

# Guidance notes on part C4 – Varying a bespoke waste operation permit



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

This guidance will help you complete part C4 of the application form pack.

You only need to give us details in this part of the application for the parts of the permit that will be affected (for example, if you are adding a new facility or making changes to existing ones).

You do not need to resend any information from your original permit application if it is not affected by your proposed changes.

**Contents**

- 1 What waste operations are you applying to vary?
- 2 Emissions to air, water and land
- 3 Operating techniques
- 4 Monitoring
- 5 How to contact us
- Appendix 1 – Specific questions for waste facilities that accept clinical waste
- Appendix 2 – Specific questions for sites that accept hazardous waste.
- Appendix 3 – Specific questions for the recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes
- Appendix 4 – Specific questions for inert landfills and deposit for recovery operations

## 1 What waste operations are you applying to vary?

Fill in Table 1a with details of what you are applying to vary. Fill in a separate table for each waste facility you are applying to vary.

**Table 1a – waste facilities which do not form part of an installation**

Describe your waste facility. The following are appropriate and can be used in combination, but you can also use your own.

**Sites**

- Transfer of waste: household commercial and industrial
- Transfer of waste: clinical
- Transfer of waste: non-biodegradable
- Transfer of waste: hazardous
- Treatment of waste: physical
- Treatment of waste: physico chemical
- Treatment of waste: chemical
- Disposal of waste in lagoons
- Household waste amenity
- Materials recycling
- Mechanical biological treatment (MBT)
- End of life vehicle authorised treatment (ELV ATF)
- Metal recycling
- Waste electrical and electronic equipment authorised treatment facility (WEEE ATF)
- Incineration
- Composting
- Anaerobic digestion
- Other biological treatment of waste
- Landfill gas engine (less than 50 megawatts)
- Deposit for recovery
- Inert waste landfill
- Closed landfill.

**Mobile plant**

- Incineration
- Waste oil recovery
- Dechlorination of waste PCBs/PCTs
- Collection and storage of a controlled substance from any waste product, installation or equipment

- Vitrification of waste
- Treatment of clinical waste
- Treatment of waste soil
- Dewatering of muds, sludges, soils and dredgings
- Lime stabilisation of sludge
- Treatment of contaminated materials, substances or products to remediate land or controlled water.

Annex I (D codes) and Annex II (R codes) description: Identify the Waste Framework Directive Annex I (D codes) and Annex II (R codes) that apply to each Schedule 1 activity or waste facility.

The revised Waste Framework Directive (rWFD) came into force on 12 December 2010. The Waste (England and Wales) Regulations 2011 ('the Waste Regulations') transpose the rWFD in England and Wales. You should be aware of the requirements set out in the Waste Regulations and in particular in relation to the need to take all such measures available to you as are reasonable in the circumstances to apply the waste hierarchy. You should also be aware of the requirements in relation to mixing of hazardous waste that may affect your proposals.

### **Table 1b – Template example – types of waste accepted and restrictions**

Table 1b provides details of the activities that you wish to be permitted for. If those activities take waste you need to tell us which wastes you want to receive for each activity.

For each waste you want to receive for a specified activity, you need to provide the 'List of Wastes' code and description [Ref – List of Wastes (England) Regulations 2005, List of Wastes (Wales) Regulations 2005]. Search for 'Technical guidance on how to assess and classify waste' at [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency). If the waste is marked with an asterisk in the list of wastes, the waste is hazardous. Remember to put the asterisk for that waste as it is part of the code.

You may wish to, or have to, restrict the type of waste you receive for a specified activity – this might, for example, be for safety or legal reasons. The restriction might be based on:

- the quantity of the waste; for example, 16 06 01\*lead batteries – no more than 500 tonnes;
- the description of a particular waste within a code; for example, 16 01 03 – bicycle tyres only;
- hazardous property; for example, no corrosive waste (H8);
- physical form; for example, 06 03 11\* solid salts and solutions containing cyanides – no liquids;
- the nature or attribute of the waste; for example, no odorous wastes;
- excluding specific substances [at specific concentrations]; for example, no chromium (VI) substances [greater than 1000 ppm];
- container type or size; for example, no IBCs.

If there are any restrictions to your activity put them into Table 1b. Send it to us with your application form. You can use Table 1b as a template.

### **Deposit for recovery purposes**

If you are applying for a waste recovery activity involving the permanent deposit on waste on land for construction, reclamation, restoration or improvement of land you must answer this question.

