



**ENVIRONMENT
AGENCY**

**Registration to keep and
use radioactive materials**

**Authorisation to
accumulate and dispose
of radioactive waste**

Application forms and
guidance notes

Registration to keep and use radioactive materials

Authorisation to accumulate and dispose of radioactive waste

The Radioactive Substances Act 1993

Responsibilities of people who apply for permission to keep or use radioactive material or accumulate or dispose of radioactive waste

The Radioactive Substances Act 1993 (RSA93) is an Act of Parliament which consolidates the Radioactive Substances Act 1960 (RSA60) as amended by the Environmental Protection Act 1990 (EPA90). Later amendment was made in the Environment Act 1995.

RSA93 requires anyone who wants to keep or use radioactive material to be registered before getting the materials, and for anyone who wants to accumulate or dispose of radioactive waste to be authorised.

If you have a current registration issued under RSA60, you only need to reapply if you want to change the type or amount of materials being handled.

If you have a current authorisation issued under RSA60 you only need to reapply if you want to

- change the type or amount of waste being accumulated or disposed of
- accumulate waste for longer than authorised
- introduce new waste disposal routes.

Exemptions from registration

Under the terms of exemption orders you may not need to register all low activity radioactive sources. It is up to you to decide whether the sources you hold are exempt from registration. You must consider whether

- the sources are covered by one of the exemption orders
- you can comply with the conditions of the relevant exemption order(s).

Similarly you will not need authorisation for accumulation and disposal of certain wastes if you can comply with one of the exemption orders.

This application pack includes a full list of exemption orders for open and closed sources. You can get copies of the orders from The Stationery Office or from the Environment Agency.

If you apply to register sources which we think are exempt, we will let you know.

Notifying the Health & Safety Executive

In addition to complying with RSA93 you also have to notify the Health & Safety Executive (HSE) under the Ionising Radiations Regulations 1999 (IRR99) before you start work for the first time or make any significant change. The information you need to give to the HSE is listed in Schedule 2 of the IRR99.

Application forms for registration and authorisation

The forms dealing with registration of radioactive materials and authorisation of accumulation and disposal of waste are

- *Form RSA1o (Open sources) Application for registration of premises for open sources.*
- *Form RSA1c (Closed sources) Application for registration of premises for closed sources.*
- *Form RSA2m (Mobile closed sources) Application for registration of (mobile closed sources) for England and Wales.* This includes materials used in the testing, measurement or otherwise investigating any of the characteristics of substances or articles. (For example, radioactive materials in the form of closed sources moved from premises to premises for use in radiography, road density gauges and borehole logging sources.)
- *Form RSA2 (Environmental studies) Application for registration for mobile radioactive apparatus in England and Wales for releasing quantities of radioactive material into the environment or introducing such material into organisms which are released into the environment.*
- *Form RSA3 Application for authorisation to accumulate and dispose of radioactive waste.*

You can get copies of these and the charges booklet from Environment Agency offices or downloadable from the Agency's website <http://www.environment-agency.gov.uk>

Fees and charges

When you send us your application form, you have to pay a fixed fee for processing your registration or authorisation. We cannot deal with your application if you

- forget to send the payment with the application
- send the wrong amount.

The fees you have to pay are set out in the fees and charges booklet *Charging Scheme for Radioactive Substances Act Regulation*.

Variations

If you already hold a registration or authorisation and wish to change it for any reason you will need to apply. In some simple cases you do not need to use the form and a variation fee may not be charged. If you use a letter to apply ask for the specific changes you seek.

Please contact us if you are unsure as to what to do.

Disposal of radioactive materials

It is your responsibility to ensure any radioactive materials or waste are disposed of safely. You will also have to pay for the disposal of those materials. **Since costs are high and can be unpredictable, you should make sure that you can bear these costs before you apply to keep or use radioactive materials.**

It will help us to process your application if you can tell us about any disposal arrangements you have already made.

In certain cases disposal of closed sources can be made under an exemption order without authorisation.

Who signs the application

The person who signs the declaration at the end of the form should have the authority to sign the application on behalf of the organisation. They might be the company managing director, a company secretary, general manager of a hospital, university registrar and so on.

Where to send your application

Send your application to your local Environment Agency area office. If you are not sure which is your local office, please phone us on 0845 933 3111.

What happens when we get your application

- 1 We will send a letter of acknowledgement.
- 2 We will check through the information you have given, and we may get in touch with you for more details. If we do this by phone, we may also ask you to put the information we need in writing.
- 3 If we are satisfied with your application, we will send you a draft certificate. It will set out any special conditions for – the security and control of the sources you intend to hold – the storage and disposal of waste.
- 4 You then have 14 days to make any comments on the draft certificate and the conditions. If you ask us to amend the certificate, we will consider what you have to say.
- 5 At the end of 14 days, we will formally sign and issue the certificate.
- 6 We aim to process applications within four months of the date we get them. If we cannot process your application within this time, we will tell you why and will ask you to agree to more time.

Appeals to the Secretary of State or National Assembly for Wales

You can appeal to the Secretary of State or the National Assembly for Wales within two months if:

- you are not happy with the conditions we include on the final certificate
- we refuse your application
- we fail to determine your application within four months.

