Application for an environmental permit Part B4 – New bespoke waste operation permit



Fill in this part of the form, together with parts A, B2 and F1, if you are applying for a new bespoke permit for a waste operation. Please check that this is the latest version of the form available from our website.

Please read through this form and the guidance notes that came with it.

You can apply online for waste bespoke environmental permits.

Apply online for an environmental permit.

The form can be:

- saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.
- 2) printed off and filled in by hand. Please write clearly in the answer spaces.

It will take less than three hours to fill in this part of the application form.

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Appendix 1 – Specific questions for the recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes

Appendix 2 – Specific questions for inert waste landfill and

Appendix 2 – Specific questions for inert waste landfill and deposit for recovery operations

1 What waste operations are you applying for?

Fill in Table 1a with details of what you are applying for.

Fill in a separate table for each waste operation you are applying for. Use a separate sheet if you have a long list and send it to us with your application form. Tell us below the reference you have given the extra sheet.

Document reference

Types of waste accepted

For each line in Table 1a, fill in a separate document to list those wastes you will accept on the site for that operation, giving the List of Wastes catalogue code (search for 'Technical guidance on how to assess and classify waste' at www.gov.uk/government/organisations/environment-agency). If you need to exclude waste from your activity or facility by restricting the description, quantity, physical nature, hazardous properties, composition or characteristic of the waste, include these in the document. Send it to us with your application form.

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1 What waste operations are you applying for?, continued

Table 1a - Waste operations which do not form part of an installation

Name of the waste operation	Description of the waste operation	Annex I (D codes) and Annex II (R codes) and descriptions	Hazardous waste treatment capacity (if this applies) (See note 1)	Non-hazardous waste treatment capacity (if this applies) (See note 1)
Add extra rows if you need them. If you do not have enough room, go to the line below or send a separate document and give us the document reference here	Use the description from the guidance. Include any extra detail that you think would help to accurately describe what you want to do			
For all waste operations	Total storage capacity (see note 2)			
	Annual throughput (tonnes each year)			

Notes

- 1 By 'capacity', we mean:
 - the total landfill capacity (cubic metres) for landfills
 - the total treatment capacity (tonnes each day) for waste treatment
 - the total storage capacity (tonnes) for waste-storage operations
- 2 By 'total storage capacity', we mean the maximum amount of waste in tonnes you store on the site at any one time.

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1 What waste operations are you applying to vary?, continued

Please provide the document reference. You can use Table 1b as a template.

If you want to accept any waste with a code ending in 99, you must provide more information and a full description of the waste in the document, (for example, detailing the source, nature and composition of the waste). Where you only want to receive specific wastes within a waste code you can provide further details of the waste you want to receive. Where a waste is dual coded you should use both codes for the waste.

Document reference _____

Table 1b - Template example - types of waste accepted and restrictions

Waste code	Description of the waste
Example	Example
02 01 08*	Agrochemical waste containing hazardous substances
18 01 03*	Infectious clinical waste, not contaminated with chemicals or medicines – human healthcare (may contain sharps) for alternative treatment
17 05 03*/17 06 05*	Non-hazardous soil from construction or demolition contaminated with fragments of asbestos cement sheet

1c Deposit for recovery purposes (see Appendix 4 and the guidance notes on part B4)

	БСР	bosic for recovery purposes (see Appendix 4 and the	Saladile notes on part bay
		pplying for a waste recovery activity involving the permanent of and fill restoration)?	leposit on waste on land for construction or land reclamation
No Yes		Go to section 2	
Are y	ou ap	pplying for an inert landfill permit that includes a restoration a	ctivity using waste?
No		Go to section 2	
Yes		Please send us a copy of your restoration plan in accordance https://www.gov.uk/guidance/landfill-operators-environments	
Have	we a	advised you during pre-application discussions that we believ	e the activity is waste recovery?
No		Go to section 2	
Yes			
Have	there	e been any changes to your proposal since the discussions?	
No			
Yes			
plan	s-and		ur guidance at https://www.gov.uk/guidance/waste-recovery- ince your pre-application discussions. Also give us the reference
		te that there is an additional charge for the assessment of a on. For the charge see https://www.gov.uk/topic/environmer	
Docı	ıment	t reference	

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2 Point source emissions to air, water and land

Fill in Table 2 below with details of the point source emissions that result from the operating techniques at each of your waste operations.

