- how you intend to use the sources;
- why you need the sources;
- why you cannot use sources of lower activity.

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

Give general details of the building, room, security measures, fire alarm systems and proximity of inflammable materials, etc. Do not supply details of security arrangements.

3 Using sealed sources on the premises

If you are the licensee of a nuclear site you should not fill in this part of the form as the Regulations do not require permitting for the keeping or use of sources on nuclear sites by licensees. A nuclear site is one specified under the Nuclear Installations Act.

Do not include sources kept in packages which are stored in the course of a journey – you should cover these in section 5.

List all sealed sources that you want permitted for these premises:

- in order, starting with the highest-activity material and finishing with the lowest-activity material;
- excluding exempt sources.

If you intend to hold several sources of the same radionuclide with approximately the same activity you can describe them together in a single line in the table. Refer to the maximum activity of an individual source. For example, caesium-137, three sources, maximum activity for each 100 megabecquerels would cover sources of 75, 85 and 95 megabecquerels activity.

You do not need to include radionuclides that are present as a result of radioactive decay of the listed radionuclides.

You may apply for the maximum number of sources that you reasonably expect to hold in the foreseeable future (i.e. the next 1–2 years).

If you want to hold large numbers of relatively small sources, you can opt to register them as a group of ‘total radionuclides’. However, it will help us process your application if you provide as much information as possible about the proposed individual radionuclides you intend to use. If you do this the maximum activity of any single source must not exceed the high-activity sealed sources (HASS) threshold (see Environment Agency HASS guidance) for that radionuclide. We will not normally issue permits with groups other than ‘total radionuclides’. If you need to use a different grouping of radionuclides you should include a document giving your proposal and reasons with the application.

Using becquerels

You should list activity in SI units (becquerels). Write the prefix kilo-, mega-, giga-, tera- or peta- clearly in full to minimise the risk of error.

Rounding up substances of nominal activity

If you use radioactive substances of nominal activity (particularly with radionuclides of short half-life), you may round up the figure to ensure you do not risk exceeding your registered limit (even temporarily). If you do round up a figure, please make sure you say how and where you have done this.

Depleted uranium

You should be aware that some sources may be supplied in depleted uranium containers. Where necessary you should give the masses for depleted uranium (for example, in source containers, counterbalance weights) in kilograms.

4 High-activity sealed sources (HASS)

4a Which (if any) of the sources are high-activity sealed sources (HASS)?

Guidance on how to tell if a source is a HASS is given in RASAG, available from the Environment Agency’s website.

4b Confirm whether you have read the requirements of the Defra guidance on financial and other provision for each high-activity source

‘Financial provision’ is the term we use for the arrangements (which can be non-financial) that holders of HASS must make for the safe management of HASS when they become disused, including when the holder becomes insolvent or goes out of business. You should read the guidance on the GOV.UK website:

<https://www.gov.uk/government/publications/radioactive-substance-regulations-rsr-guidance>

RASAG gives more details of ways you may do this.

4c Which mechanism are you proposing to use for this purpose?

You should tell us which of the methods in the guidance (or a different one) you are using.

4d Specify which of the following arrangements you have in place for the safe management of HASS when you no longer have any use for them

You should tell us which disposal route you intend to use for disused HASS.

4e Do you manufacture HASS?

You should tick ‘Yes’ even if manufacture is incidental to your main practice; for example, irradiation of cyclotron targets.

5 Radioactive material stored in transit

Only answer this section if you are applying for an activity which involves only short-term storage of unopened packages containing radioactive material. You can find more details about this in our RASAG guidance.

5a Confirm whether you intend to store radioactive packages in transit

Storage in transit is when unopened packages containing radioactivity are held temporarily between stages of a journey; for example, while awaiting road transport after unloading from an aircraft.

5b Provide the following information on the radioactive packages that you will store in transit, as far as you know them

Specify the following materials: cobalt-60, iridium-192, ytterbium-169, caesium-137, americium-241, molybdenum-99, iodine-125, iodine-131, others.

Tell us whether the packages are mainly being imported, exported or staying within the UK.

6 Radioactive waste sealed sources

Only answer this section if you intend to accumulate or dispose of radioactive waste in the form of sealed sources and cannot do so under the provisions of the Radioactive Substances (Waste Closed Sources) Exemption Order 1963, SI 1963 No. 1831, or another exemption order.