If you want to appeal, we will let you know what you need to do.

Disclosure of the information you give us in your application

For many years government policy has been to give the public access to information held by agencies and authorities who deal with environmental issues.

The Environment Agency and relevant local authorities must allow members of the public to examine documents covered by RSA93. The only exceptions to this are

- where the Secretary of State or the National Assembly for Wales has decided to restrict access to the information on the grounds of national security
- trade secrets and information about 'relevant processes'. RSA93 defines a 'relevant process' as 'any process applied for the purposes of, or in connection with, the production or use of radioactive material'.

In practice, this means that the information in your application form will be made publicly available. If you believe any information in your application should be protected in the interests of national security you need to apply to the Secretary of State for Environment, Food and Rural Affairs or the National Assembly for Wales for a Direction. If for any other reason the information in your application should not be made public, we need to know why. Please enclose a letter, giving your reasons in full, when you send us your application form.

CONTACTS:

THE ENVIRONMENT AGENCY HEAD OFFICE

Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol BS32 4UD.
Tel: 01454 624 400 Fax: 01454 624 409

www.environment-agency.gov.uk
www.environment-agency.wales.gov.uk

ENVIRONMENT AGENCY REGIONAL OFFICES

ANGLIAN

Kingfisher House
Goldhay Way
Orton Goldhay
Peterborough PE2 5ZR
Tel: 01733 371 811
Fax: 01733 231 840

SOUTHERN

Guildbourne House
Chatsworth Road
Worthing
West Sussex BN11 1LD
Tel: 01903 832 000
Fax: 01903 821 832

MIDLANDS

Sapphire East
550 Streetsbrook Road
Solihull B91 1QT
Tel: 0121 711 2324
Fax: 0121 711 5824

SOUTHWEST

Manley House
Kestrel Way
Exeter EX2 7LQ
Tel: 01392 444 000
Fax: 01392 444 238

NORTH EAST

Rivers House
21 Park Square South
Leeds LS1 2QG
Tel: 0113 244 0191
Fax: 0113 246 1889

THAMES

Kings Meadow House
Kings Meadow Road
Reading RG1 8DQ
Tel: 0118 953 5000
Fax: 0118 950 0388

NORTH WEST

Richard Fairclough House
Knutsford Road
Warrington WA4 1HG
Tel: 01925 653 999
Fax: 01925 415 961

WALES

Rivers House/Plas-yr-Afon
St Mellons Business Park
St Mellons
Cardiff CF3 0EY
Tel: 029 2077 0088
Fax: 029 2079 8555



ENVIRONMENT AGENCY
GENERAL ENQUIRY LINE

0845 933 3111

ENVIRONMENT AGENCY
FLOODLINE

0845 988 1188

ENVIRONMENT AGENCY
EMERGENCY HOTLINE

0800 80 70 60



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The person named as the applicant must be the person or organisation proposing to keep or use the radioactive materials.

You should not apply for registration using a trading name.

Multiple occupancy premises

The Environment Agency cannot issue a certificate of registration in the name of more than one organisation. But we may register premises which consist of two or more non-adjointing parts. We will only consider this if the two parts are

- reasonably close together
- managed and controlled by a single applicant.

Where more than one organisation holds radioactive material on a single premises, it can be difficult to decide who is the appropriate applicant. For example, an NHS hospital trust and a university medical school may both hold radioactive sources on the same hospital premises.

The straightforward solution is for each occupant to apply separately for registration of clearly defined parts of the overall premises. However, this may lead to difficulties where

- radioactive material frequently passes between the occupants
- staff fulfil roles in both organisations
- there is interaction in the use of facilities.

The overriding requirement under RSA93 is for proper control and use of the materials. A single party (for example, a hospital trust) may agree to take full responsibility under the Act for

- the overall premises
- the activities of all persons using radioactive material.

This sort of arrangement should

- provide clear managerial control
- reduce the amount of record keeping needed.

You must discuss your proposals with us and send a clear written statement of what is proposed (and the reasons) with your application.

Telling us the location of your premises

It is up to the Environment Agency to advise local authorities about any radioactive materials held and radioactive waste disposed of in their area. The information you give us about the location of your premises and the storage of the materials must be accurate and complete. It will help us to

- decide whether we can register your premises as suitable for holding radioactive materials
- send copies of your application and any registration certificates to relevant authorities or councils (for example, so fire brigades know about radioactive material on your premises and for public registers)
- contact the right authorities in the event of any emergency involving the radioactive materials you hold.

Details of the materials and how you intend to use them

It is up to you to give us all the information we need to issue your certificate of registration. If you give us information which is incomplete or unclear

- we may not be able to process your application
- there may be a delay while we ask for more details.

It is important that you use the application form to tell us why you want to hold radioactive materials, and how you will use them.

Include radioactive materials that you reasonably expect to hold at any one time over the next 1–2 years. You need not include materials you are confident you can hold under the terms of an exemption order.

We use the information you give us to

- consider whether the use of radioactive material is justified
- specify those uses on the certificate
- set out any special conditions for your premises.

If you hold a mixture of high and low activity sources

If you are happy that you hold low activity materials which are exempt under the conditions of one of the exemption orders, you do not need to include them in your application to register other sources.