Before applying for a permit to deposit waste on land you should refer to the guidance (see [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency)) to decide whether the proposed activity is likely to be viewed by us as recovery or disposal. Prepare your case and present it to us in a waste recovery plan before you submit your permit application. We will try to advise you whether we think your proposal is recovery or disposal within 14 days of receiving the information. We will contact you if our advice is likely to take significantly longer, and advise you of when a response will be provided.

Submit your waste recovery plan to [psc@environment-agency.gov.uk](mailto:psc@environment-agency.gov.uk) with a covering letter that identifies it as a pre-application. Please provide the following information:

- contact name;
- contact phone number;
- contact email;
- site address; and
- application/pre-application reference numbers (if obtained).

When you are aware of our advice, you will be able to apply for the appropriate permit. We will check your application against any pre-application advice that we gave you. We may refuse the application if we disagree with the application made. You have a statutory right of appeal of this decision to the Planning Inspectorate. It is very much in your interests to agree with us first that your proposal is waste recovery before applying for a recovery permit.

When you apply you must provide us with a copy of your waste recovery plan that complies with the guidance, highlighting any changes made since the pre-application discussions. Please tell us the reference number you have given the document.

For further guidance on deposit for recovery please see our website at [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency).

## 2 Emissions to air, water and land

Fill in Table 2 with details of point source emissions resulting from your operating techniques for each of your waste facilities.

**Emission point reference and location:** Give a unique reference for each emission point and a description of the location, including the site plan reference that shows the emission point.

**Parameter:** For example – ‘Oxides of Nitrogen, expressed as NO<sub>2</sub>’.

**Amount:** Maximum amount justified by the risk assessment.

**Unit:** For example – ‘mg/m<sup>3</sup>’.

Fill in one table for each waste operation.

## Supporting information

### 3 Operating techniques

#### 3a Technical standards

Refer to ‘Waste: environmental permits’ and ‘Risk assessment for your environmental permit’ at [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency) or any activity-specific guidance that applies to your waste activity at <https://www.gov.uk/government/collections/technical-guidance-for-regulated-industry-sectors-environmental-permitting>.

Decide whether or not you can meet the technical standards described.

Complete one table for each of the waste facilities you detailed in Table 1a as follows.

**Relevant technical guidance note:** List the relevant technical note or notes you are planning to use. This will normally be the guidance on the website plus any relevant activity specific notes.

**Document reference:** Where the relevant standard is that set out in the technical guidance note there is no requirement to justify it.

Where there is no technical standard, the technical guidance is not detailed enough, or where you propose an alternative standard you must provide justification for your decision.

You must list the options you have chosen to control emissions from your waste facility. For mobile plant this must apply to the plant itself and not a deployment site.

You should use the terminology from the technical guidance note and make reference to the relevant sections in the technical guidance. This will ensure that we are clear as to the technical standards you are proposing.

Where the technical guidance sets out a single standard, you need do no more than list it to confirm you are adopting that standard.

There will also be cases where you wish to use a standard other than those set out in the technical guidance (or where there is no technical guidance covering your proposed activity). In these cases you must justify that your proposed technical standard is appropriate.

‘Risk assessment for your environmental permit’ (available at [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency)) provides a methodology for comparing different techniques both in terms of comparing impacts and cost and benefits. You should use the options appraisal methodology to justify each of the decisions you have made in selecting technical standards. Where you wish to use an alternative methodology it must address the same issues to an equivalent level of detail.

Your justification may be that your proposals provide the same or better environmental protection as those in the guidance. Where they provide lower protection, but you are hoping to justify them on the basis of lower cost, ‘Risk assessment for your environmental permit’ (available at [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency)) provides a methodology for comparing different techniques both in terms of comparing impacts and cost and benefits. Where you wish to use an alternative methodology it must address the same issues to an equivalent level of detail. Give the document references here and send the documents with the application form when you’ve completed it. The document reference may be to individual sections of the risk assessment. Illustrate the configuration using block diagram(s) to help describe the process.

#### 3b General requirements

Note: Fill in a separate Table 3b for each waste operation.

**Name of waste facility.**

**Emissions management plan (dealing with emissions of substances not controlled by emission limits):** Where the technical guidance note or risk assessment shows that emissions, apart from those to land and water, are a key issue, you must send us your emissions management plan. Give the document references here and send the documents with the application form when you’ve completed it.

