

Authorisation guide for radioactive substances activities



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1.0	SEP 2018	Original document
1.1	JUN 2019	Text added to sections 4 and 5 to improve clarity
1.2	MAR 2020	Clarification that we will not normally consult on a nuclear application if it is only for transfer
2.0	APR 2025	Outwith Scotland registrations restricted to non-HASS, wording updated to reflect EASR Amendment 2025 and accessibility formatted



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1. What is the purpose of this guide?

The Scottish Environment Protection Agency (SEPA) is responsible for regulating radioactive substances activities. Under the <u>Environmental Authorisations (Scotland) Regulations 2018 (EASR)</u>, we regulate these activities within an authorisation framework designed to ensure that suitable controls are in place that are proportionate to the nature of the activity and any associated risks to human health and the environment.

This guide provides practical advice for any person or business carrying on, or intending to carry on, a radioactive substances activity in Scotland that we regulate. It will help you determine the level of authorisation you need to apply for by explaining:

- the framework for authorising radioactive substances activities under EASR.
- the radioactive substances activities we regulate under EASR; and
- the type of authorisation you need for each activity.

This guide also provides information on:

- the radioactive substances activities that have specific requirements for the fit and proper person assessment that we carry out and what these are; and
- the radioactive substances activities that we will always consult the public on when we receive an application for a permit.

You should read this guidance alongside our procedural guidance and guidance on who can hold an authorisation and our public participation statement that can be found on our website.



2. How does SEPA authorise radioactive substances activities under EASR?

As the level of complexity and risk associated with an activity increases, the type of authorisation required under EASR changes to reflect that complexity or risk. Accordingly, in order to allow for proportionate regulation based on the risk an activity poses to human health and the environment, there are four types of authorisation under EASR. The four types of authorisation are:

- General binding rules (GBR)
- Notification
- Registration; and
- Permit

The application and operation of each type of authorisation is summarised below.

2.1 General binding rules (GBR)

General binding rules (GBR) are a set of mandatory rules that cover specific low risk activities that are described in Schedule 9 of EASR. The radioactive substances activities that are covered by GBR are listed in Section 4. The associated rules and definitions have not been reproduced in this guide but can be found in Schedule 9 of EASR. If you intend to carry on an activity that is covered by GBR, provided that you comply with the rules in full including any limits in the definition, you are authorised and do not need to apply for any other authorisation.

For example, the keeping and use of low quantities of radioactive substances for medical use are covered by GBR under EASR. The GBR specify the maximum quantity of radioactive substances that may be kept on the premises; if you keep less than this limit and comply with all the rules, you do not need to apply for a registration or permit.

However, if you are unable to meet the limits or comply with the rules you cannot operate under GBR and may need a different type of authorisation.



It is acceptable to carry out a radioactive substances activity under GBR whilst having a registration or permit, provided they are covering different activities. For example, if you hold a non-nuclear registration to manage small quantities of unsealed radioactive sources, you may still manage smoke detectors under GBR.

2.2 Notification

Notification is used for low-risk activities where we do not need to decide whether to grant or refuse an authorisation but need to know that the activity is being carried out. Notification may be associated with GBR that must be complied with. If you exceed the limit or cannot comply with the rules you cannot operate under a notification and may need a different type of authorisation.

For example, the keeping and use of Category 5 sources that cannot be disposed of to the dustbin must be notified to us.

If an activity requires notification, you need to provide all the information that we require and submit it to us. This should be done using the <u>notification form</u> that can be found on our website.

2.3 Registration

Registration is for activities where a simple assessment or screening is sufficient for us to determine whether or not to allow the proposed activity to be carried on. If a registration is required, you will need to make an application to us; <u>application forms</u> are published on our website.

Registrations only include standard conditions. Standard conditions are a set of rules and radionuclide limits that apply to a particular activity and will have been consulted on before they are made; however, once they have been made, the standard condition cannot be appealed when used in a registration. If you are unable to comply with the standard conditions that apply to your activity, you must apply for a permit instead.

Standard conditions are available on our website.



2.4 Permit

A permit is used for higher risk and/or non-standard activities which require us to carry out a more detailed assessment before we can decide whether to grant or refuse a permit. Any activities that need assessment of adequate financial provision, bespoke conditions or involve a consultation process will be authorised under a permit. If a permit is required you will need to submit an application to us; <u>application forms</u> are published on our website.

Permits may contain a mixture of standard and bespoke conditions.



3. What radioactive substances activities are regulated by SEPA?

There is one radioactive substances regulated activity that requires authorisation under EASR: an activity involving either or both -

- (a) radioactive material;
- (b) radioactive waste.

This activity is intended to capture the full lifecycle of radioactive substances from production through keeping and use to the management of radioactive waste.



4. What type of authorisation do I need?

4.1 Type of authorisation normally needed

The list below shows what type of authorisation is normally needed for different radioactive substances activities and whether any specific fit and proper person test or public participation is needed in addition to the standard tests applied to all authorisations.

In some circumstances we might escalate or de-escalate a particular application or authorisation to another level, for example if the location of a particular activity means it needs greater control.