Definitions

- An **open radioactive source** is radioactive material in a form that may be divided (for example, diluted). They include radioactive powders, gases, solutions or solids. There is potential for contamination of other materials.
- A **closed radioactive source** is firmly incorporated, or sealed, in solid, inert, non-radioactive material which prevents the dispersion of any radioactive material. Closed sources include foil or electro-deposited materials. They normally consist of one or more radionuclides.
- **Mobile radioactive apparatus** means apparatus, equipment, appliance or other radioactive material which is either constructed or adapted for being transported from place to place and used for testing, measuring or otherwise investigating any of the characteristics of a substance or article or used for releasing radioactive material into the environment or introducing it into organisms.
- The term **premises** is defined in RSA93 to include any land, whether covered by buildings or not, including any place underground and any land covered by water.

Exemption orders

Under RSA93 you do not need to register all low activity radioactive sources. It is up to you to consider whether the sources you hold are exempt from registration. If you hold such sources you need not include them in your application for registration. If you apply to register sources which we think are exempt, we will let you know.

To decide if your sources are exempt, you must consider whether

- the sources are covered by one of the exemption orders in the list below
- you can comply with the conditions of the relevant exemption order(s).

Similarly you will not need authorisation for accumulation and disposal of certain wastes if you can comply with one of the exemption orders.

You can get copies of the exemption orders in the list from HMSO or from your local Environment Agency office.

Many users find the Testing Instruments Order exempts them from registration for some low-activity closed sources.

Exemption orders for open sources

Radioactive Substances (Exhibitions) Exemption Order 1962
SI No 2645

Radioactive Substances (Storage in Transit) Exemption Order
1962 *SI No 2646*

Radioactive Substances (Phosphatic Substances, Rare Earths
etc.) Exemption Order 1962 *SI No 2648*

Radioactive Substances (Lead) Exemption Order 1962
SI No 2649

Radioactive Substances (Uranium and Thorium) Exemption
Order 1962 *SI No 2710*

Radioactive Substances (Prepared Uranium and Thorium
Compounds) Exemption Order 1962 *SI 2711*

Radioactive Substances (Geological Specimens) Exemption
Order 1962 *SI No 2712*

Radioactive Substances (Schools etc.) Exemption Order
1963 *SI No 1832*

Radioactive Substances (Precipitated Phosphate) Exemption
Order 1963 *SI No 1836*

Radioactive Substances (Substances of Low Activity)
Exemption Order 1986 *SI No 1002*

Radioactive Substances (Hospitals) Exemption Order 1990
SI No 2512

Radioactive Substances (Substances of Low Activity)
Exemption (Amendment) Order 1992 *SI No 647*

Radioactive Substances (Hospitals) Exemption (Amendment)
Order 1995 *SI No 2395*

Exemption orders for closed sources

Radioactive Substances (Exhibitions) Exemption Order 1962
SI No 2645

Radioactive Substances (Waste Closed Sources) Exemption
Order 1963 *SI No 1831*

Radioactive Substances (Schools etc.) Exemption Order
1963 *SI No 1832*

Radioactive Substances (Electronic Valves) Exemption Order
1967 *SI No 1797*

Radioactive Substances (Smoke Detectors) Exemption Order
1980 *SI No 953*

Radioactive Substances (Gaseous Tritium Light Devices)
Exemption Order 1985 *SI No 1047*

Radioactive Substances (Luminous Articles) Exemption
Order 1985 *SI No 1048*

Radioactive Substances (Testing Instruments) Exemption
Order 1985 *SI No 1049*

Radioactive Substances (Smoke Detectors) Exemption
(Amendment) Order 1991 *SI No 477*

1 Company or organisation details *continued*

1.2 What type of organisation are you?

Tick the option which is most appropriate.

- Sole trader
- Partnership
- Limited liability company
- Public limited company
- District or county council or unitary authority
- Educational establishment
- NHS trust
- Private hospital
- Other medical establishment *please give details*

- Non-governmental public body
- Ministry of Defence
- Other government department
- Other *please give details*

2 About the application

2.1 When would you like to start accumulating and disposing of radioactive waste?

We will try to meet your needs, but it can take up to 4 months from the date of receiving a valid application with all the information we need (and fee), before you receive your authorisation. After you receive your authorisation there is usually another 28 days before you can start accumulating and disposing of radioactive waste.

Start date

2.2 When would you like any current authorisation revoked?

This will be the same date on which your new authorisation starts unless you tell us otherwise.

Date to cancel any existing authorisation

Type of application

2.3 Have you made any other application to the Environment Agency (or previously HMIP) for any permission under the Radioactive Substances Acts, 1960 or 1993?

No go to '3 About the premises'

Yes

2.4 Are you applying for

- an authorisation for premises you do not hold a current authorisation for?
- a variation to an authorisation for your existing premises?
- a replacement authorisation to enable you to accumulate and dispose of waste from new premises?
- a replacement authorisation for a new legal entity?
- a replacement authorisation because you have changed your name but not your legal status?
- an authorisation for waste disposal on premises already registered for open sources?
- other *please give details*

Please give details of any current or previous authorisation for these premises.

