# Pollution Inventory reporting form for radioactive waste



Annual disposals

Environmental Permitting (England and Wales) Regulations 2016

#### **Electronic reporting**

We recommend that you fill in your Pollution Inventory return using our web-based reporting system. This system can check the information you provide, automatically fill in standard fields and allow you to look at information you have given in previous years. To use this system go to:

https://www.gov.uk/government/collections/pollution-inventory-reporting.

#### Who needs to fill in this form?

You need to fill in this form if you cannot use the electronic system and you hold a permit (or its equivalent for MOD) for disposal of radioactive waste in the form of unsealed sources listed below:

disposals to air, controlled waters, or sewers

You do not need to report exempt for out of scope waste or transfers for off-site disposal. See note 1 in Part 6.

To fill in this form you'll need records of relevant disposals, discharges and releases of radioactive waste.

#### How to fill in the form

Everyone must fill in Part 1. You will then need to fill in any other parts relevant to you. Finally, fill in the explanatory notes to give us reasons for any significant changes from the previous year's figures, and the declaration in Part 5.

#### **Guidance notes**

Information to help you complete your return is given as Part 6, at the end of this form.

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#### How to contact us

If you need help filling in the form, please contact your local Officer, or call our general enquiries number: 03708 506 506 (Monday to Friday, 8am to 6pm)

Email: pollution.inventory@environment-agency.gov.uk

Website: http://www.gov.uk/government/organisations/environment-agency

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.

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.

#### Confidentiality

If you think that some of the information on this form is confidential:

- tick the box below, and
- list any supporting documents on the form

We will make a decision on your claim for confidentiality within 20 days from the date of your application or within a later period if we agree. If you do not enclose a written justification for each item included in the confidentiality claim, we are likely to reject it straight away. Please note that we are obliged to release information concerning releases to the environment so forms seeking to withhold that will be rejected.

I am enclosing documents to prove that some of the information is confidential.

Please list the documents you are including to support your claim. Continue on a separate sheet if you need to.

# Part 1 About you and the site

<b>1.1 Permit number</b> (see note 2 in Part 6)		
Reference number of permit for site		
	ı	
Site reference number		
Site reference number		
1.2 Operator's details		
Operator's name		
Site address		
Postcode		
Contact numbers including the area code		
Contact numbers, including the area code	Mahila	
Phone	Mobile	
Email		
1.3 Calendar year this report covers		
1.5 Catchdar year this report tovers		

# Part 2 Releases to air

Please see the guidance notes in **Part 6**.

Releases to air				
Radionuclide	Annual reporting threshold	Total releases n/a, brt or release (See note 3)	Metric unit	Method M, C or E (See <u>note 4</u> )
Tritium	100 GBq			
Carbon-14	1 GBq			
Fluorine-18	100 GBq			
Sulphur-35	100 MBq			
Argon-41	1 TBq			
Cobalt-60	10 MBq			
Krypton-85	1 TBq			
Strontium-90	10 MBq			
Technetium-99m	1 TBq			
Ruthenium-106	1 GBq			
Antimony-125	100 MBq			
lodine-125	10 MBq			
lodine-129	1 MBq			
lodine-131	10 MBq			
Xenon-133	1 TBq			
Caesium-137	100 MBq			
<b>Radon-222</b> (see <b>note 5</b> )	1 GBq			
Uranium alpha	10 MBq			
Plutonium alpha	1 MBq			
Plutonium-241	10 MBq			
Americium-241	1 MBq			
Curium-242	1 MBq			
Please account for any other releases which yo	ou have not re	ported above.		
Other Alpha Particulate (see note 7)	1 MBq			
Other Beta/Gamma Particulate (see <u>note 7</u> )	1 MBq			

## Part 3 Releases to sewers

Please see the guidance notes in **Part 6**.