Fill in one table for each waste operation.

Table 2 – Emissions

Name of the waste operation				
Point source emissions to air				
Emission point reference and location	Source	Parameter	Quantity	Unit
Point source emissions to water (other than	cowers)			
Emission point reference and location	Source	Parameter	Quantity	Unit
Emission point reference and location	Source	Talameter	Quantity	Onit
Point source emissions to sewers, effluent t	1		T	T
Emission point reference and location	Source	Parameter	Quantity	Unit
Point source emissions to land	1		-	
Emission point reference and location	Source	Parameter	Quantity	Unit

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Supporting information

3 Operating techniques

3a Technical standards

Fill in Table 3a for each waste operation you refer to in Table 1a above and list the 'appropriate measures' you are planning to use. If you are using the standards set out in the relevant technical guidance(s) (TGN) there is no need to justify using them within your documents in Table 3a.

You must justify your decisions in a separate document if:

- there is no technical standard
- the technical guidance provides a choice of standards, or
- you plan to use another standard

This justification could include a reference to the Environmental Risk Assessment provided in part B2 of the application form.

Table 3a should summarise:

- the operations undertaken
- the measures you will use to control the emissions from your process, as identified in your risk assessment or the relevant technical guidance
- how you will meet other standards set out in the relevant technical guidance

Table 3a - Technical standards

Fill in a separate table for each waste operation.

Waste operation		
Description of the waste operation Add extra rows if you need them	Appropriate measure (TGN reference)	Document reference (if appropriate)

In all cases, describe the type of facility or operation you are applying for and provide site infrastructure plans, location plans and process flow diagrams or block diagrams to help describe the operations and processes undertaken. Give the document references you use for each plan, diagram and description.

Document reference	
Document reference	

3b General requirements

Fill in a separate table for each waste operation.

Table 3b - General requirements

Name of the waste operation	
If the technical guidance or your risk assessment shows that emissions of substances not controlled by emission limits are an important issue, send us your plan for managing them	Document reference or references
If the technical guidance or your risk assessment shows that odours are an important issue, send us your odour management plan.	Document reference or references
If your activity type is listed in the guidance document 'Control and monitor emissions for your environmental permit' as needing an odour management plan, or your risk assessment shows that odours are an important issue, you need to send us your odour management plan.	
If the technical guidance or your risk assessment shows that noise or vibration are important issues, send us your noise or vibration management plan (or both)	Document reference or references

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3 Operating techniques, continued

We may need to ask for management plans or risk assessments in other circumstances based on our regulatory experience. If you are unsure as to whether you need to submit a management plan with your application, please discuss this with the Environment Agency prior to submission.

Search for 'Risk assessment for your environmental permit' at www.gov.uk/government/organisations/environment-agency.

3c Information for specific sectors

For some of the sectors, we need more information to be able to set appropriate conditions in the permit. This is as well as the information you may provide in sections 5, 6 and 7. For those activities listed in Table 3c, you must answer the questions in the related document.

Table 3c - Questions for specific sectors

Sector	Appendix
Recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes	See the questions in appendix 1
Inert landfill and deposit of waste on land for construction, land reclamation, restoration or improvement	See the questions in appendix 2

General information

4 Monitoring

4a Describe the measures you use for monitoring emissions by referring to each emission point in Table 2 above

You should also describe any environmental monitoring. Tell us:

- how often you use these measures
- the methods you use
- the procedures you follow to assess the measures

Document reference

4b Point source emissions to air only

Provide an assessment of the sampling locations used to measure point source emissions to air. The assessment must use M1 (search for 'M1 sampling requirements for stack emission monitoring' at www.gov.uk/government/organisations/environment-agency).