User

Authorisation number

Date of authorisation

3 About the premises

3.1 Where are the premises you want to accumulate and dispose of radioactive waste?

Address

Postcode

Ordnance Survey national grid reference 8 characters, for example SJ 123 456

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3.2 Which council or unitary authority are the premises in?

If premises are on a boundary please give names of all relevant authorities.

Borough or district council or unitary authority

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Please give the county council *unless there is a unitary authority*

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3.3 Who is the sewerage undertaker for the premises?

This is often the local water supply company.

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4 Contact details

We need the name and details of someone (or a department) in your organisation to help us deal with your application and authorisation quickly and efficiently.

Application contact

4.1 Which person or department can we contact regarding the information in your application?

Name

--

Position

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Address

Postcode

Contact numbers

Phone

Fax

Email

4 Contact details *continued*

Operational contact

4.2 Who will be responsible for day to day overall supervision of the accumulation and disposal of the radioactive waste?

Name

--

Position

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Address

Postcode

Contact numbers

Phone

Fax

Email

Payments and invoices

4.3 Which person or department can we contact about payment of fees and charges?

Name

--

Position

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Address

Postcode

Contact numbers

Phone

Fax

Email

5 Producing radioactive waste

5.1 What are the processes which create radioactive waste?

Please tick each relevant box.

- In vitro* medical diagnosis
- Medical treatment
- In vivo* medical diagnosis
- Medical research
- Academic research or teaching
- Other research and development
- Calibration/QA of equipment
- Use of non-radioactive characteristic of (radioactive) material, for example as shielding, ballast or colourant.
- Manufacture of closed sources or devices incorporating closed sources
- Manufacture, distribution or supply of radioactive substances other than closed sources
- Industrial process tracer test
- Environmental tracer test
- Concentration of natural radionuclides
- Other please give details in up to 20 words

5.2 Please say how the waste is produced.

We need to know

- how the waste is produced
- what steps you will take to minimise both the volume and activity of waste that is produced.

5 Producing radioactive waste continued

5.3 Will the radioactive waste be produced for a limited time?

No

Yes how long?

5.4 Do you intend to receive and dispose of radioactive waste from other premises?

No please go to question 5.6

Yes please give details of all premises from which you intend to receive waste. Please use a continuation sheet if you need to.

Company
Address
Phone
Email

Company
Address
Phone
Email

5.5 What is the chemical and physical nature of the waste you intend to receive?

5.6 Do you intend to use an incinerator on your own premises?

No please go to question 6.1

Yes

5.7 Is there any environmental licence covering the use of your incinerator?

No

Yes please give details

5.8 What type of incinerator do you have?

Please give the manufacturer and model or type number

5 Producing radioactive waste *continued*

5.9 When was the incinerator installed?

5.10 Briefly describe any gas clean-up system or filtration on your incinerator.

6 Gaseous waste

Disposal of gaseous waste

6.1 Do you intend to dispose of radioactive waste in the form of gas, mist or dust?

No Please go to question 7.1

Yes Please continue with the rest of this section

6.2 How many discharge points do you intend to use to dispose of gaseous waste?

Number of discharge points

For each discharge point, please tell us about the maximum daily and annual activity of each radionuclide to be disposed of and the maximum number of days per year that the disposal will occur. Please use copies of this page if you have more than 2 discharge points.

Discharge point no. 1

6.3 Identify or describe the discharge point.

6.4 List the radionuclides you intend to discharge.

Radionuclide	Maximum discharge in a single day in becquerels	Maximum discharge in a year in becquerels

Maximum number of days in a year on which you will discharge

6.5 How do you intend to measure or estimate the activity of the discharge? Please explain

6 Gaseous waste *continued*

Discharge point no. 2

6.6 Identify or describe the discharge point.

6.7 List the radionuclides you intend to discharge.

Radionuclide	Maximum discharge in a single day in becquerels	Maximum discharge in a year in becquerels

Maximum number of days in a year on which you will discharge

6.8 How do you intend to measure or estimate the activity of the discharge? *Please explain*

Assessment

6.9 Please attach your radiological assessment of the proposed discharges to this form.

You should assess the dose to the most likely exposed individual(s) who are not involved in the work with the radioactive material.

For each discharge point you should give details of

- the height of the discharge point
- the height of the discharge point above the highest part of the nearest building
- the discharge rate
- details of any filtration on the discharge system

Please give details of the calculations you use.

7 Aqueous waste

7.1 Do you intend to accumulate or dispose of radioactive aqueous waste?

This includes accumulation of waste to enable short-lived radionuclides to decay.

No *Please go to question 8.1*

Yes *Please continue with the rest of this section*

7.2 What is the chemical and physical nature of the waste you intend to dispose of?

Accumulation of aqueous waste

7.3 Do you intend to accumulate radioactive aqueous waste?

This includes accumulation of waste to enable short-lived radionuclides to decay.

No *Please go to question 7.8*

Yes *Please continue with the rest of this section*

7.4 Why do you intend to accumulate aqueous waste?

It is not a common practice to accumulate aqueous waste before you dispose of it. Please explain why you want to do it.

7.5 How do you intend to accumulate aqueous waste?

Please explain what facilities and controls you will use to store the accumulated aqueous waste safely.

7 Aqueous waste continued

7.6 How long do you intend to accumulate aqueous waste for?

Please give the maximum time that radioactive aqueous waste will be stored from creation or receipt until final disposal.