**Odour management plan:** Where the technical guidance note or risk assessment shows that odours are a key issue, you must send us your odour management plan. Give the document references here and send the documents with the application form when you’ve completed it. If you think that odour is unlikely to be a problem from your activities, please say so and briefly describe why. Please refer to our odour guidance (H4) that can be found on our website.

**Noise and/or vibration management plan:** Where the technical guidance note, risk or H3 assessment shows that noise or vibration are key issues, you must send us your noise and/or vibration management plan. Give the document references here and send the documents with the application form when you’ve completed it. If you believe that noise is unlikely to be a problem from your activities, please say so and briefly describe why.

### 3c Information for specific sectors

Refer to the additional questions relevant to the type of facility you are applying for, as follows:

Clinical waste: appendix 1

Disposing of and recovering hazardous waste: appendix 2

The recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes: appendix 3

Inert landfill and deposit of waste on land for construction, land reclamation, restoration or improvement: appendix 4.

## General information

### 4 Monitoring

Give us a description of the measures you will put in place to monitor emissions. This should include any environmental monitoring; for example, bio-aerosol monitoring, surface water or groundwater, noise, ambient air monitoring, process and land monitoring. It should also describe the frequency of any monitoring, the measurement methodology you will use and the procedure for evaluating your results. You must provide a permanent means of access to monitoring points.

Reference each emission point detailed in Table 2. You will need to do this for each waste facility.

#### 4b Point source emissions to air only

In order to comply with the technical requirements of methods used to sample point source emissions to air, an appropriate sample location must be provided. For new waste facilities, the sample location and associated facilities must be considered at the design stage (search for 'M1 sampling requirements for stack emission monitoring' at [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency)). Technical Guidance Note (TGN) M1 on sampling requirements for monitoring point source emissions to air, provides guidance on:

- the selection of the sampling position,
- sampling plane and sampling points;
- access, facilities and services required; and
- safety considerations.

### 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](mailto:enquiries@environment-agency.gov.uk)

Website: [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency)

## Appendix 1 – Specific questions for waste facilities that accept clinical waste

Complete questions 1 to 7 if you are applying for an activity or operation in the clinical waste sector.

**1 to 4** You should refer to EPR5.07 'Technical guidance for managing clinical waste' and decide whether you will meet the technical standards described in that guidance.

If you do not meet the standards in EPR5.07 you must tick 'no' and provide the reference and a copy of the justification for your alternative proposals that you feel are equivalent to those standards so that we can check that they represent the Best Available Techniques for your activities.

If your procedures are fully in line with the standards set out in EPR5.07 then you should tick the 'yes' box and provide the procedure reference from EPR 5.07. There is no need for you to supply a copy of the procedure.

We will not give you a permit for a new waste operation if your standards do not meet those in EPR5.07 or reach an equivalent standard.

**5** If you would like to accept a waste type not included in Section 2.1 of EPR5.07 then you need to submit a full justification as part of the application.

**6** If you treat waste at your installation, you need to tell us how you will do that treatment for each of the activities that you want permitted. You should tell us how your treatment follows the principles set out in Section 2 of ERP 5.07 for each waste you want to process.

**7** The layout plans should be clear, legible and, where possible, drawn to scale. If drawn to scale, ensure that the scale is stated on the plan. The plan should be drawn to a scale/size that ensures it can be easily read, preferably on A3 size paper or bigger. You should identify where the site is based by including and labelling local details (topographical features), such as named roads, watercourses and buildings. Site infrastructure should be identified and labelled and, where relevant, additional information provided, including storage capacities, types of waste that can be stored and emission points to air, ground, water and sewer. A key can be used to help identify the infrastructure shown on the plan and a colour code can be used to help distinguish between different areas of the site. The plan should identify the installation boundary of the regulated facility, along with the boundaries of any waste operations that are carried out on the same site.

In addition, process flow diagrams should be provided for each plant shown on the layout plan and for each treatment activity that you are applying for. The diagrams should be clear, legible and easy to follow, using identified symbols and colours in a consistent way to represent the individual plant and processes that are used. The diagrams should be labelled and, where required, provided

with a key. The diagrams should show the inputs (including raw materials, wastes and energy) to each treatment plant, the distinct stages of the treatment processes and their outputs (including emissions and residual wastes). The diagrams must clearly show the flow direction of the treatment process. The diagrams should also include other relevant details, such as bypasses, control loops, recirculation lines and connections with other associated plant, and relevant operational values such as minimum, normal and maximum flow, temperature and pressure, etc.