Document reference of the assessment

5 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422 549 (Monday to Friday, 8am to 6pm)

Email: enquiries@environment-agency.gov.uk

Website: 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.

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Feedback			

You don't have to answer this part of the form, but it will help us improve our forms if you do.)		
We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.		
How long did it take you to fill in this form?		
We will use your feedback to improve our forms and guidance notes, simpler.	and to tell the Government how regulations could be made	
Would you like a reply to your feedback?		
Yes please		
No thank you		

Crystal Mark 19105 Clarity approved by Plain English Campaign

For Environment Agency use only	
Date received (DD/MM/YYYY)	Payment received?
	No 🗆
Our reference number	Yes Amount received
	£

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Plain English Campaign's Crystal Mark does not apply to appendices 1 to 2.

Appendix 1 – Specific questions for the recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes

	ed oı	•	n of your compost like outputs (CLO). This should be treatment (MBT) process over a 12-month period and
Docı	ımen	t reference	
2 of T		ase provide an agricultural benefit assessment for t .15 and should be signed and dated by an appropri	he use of your CLO. This should be based on section 2 ate technical expert
Docı	ımen	t reference	
		dule 2 of TGN 6.15 and include a map with a green o	to soil and food chain receptors. This should be based utline showing the boundary of the area being treated
•	locati	ons where the waste will be stored and spread	
		pring, well or borehole used to supply water for domestic or for treated	ood production purposes that is within 250 metres of the area
	any s treate		roduction purposes that is within 50 metres of the area being
	Wales	uropean designated sites (candidate or Special Area of Conses or Ramsar Site) or Sites of Special Scientific Interest (SSSI) w d or spread	ervation, proposed or Special Protections Area in England and which are within 500 metres of the place where waste is to be
•	the lo	ocation of public rights of way	
•	any G	roundwater Source Protection Zones	
		ce watercourses	
	-	uildings or houses within 250 metres of the area being treate	d
		drains within the boundary	
Docı	ımen	t reference	
4	Are	the technical standards and measures fully in line v	vith those set out in section 3 of TGN 6.15?
No		Provide justification for departure from TGN 6.15 and a copy	of the proposed technical standards, measures or procedures
		Document reference	
Yes			
App	end	ix 2 – Specific questions for inert waste landfill	and deposit for recovery operations
1	Ple	ase provide your Environmental Setting and Site De	sign (ESSD) report
Docı	ımen	t reference	
		·	velop an environmental setting and site design (ESSD) report.
2	Ple	ase provide your Waste Acceptance Procedures (inc	luding Waste Acceptance Criteria)
Docı	ımen	t reference	
3	Hav	ve you provided a hydrogeological risk assessment ((HRA) for the site?
No		Please refer to the section of your ESSD that explains why th	is is unnecessary for your site
Yes		Document reference	
4	Hav	ve you completed an outline engineering plan for the	e site?
No		Please refer to the section of your ESSD that explains why th	is is unnecessary for your site
Yes		Document reference	
5	Hav	ve you provided a stability risk assessment (SRA) for	vour site?
No		Please refer to the section of your ESSD that explains why th	•

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Document reference

Appendix 2 - Specific questions for inert waste landfill and deposit for recovery operations, continued

6	Hav	ve you completed a monitoring plan for the site?			
No		Please refer to the section of your ESSD that explains why tl	nis is unnecessary for your site		
Yes		Document reference			
7	Hav	ve you completed a plan for closing the site and pro	cedures for looking after the site once it has closed?		
No		If no for deposit for recovery activities please refer to the se site	ction of your ESSD that explains why this is unnecessary for your		
Yes		For inert waste landfill you must provide a closure plan			
		Document reference			
Spr	eadir	ing waste to support plant growth			
8a	Doe	Does the activity involve the deposit of waste to create or treat a growing medium (R10 for land treatment)?			
No					
Yes					
•	•	ou answered 'yes' to question 8a, does the R10 action of the growing medium (e.g. soil conditioner to imp	, ,		
No					
Yes		Go to question 8c			
8c	If y	ou have answered 'Yes' to question 8b, have you co	mpleted a benefit statement?		
No		Please explain why			
		Document reference			
Yes					

Note: Refer to our guidance when completing your statement (including EPR 8.01, section 6).