7.7 How much radioactive waste do you intend to accumulate?

- Where one or a few radionuclides dominate the waste you should detail each of them.
- You must detail all alpha-emitting radionuclides.
- If you use just a few megabecquerels of similar radionuclides, you can list them as a group. Examples could be 'Tritium/Carbon 14' or 'total other radionuclides excluding alpha emitters'. This will give you flexibility.

Radionuclide Maximum activity
in becquerels

Radionuclide	Maximum activity in becquerels

Maximum volume at any one time
in cubic metres

Disposal of aqueous waste

7.8 Do you intend to dispose of radioactive aqueous waste?

No Please go to question 8.1

Yes Please continue with the rest of this section

7.9 How do you intend to measure or estimate the activity of the discharge? Please explain

7.10 Where will you dispose of the radioactive aqueous waste?

Please tick all that apply and answer the questions shown.

- to a public sewer *question 7.11 to question 7.15*
- direct to a watercourse or water body *question 7.16 to question 7.20*
- to premises' own sewage treatment works *question 7.21 to question 7.27*
- to a septic tank or cesspit on the premises *question 7.28 to question 7.33*
- other method(s) 'Disposal of aqueous waste by other methods' (page 9)

Disposal to a public sewer

7.11 What is the name of your sewerage undertaker?

7.12 What is the OS national grid reference of the sewage treatment works discharge point?

For example SJ 123 456

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7.13 What is the total monthly volume of water which you intend to discharge from the premises into the sewer?

 cubic metres

7 Aqueous waste continued

7.14 What is the maximum monthly total of each radionuclide which you intend to discharge?

- Where one or a few radionuclides dominate the waste you should detail each of them.
- You must detail all alpha-emitting radionuclides.
- If you use just a few megabecquerels of similar radionuclides, you can list them as a group. Examples could be 'Tritium/Carbon 14' or 'total other radionuclides excluding alpha emitters'. This will give you flexibility.

Radionuclide	Maximum total activity in any single month in becquerels

7.15 Please attach your radiological assessment of the proposed discharge to this form.

You should assess the dose to the most likely exposed individual(s) who are not involved in the work with the radioactive material. You could include consideration of discharges to the sewage treatment works which treats your discharge. Please give details of the calculations you use.

Disposal direct to a watercourse or water body

7.16 What is the name of the watercourse or body of water that you intend to discharge into?

7.17 What is the OS national grid reference of the discharge point?

For example SJ 123 456

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7.18 What is the total monthly volume of water which you intend to discharge from the premises?

7.19 What is the maximum monthly total of each radionuclide which you intend to discharge?

Radionuclide	Maximum total activity in any single month in becquerels

7.20 Please attach your radiological assessment of the proposed discharge to this form.

You should assess the dose to the most likely exposed individual(s) who are not involved in the work with the radioactive material. Please give details of the calculations you use.

Disposal to a sewage treatment works on the premises

7.21 What is the name of the watercourse or body of water that your sewage treatment works discharges into?

7.22 What is the OS national grid reference of your sewage treatment works discharge point?

For example SJ 123 456

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7.23 What is the total monthly volume of water which you intend to discharge from your sewage treatment works?

7.24 What is the maximum monthly total of each radionuclide which you intend to discharge?

Radionuclide	Maximum total activity in any single month in becquerels

7.25 What do you intend to do with any sludge or solids which are left after treatment?

7.26 How do you plan to assess the activity of any sludge or solids which are left after treatment before final disposal?

7.27 Please attach your radiological assessment of the proposed discharge to this form.

You should assess the dose to the most likely exposed individual(s) who are not involved in the work with the radioactive material. Please give details of the calculations you use.

Disposal to a septic tank or cesspit on the premises

7.28 What is the total monthly volume of water which you intend to discharge into your septic tank or cesspit?

cubic metres

7.29 What happens to the water after it enters your septic tank or cesspit?

7.30 What is the monthly total of each radionuclide which you intend to discharge?

Radionuclide	Maximum total activity in any single month <i>in becquerels</i>

7.31 What do you intend to do with any sludge or solids which are left in your septic tank or cesspit?

7.32 How do you plan to assess the activity of any sludge or solids which are left after treatment before final disposal?

7.33 Please attach your radiological assessment of the proposed discharge to this form.

You should assess the dose to the most likely exposed individual(s) who are not involved in the work with the radioactive material. Please give details of the calculations you use.

Disposal of aqueous waste by other methods

Please

- give details on a separate sheet and attach it to this form
- give a brief summary of any agreement with a contractor and attach it to this form
- attach your radiological assessment of the proposed discharge to this form.

You should assess the dose to the most likely exposed individual(s) who are not involved in the work with the radioactive material.

Please give details of the calculations you use.

Incineration on the premises

8.10 What is the maximum daily and monthly activity of each radionuclide which you intend to incinerate?

- Where one or a few radionuclides dominate the waste you should detail each of them.
- You must detail all alpha-emitting radionuclides.
- If you use just a few megabecquerels of similar radionuclides, you can list them as a group. Examples could be 'Tritium/Carbon 14' or 'total other radionuclides excluding alpha emitters'. This will give you flexibility.