Releases to sewers				
Radionuclide	Annual reporting threshold	Total releases n/a, brt or release (See note 3)	Metric unit	Method M, C or E (See <u>note 4</u> )
Total Alpha (see <u>note 6</u> )	1 MBq			
Total Beta/Gamma (but not tritium) (see note 6)	1 MBq			
Tritium	100 GBq			
Carbon-14	100 MBq			
Fluorine-18	10 GBq			
Sodium-22	100 MBq			
Phosphorus-32	1 MBq			
Phosphorus-33	10 MBq			
Sulphur-35	10 MBq			
Chromium-51	10 MBq			
Cobalt-57	10 MBq			
Cobalt-58	1 MBq			
Cobalt-60	1 MBq			
Gallium-67	100 MBq			
Selenium-75	1 MBq			
Strontium-89	1 GBq			
Strontium-90	10 MBq			
Yttrium-90	1 GBq			
Zirconium-95	1 MBq			
Niobium-95	1 MBq			
Technetium-99 (do not use for Tc-99m)	1 MBq			
Technetium-99m	10 GBq			
Ruthenium-106	100 MBq			
Indium-111	100 MBq			
Antimony-125	100 MBq			
lodine-123	1 GBq			
lodine-125	100 MBq			
lodine-129	10 MBq			
lodine-131	100 MBq			
Caesium-134	10 MBq			
Caesium-137	10 MBq			

# Part 3 Releases to sewers, continued

Releases to sewers				
Radionuclide	Annual reporting threshold	Total releases n/a, brt or release (See note 3)	Metric unit	Method M, C or E (See <u>note 4</u> )
Cerium-144	100 MBq			
Samarium-153	100 MBq			
Erbium-169	100 GBq			
Lutetium-177	1 GBq			
Thallium-201	1 GBq			
Radium-223	100 MBq			
Thorium-230	10 MBq			
Thorium-232	10 MBq			
Uranium alpha	100 MBq			
Neptunium-237	10 MBq			
Plutonium alpha	10 MBq			
Plutonium-241	100 MBq			
Americium-241	100 MBq			
Curium-242	100 MBq			
Curium-243	10 MBq			
Curium-244	10 MBq			
Please account for any other releases which you have not reported above.				
Other Alpha (see <u>note 7</u> )	1 MBq			
Other Beta/Gamma (see <u>note 7</u> )	1 MBq			

# Part 4 Releases to controlled waters

Please see the guidance notes in **Part 6**.

Releases to controlled waters						
Radionuclide	Annual reporting threshold	Total releases n/a, brt or release (See note 3)	Metric unit	Media R, S or E (See <u>note 3</u> )	Method M, C or E (See <u>note 4</u> )	
Total Alpha (see <u>note 6</u> )	1 MBq					
Total Beta/Gamma (but not tritium) (see <b>note 6</b> )	1 MBq					
Tritium	1 TBq					
Carbon-14	100 MBq					
Sulphur-35	10 GBq					
Cobalt-60	10 MBq					
Strontium-90	100 MBq					
Yttrium-90	1 GBq					
Zirconium-95	1 GBq					
Niobium-95	100 MBq					
<b>Technetium-99</b> (do not use for Tc-99m)	1 GBq					
Ruthenium-106	1 GBq					
Antimony-125	10 GBq					
lodine-129	100 MBq					
Caesium-134	10 MBq					
Caesium-137	100 MBq					
Cerium-144	1 GBq					
Thorium-230	10 MBq					
Thorium-232	10 MBq					
Uranium alpha	100 MBq					
Neptunium-237	100 MBq					
Plutonium alpha	100 MBq					
Plutonium-241	10 GBq					
Americium-241	100 MBq					
Curium-242	10 GBq					
Curium-243	100 MBq					
Curium-244	100 MBq					
Please account for any other releases	which you h	ave not reported ab	ove.	•		
Other Alpha (see <u>note 7</u> )	1 MBq					
Other Beta/Gamma (see note 7)	1 MBq					

## Part 5 Explanation and declaration

#### 5.1 Explanation notes

Please let us know why your releases and transfers have changed from previous years. Continue on a separate sheet if you need to. If you have significant unexplained discharges we may need to seek
further details, so please include any information you believe may be helpful.
5.2 Declaration
f you make a statement that is false or misleading, you may be committing an offence under the Environmental Permitting (England and Wales) Regulations 2016.
declare that as far as I know, the information on this form is true.
Tick this box to confirm that you understand and agree with the declaration.
,
Title (Mr, Mrs, Miss and so on)
Name
First name Last name
Position
Today's date (DD/MM/YYYY)

If you have good reason for not wanting to sign the form (for example, your personal security), pass the form to a senior manager who is willing to sign it. If this is not possible, you will need to write to your local Environment Agency office to explain your concerns and get them to agree to you sending both a signed and unsigned form. We will place the unsigned form on the public register.