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Doc Ref_B4_Table 1a

Name of the waste operation	Description of the waste operation	Annex I (D codes) and Annex II (R codes) and descriptions	Hazardous waste treatment capacity (if this applies).	Non-hazardous waste treatment capacity (if this applies).
	Treatment of Healthcare wastes - physical			
Treatment of Healthcare wastes - hazardous	(autoclave)	R3, D09	1.6	
	Treatment of Healthcare wastes - Physical			
Treatment of Healthcare wastes - non-hazardous	(autoclave)	R3, D09		1.6
Storage of hazardous wastes	Storage of wastes prior treatment	R13, D15		
Storage of non hazardous wastes	Storage of wastes prior treatment	R13, D15		
	Repackaging- treated waste (floc) prior dispatch to be used as fuel in an energy from waste plant (Teeside Energy from Waste			
Repackaging non-hazardous	Plant).	R12, D14		
Storage of treated wastes	Storage of treated wastes (floc) prior dispatch to energy from waste plant, as above.	R13, D15		
		Total storage capacity	2x770l bin containers	2x240l bin containers
	Ann	ual throughput (tonnes each year)		330 (floc) t/y

By 'capacity', we mean:

- the total landfill capacity (cubic metres) for landfills
- the total treatment capacity (tonnes each day) for waste treatment
- the total storage capacity (tonnes) for waste-storage operations
- 2 By 'total storage capacity', we mean the maximum amount of waste in tonnes you store on the site at any one time.

Doc Ref_B4_Table 1b

List of Wastes Code (LoW)	Material Description	
Healthcare Wastes undergoing Thermal Treatment (Autoclave)		
180103*	Wastes whose collection and disposal is subject to special requirements in order to prevent infection, orange stream waste to include sharps	
180104	Wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)	

Doc Ref_B4_Table 2

Name of the waste operation: Thermal (a	utoclave) Treatment			
Point source emissions to air				
Emission point reference and location	Source	Parameter	Quantity	Unit
autoclave treatment	sterilization process* - extract system	steam	no emissions	
	shredding process* - extract system	particulate matter, VOCs, microbial emissions	no emissions	
Point source emissions to water (other than s	ewers)			
Emission point reference and location	Source	Parameter	Quantity	Unit
n/a				
Point source emissions to sewers, effluent tre	atment plants or other transfers off site		<u> </u>	
Emission point reference and location	Source	Parameter	Quantity	Unit
autoclave treatment	end of treatment process	sterilised liquid	25 litres per 40 minute	litres
Point source emissions to land	I		<u>l</u>	
Emission point reference and location	Source	Parameter	Quantity	Unit
n/a				

Shredding occurs after sterilisation process in order to minimise the potential for bio-aerosols emissions from the untreated wastes.

The applicant is aware that the EA will place conditions for monitoring of the autoclave process for particulates, VOCs and microbial emissions to air. The Applicant is also aware that as part of the autoclave validation process, an autoclave monitoring plan should be approved by the EA prior initiation of the treatment process. The Applicant has developed, at application stage, a proposed Autoclave Monitoring Plan for EA's approval (Doc Ref_NSECH_Autoclave Monitoring Plan).

^{*} The autoclave is fully enclosed (including the shredding process) in order to eliminate the potential of the release of pathogens from the untreated waste. The autoclave is equipped with an air extract system via a HEPA air filter system. The HEPA filter will remove small particulates from the air and trap it, preventing their release to atmosphere also providing odour and dust control.

^{**} Liquids from the process are sterilized internally before being discharged via the HEPA filter into the foul sewage drain (sealed drainage system).