6a Enclose your assessment of how you plan to use the 'best available techniques' to minimise the period over which radioactive waste is accumulated

Guidance on 'best practicable means' (BPM), which we required previously, is available in RASAG. 'Best available techniques' (BAT) replaces and is equivalent to BPM and guidance will be available in 'How to Comply'.

6b Do you have an emergency role under the National Arrangements for Incidents Involving Radioactivity (NAIR) or RADS SAFE schemes?

You can find more information about these schemes by searching the internet.

6c Do you want us to include the standard conditions for organisations taking part in NAIR or RADS SAFE on this permit?

If you are a NAIR or RADS SAFE respondent we can include in your permit conditions which would enable you to accumulate and dispose of radioactive waste collected as part of the scheme.

7 Radioactive waste accumulation

7a Do you plan to accumulate sealed sources that are no longer needed (waste sealed sources)?

Answer 'No' if you accumulate or dispose of waste sealed sources under an exemption order without an authorisation from us (you are responsible for keeping to the conditions of any exemption order you use).

Answer 'Yes' if you accumulate sealed sources but are unable to use an exemption order.

7b Explain why your accumulation of waste sealed sources is not carried out under an exemption order

You will need to explain why you cannot use an exemption order. See RASAG for guidance on exemption orders.

8 Disposal of waste sealed sources

8a How do you plan to dispose of waste sealed sources?

You will need to explain whether sources are to be returned to the supplier, a specialist radioactive waste contractor, a nuclear site, or other route. Any person receiving permitted sources will need to have a suitable permit.

8b Provide the following details of waste sealed sources you plan to dispose of

Give the details requested.

8c Confirm whether you have contracts in place for another organisation to receive all of your waste

The operator consigning waste must have in place contracts with a waste disposal/storage company or companies to dispose of all of the waste. (It is acceptable to establish a contract or contracts with a waste disposal company. It is not necessary to specify any particular site which will receive the waste). These contracts and transfer records should be available for inspection by Natural Resources Wales, either at the application stage or any subsequent stage of regulatory activity.

You should provide evidence that you have contractual arrangements in place to do this, or, where disposal may not take place for some time, that such contractual arrangements can be put in place. This may take the form of a letter of agreement in principle from a waste recipient to accept waste.

9 Receipt of waste sealed sources

9a Provide details of the origin, nature and quantity of waste sealed sources to be accepted onto the premises, and how you will manage and dispose of them

Give the requested details of your plans to receive waste sealed sources. You will not be permitted to receive them unless we have the appropriate details and include them on your permit.

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 RADS SAFE.

10 Security of sources

You do not need to complete this section if the sources stay on a nuclear licensed site because this is regulated by the Health and Safety Executive (HSE). If the sources are mobile and based on a nuclear site, then the section should be completed in respect security measures required off the site.

Natural Resources Wales has regulatory powers over the protective security of certain sealed sources. Consideration of security is required for high-activity sources and sources which, in the opinion of Natural Resources Wales, are of a similar level of potential hazard to that arising from high-activity sources. It is our opinion that any source, or aggregation of sources in a single premises, which falls into any of the source categories 1 to 4 in the scheme set out in the Security Requirements Document ('Security Requirements for Radioactive Sources', NaCTSO, April 2011), constitutes a similar level of potential hazard to a HASS. All users, applicants and other interested parties who need to see the Security Requirements Document should ask their police force Counter-Terrorism Security Adviser (CTSA) for a copy. Further guidance on this is available in RASAG.

Do not list category 5 sources here unless a number of them add up to category 4 when taken together.

You can discuss source security matters with your CTSA before completing an application form if you desire. If you may need to spend significant resources on security matters, you should contact your CTSA before applying.

Where sources are not considered to constitute a similar level of potential hazard (i.e. category 5 sources) to that from high-activity sources, we will be requiring users to take simple precautions to protect radioactive sources.

10a Which police force area are the premises in?

We need this so that we can ask the CTSA for advice on security.

10b Provide the following details of all the sealed sources (kept or used, in mobile radioactive apparatus or waste) that you will have at any time

This enables you and us to decide what security level is appropriate for the sources on the premises.

10c Do you have a copy of 'Security Requirements for Radioactive Sources', NaCTSO, April 2011?

This document specifies how to decide the source category and security level and is available from your local police CTSA.

10d If you think your premises are in security levels A, B or C, have you met all of the conditions of the Security Requirements Document for the security level your premises are in?

You will need to have done this before you can hold sources.

Now fill in part RSR-F of the form.