Plans should be provided with a title and a reference. Write the plan reference in the application form and include a hard copy of the plan with your application. Electronic copies of the plan(s) should also be provided on CD.

## Appendix 2 – Specific questions for waste facilities that accept hazardous waste

Complete questions 1 to 6 if you are applying for an operation in the hazardous waste disposal or recovery sector for the relevant aspects of your waste operation based on Sector Guidance Note 5.06.

**1 to 3** You should refer to Sector Guidance Note 5.06 ‘Recovery and disposal of hazardous and non-hazardous waste’ and decide whether you will meet the technical standards described in that guidance.

If you do not meet the standards in S5.06 you must tick ‘no’ and provide the reference and a copy of the justification for your alternative proposals that you feel are equivalent to those standards so that we can check that they represent the Best Available Techniques for your activities.

If your procedures are fully in line with the standards set out in S5.06 then you should tick the ‘yes’ box and provide the procedure reference from SGN 5.06. There is no need for you to supply a copy of the procedure.

**4** The layout plans should be clear, legible and, where possible, drawn to scale. If drawn to scale, ensure that the scale is stated on the plan. The plan should be drawn to a scale/size that ensures it can be easily read, preferably on A3 size paper or bigger. You should identify where the site is based by including and labelling local details (topographical features), such as named roads, watercourses and buildings. Site infrastructure (including storage tanks, bays, silos, reception areas, sumps, bunds, firewalls, interceptors, penstock valves, wash out areas, buildings/covered areas, areas of kerbing and hardstanding, areas of grass/vegetation/grave etc) should be identified and labelled and, where relevant, additional information provided, including storage capacities, types of waste that can be stored and emission points to air, ground, water and sewer. A key can be used to help identify the infrastructure shown on the plan and a colour code can be used to help distinguish between different areas of the site. The plan should identify the boundary of the regulated facility, along with the boundaries of any waste operations that are carried out on the same site.

Plans should be provided with a title and a reference. Write the plan reference in the application form and include a hard copy of the plan with your application. Electronic copies of the plan(s) should also be provided on CD.

**5** If you treat waste, you need to tell us how you will do that treatment for each of the activities that you want permitted. Section 2.1.4 to Sector Guidance note S5.06 gives general principles for treatment and Sections 2.1.5 to 2.1.15 gives specific principles for certain treatment processes; for example, oil processing, drum washing. You should tell us how your treatment follows these principles for each waste you want to process.

**6** See guidance provided for question 4, regarding the content and presentation of layout plans. Treatment plant(s) should be identified and labelled, along with any associated infrastructure (including pipework), equipment and emission points.

Process flow diagrams should be provided for each plant shown on the layout plan and for each treatment activity that you are applying for. The diagrams should be clear, legible and easy to follow, using identified symbols and colours in a consistent way to represent the individual plant and processes that are used. The diagrams should be labelled and, where required, provided with a key. The diagrams should show the inputs (including raw materials, wastes and energy) to each treatment plant, the distinct stages of the treatment processes and their outputs (including emissions and residual wastes). The diagrams must clearly show the flow direction of the treatment process. The diagrams should also include other relevant details, such as bypasses, control loops, recirculation lines and connections with other associated plant, and relevant operational values such as minimum, normal and maximum flow, temperature and pressure, etc.

Plans and diagrams should be provided with a title and a reference. Write the reference(s) in the application form and include hard copies of the plans and diagrams with your application. Electronic copies of the plans and diagrams should also be provided on CD.

## Appendix 3 – Specific questions for the recovery to land for agricultural benefit of compost like outputs (CLO) from the treatment of mixed municipal solid wastes

You should refer to the technical guidance when providing the required information.

## Appendix 4 – Specific questions for inert waste landfill and deposit for recovery purposes

Complete questions 1 to 7 (and 8 where appropriate) if you are applying for an inert waste landfill operation or a deposit for recovery activity.

**1** Environmental Setting and Site Design (ESSD) report. You must describe your site by developing a conceptual model and appropriate ‘source-pathway-receptor’ risk assessments. This will help you understand the risk your activity poses to water, land or people.

Note that you only need to include the risks relevant to your activity. Your ESSD may identify that questions 3, 4, 5 and 6 of application form B4 do not apply to your site. If this is the case, you may answer ‘no’ to those questions but you should refer to the parts of your ESSD that explain why they do not apply.