Radionuclide	Maximum activity in a single day in becquerels	Maximum activity in a month in becquerels
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Maximum volume in any one day in cubic metres

Maximum volume in any one month in cubic metres

8.11 How do you intend to assess the activity content of the ash from the incinerator or solids from any filtration system?

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8.12 How do you intend to dispose of ash from the incinerator or solids from any filtration system?

--

8.13 What will you do if your incinerator fails or breaks down?

--

8.14 Please attach your radiological assessment of the proposed disposal to this form.

You should assess the dose to the most likely exposed individual(s) who are not involved in the work with the radioactive material.

You should give details of

- the height of the incinerator discharge point
- the height of the discharge point above the highest point of the nearest building
- the discharge rate
- details of any filtration on the incinerator

Please give details of the calculations you use.

Transfer to a contractor

Please attach a brief summary of your agreement with the contractor to this form.

8.15 How much radioactive waste do you intend to transfer to your contractor?

- Where one or a few radionuclides dominate the waste you should detail each of them.
- You must detail all alpha-emitting radionuclides.
- If you use just a few megabecquerels of similar radionuclides, you can list them as a group. Examples could be 'Tritium/Carbon 14' or 'total other radionuclides excluding alpha emitters'. This will give you flexibility.

Radionuclide	Maximum annual activity in becquerels
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Maximum volume in any one year in cubic metres

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8.16 What is the company name of the contractor?

Contractor number 1

--

Contractor number 2

--

8 Organic liquid waste *continued*

8.17 What is the address of the contractor's site which will receive the waste?

Contractor number 1

Postcode

Contact numbers

Phone
Fax
Email

Contractor number 2

Postcode

Contact numbers

Phone
Fax
Email

8.18 In which borough, district or unitary authority area is the contractor's premises?

Contractor number 1

Borough or district council or unitary authority

--

Please give the county council *unless there is a unitary authority*

--

Contractor number 2

Borough or district council or unitary authority

--

Please give the county council *unless there is a unitary authority*

--

8.19 Please describe the containers or packaging you will use to transfer the organic liquid waste to your contractor.

Contractor number 1

--

Contractor number 2

--

8 Organic liquid waste *continued*

8.20 Please describe the arrangements that will be used to transport the organic liquid waste to your contractor

Contractor number 1

--

Contractor number 2

--

8.21 Please describe contingency arrangements if your planned transfer routes become unavailable.

For example failure of contractor's incinerator

--

Disposal of organic liquid waste by other means

Please describe any other method you intend to use to dispose of liquid organic waste on a separate sheet. Attach your description to this form.

9 Very low level solid waste

9.1 Do you intend to accumulate or dispose of very low level solid waste?

No *Please go to question 10.1*

Yes *Please continue with the rest of this section*

9.2 What is the chemical and physical nature of the waste?

--

9 Very low level solid waste *continued*

9.3 What categories of very low level waste do you intend to accumulate or dispose of?

- VLLW Category 1 waste in which
- there are no alpha-emitting radionuclides
 - the sum of all radionuclides in any 0.1 cubic metre of refuse is less than 400kBq and less than 40kBq in any one article
- VLLW Category 2 *higher limits for Tritium and Carbon 14* waste in which
- the sum of all Tritium and Carbon 14 in any 0.1 cubic metre of refuse is less than 4 MBq and less than 400 kBq in any one article
 - there are no other radionuclides
- Please tell us why you need these higher limits

Please contact us if you wish to dispose of alpha-emitting radionuclides via this route.

9.4 How will you measure or assess the activity of the waste?

Accumulation of very low level solid waste

9.5 Do you intend to accumulate very low level solid waste?

- No *Please go to question 9.9*
Yes *Please continue with the rest of this section*

9.6 How much very low level waste do you intend to accumulate at any one time?

cubic metres

9.7 How long do you intend to accumulate the waste before you dispose of it?

The usual time is two weeks

weeks

Where the accumulation time is longer than two weeks please tell us why you need the extra time

9 Very low level solid waste *continued*

9.8 How will you store the accumulated very low level waste until it is disposed of?

Please give details of measures and controls used to help keep the waste safe, for example security, fire precautions and alarms, etc.

Disposal of very low level solid waste

9.9 What is the maximum amount of very low level solid waste you intend to dispose of with normal refuse in any one month?

cubic metres

10 Solid waste

10.1 Do you intend to accumulate or dispose of solid waste?

This includes accumulation of waste to enable short-lived radionuclides to decay.

- No *Please go to question 11.1*
Yes *Please continue with the rest of this section*

10.2 What is the chemical and physical nature of the waste?

Accumulation of solid waste

10.3 Do you intend to accumulate solid waste?

This includes accumulation of waste to enable short-lived radionuclides to decay.

- No *Please go to question 10.9*
Yes *Please continue with the rest of this section*

10 Solid waste *continued*

10.4 How much radioactive waste do you intend to store?

- Where one or a few radionuclides dominate the waste you should detail each of them.
- You must detail all alpha-emitting radionuclides.
- If you use just a few megabecquerels of similar radionuclides, you can list them as a group. Examples could be 'Tritium/Carbon 14' or 'total other radionuclides excluding alpha emitters'. This will give you flexibility.