#### 5.3 What happens next

Send the filled-in form and any other documents to your local Environment Agency Officer.

Remember to keep a copy for your own records.

#### 5.4 Data protection

#### Pollution Inventory privacy notice

The Environment Agency runs the Pollution Inventory for England.

### Part 5 Explanation and declaration, continued

We are the data controller for this service. A data controller determines how and why personal data (also called 'personal information') is processed.

If you have any questions or concerns about how we process personal data, or want to make a complaint or request relating to data protection, please contact:

Data Protection Team, Environment Agency Horizon House, Deanery Road Bristol, BS1 5AH

Email: dataprotection@environment-agency.gov.uk

For any other queries telephone: 03708 506 506

#### Personal data we collect

Personal data we collect includes:

- names
- addresses
- email address and other contact details
- questions, queries, or feedback you leave

We are allowed to process your personal information because we have official authority as the environmental regulator. The lawful basis for processing your personal data is to perform a task in the public interest that is set out in law.

If you do not give us the personal data we ask for we will not be able to comply with our legal duty to collect data on emissions.

#### Your responsibility

If you have included personal data about any other individuals on your pollution inventory submission, you must inform them. You must provide them with a copy of this privacy notice so that they are aware of how their personal data will be used.

#### What we do with your personal data

The data we process is used by the UK government to inform decisions on environmental policy. It is submitted to Defra to inform the UK Pollutant Releases and Transfer Register.

All the information you supply, including personal data, is available to the public on data.gov.uk. We may also use it to respond to requests for information under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004 (if the General Data Protection Regulation allows).

If you can demonstrate that information you provide is commercially or industrially confidential, we will consider withholding that information from the public register.

If you believe that including information on a public register would not be in the interests of national security, you must contact the <u>Secretary of State</u> before you apply to request a determination (<a href="https://www.gov.uk/government/ministers/secretary-of-state-for-environment-food-and-rural-affairs">https://www.gov.uk/government/ministers/secretary-of-state-for-environment-food-and-rural-affairs</a>). You must still send that information with your submission. We will not include the information in the public register unless the Secretary of State decides it can be included.

See guidance on national security and commercial confidentiality in **Environmental permitting guidance: core guidance (https://www.gov.uk/government/publications/environmental-permitting-guidance-core-guidance--2)**.

### Part 5 Explanation and declaration, continued

We may use your email address to contact you for user research to improve our service. You do not have to take part in the research.

#### Where your personal data is stored and processed

We store and process your personal data on our servers in the UK.

Your data will not be hosted or stored outside the European Economic Area. We do not use your data to make an automated decision or for automated profiling.

#### How long we keep your personal data

We will keep your personal data while your permit is in use, and for 6 years after you surrender your permit.

If your permit is for a landfill site, we will keep your personal data for 10 years after you surrender your permit. We will then remove it from the public register.

#### Your rights

Our <u>personal information charter (https://www.gov.uk/government/organisations/environment-agency/about/personal-information-charter)</u> explains your rights and how we deal with your information.

#### Part 6 Guidance notes

#### 1 Radioactive Substances Regulation (RSR) reporting

Permits for radioactive substances are issued for England by the Environment Agency under the Environmental Permitting (England and Wales) Regulations 2016. If you hold a permit for disposal of radioactive waste in the form of unsealed sources, and we have have sent a Pollution Inventory Specification, you must provide the information we ask for. Unsealed sources are:

- disposals to air
- disposals to controlled waters
- disposals to sewers

You do not need to report disposal of radionuclides which are exempt from permitting or fall outside the definition of radioactive waste. You must not report disposals of sealed sources or solid waste or of transfers of radioactive waste (see **8 Transferring radioactive waste**).

You should make your report online using the system available at:

#### https://www.gov.uk/government/collections/pollution-inventory-reporting

If you cannot report online you can use this form.