**2** Waste Acceptance Procedures (including Waste Acceptance Criteria). You must confirm in waste acceptance procedures how you will confirm that you will only accept waste that is suitable and will not cause pollution. Refer to the guidance on [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency) for further details.

**3 Hydrogeological risk assessment (HRA).** This is necessary where your ESSD shows that your activity may have an impact on groundwater quality. Refer to the guidance on [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency)) for further details.

**4 Outline engineering plan.**

For inert waste landfill you must be able to show that the geology around your site is capable of attenuating any emissions from the waste. If your risk assessment and any site investigation (as per the ESSD) suggests that the natural geology around your site is not able to do this, you must build an ‘artificial geological barrier’ with appropriate mineral materials. This mineral layer must be equivalent to 1m thick with a permeability of  $1 \times 10^{-7}$  m/s.

For deposit for recovery activities, engineering is only necessary where your ESSD shows that you need to protect the environment, particularly groundwater, from your activity (eg with an attenuation layer).

For either of the above, you may need to install other structures, for example monitoring boreholes for groundwater or ground gas.

You only need to provide outline engineering proposals with your permit application. Your permit will require you to submit detailed construction plans and a construction quality assurance (CQA) plan to us before you start the planned work so that we can consider your proposals. Refer to the guidance on [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency) for further details.

**5 Stability risk assessment (SRA).** This is necessary where your ESSD shows that existing slopes or waste slopes may be unstable and present a risk to the environment or people. It may also be necessary where the intended function of your recovery or disposal activity is to stabilise an existing slope. You are more likely to need to provide an SRA if your proposal includes depositing waste in a pile or mound (eg a noise bund) or in a hole in the ground with steep side walls. You must ensure that the waste:

- does not slip outside the permit boundary, or
- into a water course or onto other sensitive land or
- present a threat to human health

**6 Monitoring plan.** This is necessary where your ESSD shows that there may be emissions from your site into the wider environment. For deposit for recovery sites this may include where the waste types you plan to accept are not inert.

Where your ESSD suggests there is a need, you must develop a monitoring plan to consider the following:

- generation of soil gas
- potential for gas to be generated in future
- physical stability of the waste and associated structures
- impact of your activity on surface water and groundwater
- impact of particulates (dust and silt) from your activity
- impacts from your activity on the public highway
- impacts of noise for your activity

Refer to the guidance on [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency)) for further details.

**7** Once you have finished taking waste at your site, you may need to continue to monitor it to make sure that the waste is stable and is unlikely to cause pollution in the future. You may also need to collect monitoring data to support an application to surrender your permit. You must therefore consider whether you need to monitor the site once you have finished tipping. Whether you need to monitor and for how long will depend on the how much and what types of waste you accepted and what the results of your monitoring were like while you were accepting that waste.

For inert waste landfills and deposit of recovery activities, you must carry out a survey to confirm the final levels so that you can calculate how much waste you have disposed of or recovered (by comparing this to your original survey).

For inert waste landfills, you must provide a closure report for us to agree. We must inspect your site to confirm that the site is ‘definitely closed’.

Once the works are complete and where applicable, your monitoring suggests that the waste is physically and chemically stable, you can apply to us to surrender your permit. You can find guidance on how to do this on [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency).

**8 Benefit statement.** If your activity involves the deposit of waste to provide a growing medium and/or nutrients to support plant growth (R10 for land treatment) for agricultural benefit or ecological improvement, but you cannot meet the criteria listed under 8b of the application form, you must prepare a benefit statement in accordance with EPR 8.01 section 6 and include it in your application.

‘R10’ activity means land treatment resulting in benefit to agriculture or ecological improvement. This includes deposit of waste to create a growing medium and subsequent treatment of that medium using waste to improve the physical, chemical or biological properties of the soil.

‘Agricultural benefit’ means providing, maintaining or improving the soils ability to provide a growing medium for the purposes of agriculture. Agricultural land has the meaning given by section 109 of the Agriculture Act 1947 and includes land for the production of timber and non-food agricultural crops.

‘Ecological improvement’ means providing, maintaining or improving the soils ability to provide a growing medium including for growth of vegetation on landscaping and for recreational and amenity uses.

Refer to the guidance on [www.gov.uk/environment-agency](http://www.gov.uk/environment-agency) for further details.