Radionuclide	Maximum activity in becquerels	Maximum time of accumulation

10.5 How much waste do you intend to accumulate at any one time?

10.6 Why are you suggesting this time period(s) for accumulating the waste?

10.7 How will you record and label this solid waste?

10.8 How will you store the accumulated waste until it is disposed of?

Please give details of measures and controls used to help keep the waste safe, for example security, fire precautions and alarms, etc.

Disposal of solid waste

10.9 Do you intend to dispose of solid waste?

No Please go to question 11.1

Yes Please continue with the rest of this section

10.10 How do you intend to dispose of solid waste?

Please tick all that apply and answer the questions shown.

- incineration on the premises *question 10.11 to question 10.16*
- transfer to a contractor (other than BNFL at Drigg and Sellafield) *question 10.17 to question 10.23*
- transfer to BNFL at Drigg and Sellafield sites *question 10.24 to question 10.29*
- controlled disposal *question 10.30 to question 10.37*
- by other means 'Other methods of solid waste disposal' (page 17)

Incineration on the premises

10.11 What is the maximum daily and monthly activity of each radionuclide which you intend to incinerate?

- Where one or a few radionuclides dominate the waste you should detail each of them.
- You must detail all alpha-emitting radionuclides.
- If you use just a few megabecquerels of similar radionuclides, you can list them as a group. Examples could be 'Tritium/Carbon 14' or 'total other radionuclides excluding alpha emitters'. This will give you flexibility.

Radionuclide	Maximum discharge in a single day in becquerels	Maximum discharge in a month in becquerels

10.12 How much radioactive solid waste do you intend to incinerate each month?

10.13 How do you intend to assess the activity in the ash from the incinerator or solids from any filtration system?

10.14 How do you intend to dispose of ash from the incinerator or solids from any filtration system?

10.15 What will you do if your incinerator fails or breaks down?

10.16 Please attach your radiological assessment of the proposed disposal to this form.

You should assess the dose to the most likely exposed individual(s) who are not involved in the work with the radioactive material.

You should give details of

- the height of the incinerator discharge point
- the height of the discharge point above the highest point of the nearest building
- the discharge rate
- details of any filtration on the incinerator

Please give details of the calculations you use.

Transfer to a contractor (other than BNFL at Drigg and Sellafield)

Please attach a brief summary of your agreement with the contractor to this form.

10.17 How much radioactive waste do you intend to transfer to your contractor?

- Where one or a few radionuclides dominate the waste you should detail each of them.
- You must detail all alpha-emitting radionuclides.
- If you use just a few megabecquerels of similar radionuclides, you can list them as a group. Examples could be 'Tritium/Carbon 14' or 'total other radionuclides excluding alpha emitters'. This will give you flexibility.

Radionuclide	Maximum annual activity in becquerels
--------------	--

Maximum volume in any one year
in cubic metres

10.18 What is the company name of the contractor?

Contractor number 1

Contractor number 2

10.19 What is the address of the contractor's site which will receive the waste?

Contractor number 1

Postcode

Contact numbers

Phone

Fax

Email

Contractor number 2

Postcode

Contact numbers

Phone

Fax

Email

10 Solid waste *continued*

10.20 In which borough, district or unitary authority area is the contractor's premises?

If premises are on a boundary please give names of all relevant authorities.

Contractor number 1

Borough or district council or unitary authority

Please give the county council *unless there is a unitary authority*

Contractor number 2

Borough or district council or unitary authority

Please give the county council *unless there is a unitary authority*

10.21 Please describe the containers or packaging you will use to transfer the solid waste to your contractor.

Contractor number 1

Contractor number 2

10.22 Please describe the arrangements for transporting the solid waste to your contractor.

Contractor number 1

Contractor number 2

10.23 Please describe contingency arrangements if your planned contractor is unavailable.

For example incinerator failure.

Transfer to BNFL at Drigg and Sellafield sites

Please attach a brief summary of your agreement with BNFL to this form.

10.24 Please describe the containers or packaging you will use to transfer the solid waste to BNFL at Drigg and Sellafield sites.

10.25 Will any consignment of waste contain alpha-emitting radionuclides in excess of 4 gigabecquerels per tonne or all other radionuclides in excess of 12 gigabecquerels per tonne?

No

Yes

10.26 What is the chemical and physical nature of the waste?

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

	<i>in becquerels</i>
Uranium	<input type="text"/>
Radium 226 plus Thorium 232	<input type="text"/>
Other alpha emitters	<input type="text"/>
Carbon 14	<input type="text"/>
Iodine 129	<input type="text"/>
Tritium	<input type="text"/>
Cobalt 60	<input type="text"/>
Other beta-emitting radionuclides (half-life greater than 3 months)	<input type="text"/>
Other beta-emitting radionuclides (half-life less than 3 months)	<input type="text"/>

10.28 What is the maximum amount of waste you plan to send to BNFL at Drigg or Sellafield in any one year?

cubic metres

10.29 How many consignments are intended for BNFL at Drigg or Sellafield in a year?

10 Solid waste *continued*

Controlled burial

Please attach a brief summary of your agreement with the site operator to this form.