#### 2 Permit number

Please enter the permit number for the main (generally the original) radioactive substances permit for the organisation on the site. Nuclear sites should enter the number used for charging purposes for the site. Numbers should be in the form of AA1111 or AA1111XY. Please contact your local Environment Agency office if you cannot access the system.

#### 3 Releases

Releases to air mean those disposals to air from discharge points which are specified in the permit, together with fugitive releases.

### Part 6 Guidance notes, continued

Releases to sewers or controlled waters mean those disposals which are specified as such in the permit. In the case of controlled waters you need to specify the water as sea or coastal waters (S), estuary (E) or river or inland water (R). These are the definitions you should use when completing this form:

- sea or coastal waters are those waters up to three miles from the coast
- estuary is defined as the transitional area at the mouth of a river between fresh water and coastal waters
- rivers and inland waters include surface fresh waters which are not part of, and are upstream from, an estuary

If you are not sure about which category you should use please contact your local Environment Agency Officer.

You must put an entry for each radionuclide listed in the 'Total release' column. Put either your release data, 'brt' or 'n/a' in each box.

#### 4 Release value

If a release above the reporting threshold takes place, you should report the amount released as radioactivity in units of Becquerels (Bq) or multiples of Bq (MBq, GBq, TBq or PBq – see your permit for explanation of these terms).

You should use two significant figures when reporting the quantity of activity released (for example, 4.2 GBq rather than 4.21 GBq).

#### brt - Below reporting threshold

If the release is below the relevant annual reporting threshold shown, enter this on the reporting form as brt. You can provide the actual value if it is available, even if it is below the threshold.

#### n/a - Not applicable

If you do not release this radionuclide to a particular method of release, you should enter this on the reporting form as n/a.

#### Measurement, calculation and estimation

You must say how you have decided on the value of each release. There are three ways of doing this.

**Measurement (M)** – releases you assess from direct monitoring results, based on actual monitoring of a radionuclide using a given discharge route, including:

• spot or flow-proportional sampling of effluent in a tank and subsequent analysis

**Calculation (C)** – releases based on calculations specific to the plant or operation, including:

 adding up the total amount of radioactivity which has been released to sewers, using records of the volumes of laboratory solutions and their concentration, which have been disposed of to drains in laboratories

**Estimation (E)** – releases based on best estimates, including:

 arriving at figures for releases to the air and sewers based on previous experience of the likely percentage of activity released from a particular type of experiment and the number of these experiments carried out in a year

If uncertain which category to use, put E.

#### 5 Radon-222

You only need to report radon-222 releases to air if there is a specific limit for this radionuclide in your authorisation.

#### 6 Total alpha and total beta/gamma (not including tritium) releases to controlled water or sewers

Everyone must report the total alpha and total beta/gamma (not including tritium) releases to controlled water or sewers. This is so we can collect information on releases to meet the targets in the UK Radioactive Discharge Strategy (July 2009). You do not need to report these substances to air as there are no targets for these in the Strategy.

Many operators do not measure total alpha or total beta/gamma to meet a permit limit (normally non-nuclear sites). If so you should work out the total individual releases of all alpha-emitting and all beta/gamma-emitting radionuclides (but not tritium) for reporting purposes. You should report all non-alpha-emitting radionuclides in the total beta/gamma category, except tritium. For example, you should report positron emitters and electron-capture radionuclides as total beta/gamma. You do not need to include tritium in the beta/gamma category because of the relatively large releases and significantly lower radiological effect compared with other beta/gamma radionuclides.

#### 7 Other alpha and other beta/gamma

You may have authorised releases of other radionuclides which are not listed on the form. You should account for these releases under the generic categories of other alpha and other beta/gamma. You should report all non-alpha-emitting radionuclides in the other beta/gamma category.

For releases to air, we give details of the categories of other alpha particulate and other beta/gamma particulate. We believe it is unreasonable to expect operators to measure all releases of short-half-life noble gases. Because of this, we have limited the other alpha and other beta/gamma categories to particulate releases. This will mean that releases of some short-lived positron emitters are not reported. For some radionuclides, releases could be either particles or gases and you can choose to report these as other particulate.

#### 8 Transferring radioactive waste

Although many permits require reporting of transfers of radioactive waste, we no longer want this to be done and have removed the relevant section from the reporting system. We will take no action against operators for not reporting transfers.