The following information should be read in conjunction with the glossary in section 5.

Radioactive substances activities typically requiring GBR tier of authorisation

- The management of a category 5 sealed source that has an activity not exceeding
 200 kBq
- 2. The management (other than the treatment and disposal) of a smoke detector incorporating a sealed radioactive source that has an activity not exceeding 40 kBq
- 3. The management of a tritium source that has an activity not exceeding 20 GBq
- 4. The management of a barium eluting source with an individual activity not exceeding 40 kBq and the total activity of barium eluting sources held at any one time not exceeding 400 kBq
- 5. The management of a thorium alloy
- 6. The management of less than 5 kg of a uranium or thorium compound
- 7. The management of a medical or veterinary radioactive substance with an activity not exceeding 1 GBq Tc-99m and up to 200 MBq of all other radionuclides
- 8. The management (other than disposal) of a NORM containing substance with waste transfers less than the limits in Table 1 of Schedule 9 of EASR



- 9. The disposal of gaseous radioactive waste which contains no radionuclides other than Kr-85 up to 100 GBq per year
- Any other radioactive substances activity, not authorised by any other GBR, involving
 quantities of radioactive substances less than those specified in Table 2 of Schedule 9 of
 EASR

Radioactive substances activities typically requiring Notification tier of authorisation, with associated GBR

- 11. The management (other than the disposal) of a category 5 sealed source that contains an activity exceeding 200 kBq
- 12. The management (other than the disposal) of a tritium source that contains an activity exceeding 20 GBq
- 13. The management (other than the disposal) of an electrodeposited source*
- 14. The management of an orphan source
- 15. The management of radioactive waste resulting from decontamination of people following an incident
- 16. The management of radioactive waste from firefighting activities following an incident

Radioactive substances activities typically requiring registration tier of authorisation

- 17. The management (other than the disposal) of sealed sources, excluding HASS that are normally kept in the UK outwith Scotland and are kept in Scotland for less than four months at any one visit
- 18. The management of unsealed radioactive substances that have an activity not exceeding 10 GBq Tc-99m and 20 MBq in total of all other radionuclides with no disposals other than those allowed by standard conditions G.3 to G.5
- 19. The management of NORM from the production of oil and gas at offshore installations where the total quantity of solid waste discharged to the marine environment per year does not exceed 2 GBq each of Ra-226, Ra-228, Pb-210 and Po-210



Radioactive substances activities typically requiring permit tier of authorisation

20. Any activity involving the management of radioactive material or radioactive waste not listed 1 to 19 above.

*Please note that although the management (other than the disposal) of an electrodeposited source appears as a GBR in Schedule 9 of EASR, SEPA has deemed that it should be a Notification since these types of sources must be transferred to a specialist contractor for disposal. The radioactive substances common rules set out in Schedule 9 of EASR still apply to this Notification.



4.2 Fit and proper person requirements

For all permits and registrations, we will assess if the applicant is fit and proper. Details of our fit and proper person (FPP) requirements that will be needed for all applicants can be found in our guidance on who can hold an authorisation which is published on our website.

Some activities have specific requirements. These are:

- (a) any activity involving a high activity sealed source (HASS) requires adequate financial provision.
- (b) any activity involving the management of radioactive waste requires appointment of a Radioactive Waste Adviser (RWA).

Where we have information to suggest that an individual applicant may need a more detailed assessment, we may apply the fit and proper person test in a different way than we might normally.

4.3 Public participation requirements

For some activities we always consult the public and other public bodies on the permit application as part of the determination process; however, we may carry out consultation for other applications if we consider it necessary and this will be done in accordance with our <u>public participation statement</u> which is published on our website.

We will always carry out public consultation on applications from nuclear sites unless the application is only for a transfer or minor variation.



5. Glossary of terms

Bq Becquerel

Category 5 source a sealed source in category 5 as defined by the International

Atomic Energy Agency (IAEA) in its publication RS-G-1.9

Disposal includes discharge (whether into the environment or into a

sewer or drain), abandonment, burial or deposit of radioactive waste but it does not include transfer of

radioactive waste

EASR The Environmental Authorisations (Scotland) Regulations

2018

Electrodeposited source has the same meaning as in Schedule 9 of EASR

FPP Fit and proper person

GBq Giga becquerel

GBR General binding rules

HASS High-activity sealed radioactive source

IAEA International Atomic Energy Agency

kBq kilo becquerel

Management includes any activity involving radioactive material or

radioactive waste excluding the production of radioactive material and the manufacture of a radioactive source

MBq Mega becquerel

NORM naturally occurring radioactive material

NORM containing substance has the same meaning as in Schedule 9 of EASR



Orphan source has the same meaning as in Schedule 8 of EASR

RWA Radioactive Waste Adviser

SEPA Scottish Environment Protection Agency

Standard conditions Standard Conditions for radioactive substances activities

Thorium alloy has the same meaning as in Schedule 9 of EASR

Tritium source has the same meaning as in Schedule 9 of EASR

Uranium or thorium compound has the same meaning as in Schedule 9 of EASR



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