10.30 How much radioactive waste do you intend to bury at the operator's disposal site?

- Where one or a few radionuclides dominate the waste you should detail each of them.
- You must detail all alpha-emitting radionuclides.
- If you use just a few megabecquerels of similar radionuclides, you can list them as a group. Examples could be 'Tritium/Carbon 14' or 'total other radionuclides excluding alpha emitters'. This will give you flexibility.

Radionuclide	Maximum activity in any one month in becquerels	Concentration (Bq/m ³)

10.31 What is the company name of the disposal site operator?

10.32 What is the address of the disposal site which will receive the waste?

Postcode

Contact numbers

Phone
Fax
Email

10.33 What is the OS national grid reference of the site?

For example SJ 123 456

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10 Solid waste *continued*

10.34 In which borough, district or unitary authority area is the contractor's premises?

If premises are on a boundary please give names of all relevant authorities.

Borough or district council or unitary authority

Please give the county council *unless there is a unitary authority*

10.35 Please describe the containers or packaging you will use to transfer the solid waste to the disposal site.

10.36 Please describe the way the solid waste will be transported to the disposal site.

10.37 Please attach your radiological assessment of the proposed disposal to this form.

You should assess the dose to the most likely exposed individual(s) who are not involved in the work with the radioactive material.

You should give details of

- the disposal arrangements at the disposal site
- the type and approximate depth of the overlying material
- any measurable radiation dose rates from the closed containers holding the waste.

Other methods of solid waste disposal

Please describe any other method you intend to use to dispose of solid waste on a separate sheet and attach it to this form.

11 NAIR arrangements

11.1 Do you have an emergency role as a participant under the National Arrangements for Incidents involving Radioactivity (NAIR)?

No Please go to '12 Checklist'

Yes Please continue with the rest of this section

11.2 Do you wish to have the standard conditions for NAIR participants to be entered into this authorisation?

This allows you to accumulate waste arising from your participation in the NAIR scheme.

No

Yes

11.3 Do you have a separate current Variation Notice for the accumulation and disposal of NAIR waste?

No

Yes What is the reference number of the Notice?

12 Checklist

This section is to help you check that you have

- completed the correct parts of the form ()
- attached the right documents to help us process your application quickly ()

Company or organisation details

- Type of application

About the application

About the premises

Contact details

Producing radioactive waste

Gaseous waste

- Disposal of gaseous waste
- Discharge point description(s)
- Radiological assessment of discharge

Aqueous waste

- Accumulation of aqueous waste
- Disposal of aqueous waste
- Disposal to a public sewer
- Radiological assessment of discharge
- Disposal direct to a watercourse or water body
- Radiological assessment of discharge
- Disposal to a sewage treatment works on the premises
- Radiological assessment of discharge
- Disposal to a septic tank or cesspit on the premises
- Radiological assessment of discharge
- Disposal of aqueous waste by other methods
- Radiological assessment of discharge

Organic liquid waste

- Accumulation of organic liquid waste
- Disposal of organic liquid waste
- Incineration on the premises
- Radiological assessment of discharge
- Transfer to a contractor
- Disposal of organic liquid waste by other means
- Description of method
- Radiological assessment of disposal

Very low level solid waste

- Accumulation of very low level solid waste
- Disposal of very low level solid waste

Solid waste

- Accumulation of solid waste
- Disposal of solid waste
- Incineration on the premises
- Radiological assessment of disposal
- Transfer to a contractor (other than BNFL Drigg or Sellafield sites)
- Transfer to BNFL Drigg or Sellafield sites
- Controlled burial
- Radiological assessment of disposal
- Other methods of solid waste disposal
- Description of method

NAIR arrangements

Public disclosure

- Claim of confidentiality
- National security direction

Payment for your application

- Cheque

Application for authorisation

13 Data protection notice

The Environment Agency is responsible for regulating environmental protection, flood defence, water resources and fisheries. It has a duty to discharge its functions to protect and enhance the environment and to promote conservation and recreation.

The information provided will be processed by the Environment Agency to deal with your application, to monitor compliance with the licence/permit/registration conditions, to process renewals and for maintaining the relevant public register(s).

We may also process and/or disclose it in connection with the following:

- offering/providing you with our literature/services relating to environmental matters.
- consulting with the public, public bodies and other organisations (eg Health and Safety Executive, local authorities, emergency services, DEFRA on environmental issues)
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving our service.

We may pass it on to our agents/representatives to do these things on our behalf.

You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Commercial in confidence

13.1 Absence of relevant processes and trade secrets.

I accept that the information contained in the application form will form part of the publicly available information held by the Environment Agency and relevant public registers.

Signature

--

Name

Authorised on behalf of

Date

National security

13.2 Is there any information in the application which you believe should be restricted on the grounds of national security?

No

Yes Please enclose a copy of any application for a Direction which you have made to the Secretary of State or National Assembly for Wales.

Continues on the next page

14 Payment for your application

14.1 Amount enclosed.

Please make cheques payable to 'Environment Agency'. We cannot accept payment by bank giro or credit card.

You can find details of how much to pay in the fees and charges booklet which came with this form or from <http://www.environment-agency.gov.uk>

£

15 Application for authorisation

I declare that the information given in this application is correct, to the best of my knowledge and belief. I have read '13 Data protection notice'.

Signature

Name

Position

Date