Doc Ref_B4_Table 3a

Description of the waste operation	Appropriate measure (TGN ref)	Document Reference (if appropriate)
hermal treatment onsite - autoclave	EA guidance - Legal operator and competence requirements: environmental permits	Waste operation procedures and processes to comply with the TGN's provided in accompanying documents to
	EA guidance - Healthcare waste: appropriate measures for permitted facilities	Environmental Permit Application.
	Clinical waste (EPR 5.07) guidance	
	Health Technical Memorandum 07-01: Safe and sustainable management of healthcare waste (2023)	
	EA guidance_ Risk Assessment for Environmental Permits	
	RGN 2: Understanding the meaning of regulated facility	
	Fire prevention plans: environmental permits	



Doc. Ref_B4_4a and 4b

B4.4a Describe the measures you use for monitoring emissions by referring to each emission point in Table 2.

You should also describe any environmental monitoring. Tell us:

- how often you use these measures
- the methods you use
- the procedures you follow to assess the measures
 - 1. Point source emissions to air

Autoclave treatment (sterilisation and shredding) - Extract HEPA filter system

The proposed treatment activity and related storage will occur within the designated area, within the building on impermeable surface.

The autoclave is fully enclosed (including the shredding process) in order to eliminate the potential of the release of pathogens from the untreated waste. The autoclave is equipped with an air extract system via a 'High Efficiency Particulate Air' filter system (HEPA). The HEPA filter will remove small particulates from the air and trap it, preventing their release to atmosphere and providing odour and dust control.

Shredding occurs after sterilisation process in order to minimise the potential for bio-aerosols emissions from the untreated wastes.

The applicant is aware that the EA will place conditions for monitoring of the autoclave process for parameters such as particulates, VOCs and microbial emissions to air. The Applicant is also aware that as part of the autoclave commissioning and validation process, an autoclave monitoring plan should be submitted to the EA for approval prior initiation of the treatment process.

A monitoring plan for the autoclave is part of the service package provided by Curo/Peacocks (the autoclave supplier) and includes regular servicing and maintenance, also covering the replacement of HEPA filters every 6 months as a minimum and tests to ensure autoclave's efficiency, in accordance with EPR 5.07 guidelines and the EA Health Technical Memorandum 07-01 – Safe Management of Healthcare Waste.

A proposed Autoclave Monitoring plan (**Doc Ref_NSECH_Site Management Plan Appendix H**) includes routine monitoring of emissions and treatment efficacy to prevent air emissions, leaks, malfunctioning and ensure efficiency of the sterilization and shredder processes.

In addition, as part of the commissioning/ validation stage (once allowed by the EA after submission of this permit application), a spore inactivation qualification using the CISA WSD200 steriliser will be carried out assuming a worst-case challenge load of relevant clinical wastes, as per EPR 5.07 guidelines Annex 1. The procedure, cycles and parameters analysed will be detailed in a report. Such analysis would aim to demonstrate that the steriliser can meet the required ISTAATT Level III treatment standards and therefore treated wastes will be rendered safe, as required by the EPR 5.07 guidelines. **Doc Ref NSECH Site Management Plan Appendix H)**

The autoclave Contingency Plan (**Doc Ref_NSECH_Site Management Plan Appendix E**) and Start Up and Shut Down plan (**Doc Ref_NSECH_Site Management Plan Appendix I**) are provided.

2. Point source emissions to water (sewer)

Liquids from the process are sterilized internally before being discharged via the HEPA filter into the foul sewage drain (sealed drainage system).

Doc Ref_NSECH_Site Management Plan provides more details and includes the Site Drainage Plan and the Autoclave Contingency Plan.

B4.4b Point source emissions to air only.

Provide an assessment of the sampling locations used to measure point source emissions to air. The assessment must use M1 (search for 'M1 sampling requirements for stack emission monitoring' at

Waste & Environmental Solutions



Doc. Ref_B4_4a and 4b

www.gov.uk/government/organisations/environment-agency).

n/a the system is a closed loop via HEPA filtration and no vent stack to atmosphere is fitted