

Guidance notes on part B3 – New bespoke installation permit



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

This guidance will help you complete part B3 of the application form pack.

Where you see the term ‘document reference’ on the form, give the document references and send the documents with the application form when you’ve completed it.

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1 What activities are you applying for?

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

If you are applying for a permit for an intensive farm do not use this form, but complete application form part B3.5 instead.

Fill in a separate table for each installation 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 the reference you have given the document.

Table 1a – Types of activities

An installation with all the proposed activities listed in Schedule 1, Schedule 13 and 14 for Local Authority regulated activities or Schedule 25/25B for Medium Combustion Plant/Specified Generators of the Environmental Permitting Regulations (EPR) and all directly associated activities (in separate rows).

Schedule 1 references: Quote the section number, Part A(1) or A(2) or B, then paragraph and sub paragraph number as shown in Part 2 of Schedule 1 to the regulations.

Description of the activity: Use the description from the relevant Schedule of the regulations. Include any extra detail that you think would help to accurately describe what you want to do.

Annex I (D codes) and Annex II (R codes) and description(s): Fill in for installations that take waste only.

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

Note: Applicable for ALL installations: 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 and energy efficiency in incineration/co-incineration that may affect your proposals.

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

Table 1a 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 in Table 1b.

For each waste you want to receive for a specified activity, you need to provide the 'List of Wastes' code and description [ref: the List of Wastes (England) Regulations 2005]. For waste classification technical guidance see <https://www.gov.uk/government/publications/waste-classification-technical-guidance>.

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 (VII) substances [greater than 1000 ppm]
- the dual coding of a waste, for example non-hazardous soil from construction or demolition contaminated with fragments of asbestos cement sheet (17 05 04/17 06 05*)
- 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 in the application form B3 as a template.

1c Recovery of hazardous waste on land activities

If you are applying for a waste recovery activity involving the permanent deposit of inorganic hazardous waste on land for construction or land reclamation (including landfill restoration) you must answer this question.

If you are applying for a landfill permit that includes a restoration activity using waste, a restoration plan is required. The restoration plan must include information and evidence to support that the activity is recovery rather than disposal of waste.

Before applying for a landfill restoration activity you should refer to the guidance at <https://www.gov.uk/guidance/landfill-operators-environmental-permits/restore-your-landfill-site>. Alternatively, a variation application can be submitted at a later date to add a restoration activity to the permit.

Before applying for a permit to deposit waste on land for recovery you should refer to the guidance (see <https://www.gov.uk/government/publications/deposit-for-recovery-operators-environmental-permits/waste-recovery-plans-and-deposit-for-recovery-permits>) 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.

Please note that there is an additional charge for the assessment of a waste recovery plan that must be submitted as part of this application. For the charge see <https://www.gov.uk/government/publications/environmental-permitting-charges-guidance/environmental-permitting-charges-guidance>.

Submit your waste recovery plan to 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 recovery of inorganic hazardous waste on land please see our website at <https://www.gov.uk/government/publications/deposit-for-recovery-operators-environmental-permits/waste-recovery-plans-and-deposit-for-recovery-permits>.

2 Point source 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 installations.

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 NO₂

Quantity: Maximum amount justified by H1 assessment.

Unit: For example – ‘mg/m³’.

Fill in one table for each installation.

You will also need to complete application form part B6 if your installation includes a point source emission(s) to:

- surface water
- groundwater or
- sewer

For example, the operation of your installation may include a discharge of cooling water.

Completing the part B6 form will provide us with the information we need to complete the determination of your installation permit application. There is no additional application charge.

Supporting information

3 Operating techniques

3a Technical standards

Fill in Table 3a for each activity at the installation you refer to in Table 1a above and list the ‘Best Available Techniques’ you are planning to use. If you use the standards set out in the relevant BAT conclusion(s), BAT reference document(s) (BREF) and/or technical guidance(s) there is no need to justify using them.

For Part A(2) activities refer to <https://www.gov.uk/government/collections/integrated-pollution-prevention-and-control-sector-guidance-notes> and for Part B and Schedule 14 activities see <https://www.gov.uk/government/collections/local-air-pollution-prevention-and-control-lapppc-process-guidance-notes>.

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

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

Installation reference: Use the unique identifier that you used in Table 1a.

Schedule 1 activity, directly associated activity: Fill in the Schedule 1 reference, directly associated activity.

Relevant technical guidance: List the relevant technical guidance note or notes you are planning to use. This will normally be the guidance on our 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 installation. 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’ (see <https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit>) 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’ (see <https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit>) 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.

Site infrastructure 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 plans 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 materials or 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.

Process flow diagrams should be provided for each plant shown on the layout plan and for each 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 plant, the distinct stages of the processes and their outputs (including emissions and residual wastes). The diagrams must clearly show the flow direction of the 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.

Sector specific requirements for the block diagram

Chemicals sector: Where you are carrying out chemical reactions, list the transformations involved.

Combustion sector: Highlight any units which are subject to Chapter III of the Industrial Emissions Directive (IED).

Waste treatment and storage: Where you are carrying out any Schedule 1 Chapter 5 waste activity and directly associated activity, identify the Waste Framework Directive Annex I (D codes) and Annex II (R codes) that apply to each such operation.

3b General requirements

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

Installation reference: Use the unique identifier that you used in Table 1.

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 Types and amounts of raw materials

This only applies to installations, excluding landfills and recovery of waste on land activities where raw materials are not used. Fill in a separate table for each installation detailed in Table 1.

Installation reference: Use the unique identifier that you used in Table 1a.

Schedule 1 activity: Fill in the Schedule 1 reference used in Table 1a.

Total treatment capacity: Fill in the treatment capacity of your activity in tonnes per day.

Material: List all the raw materials you will use.

Maximum amount: Specify the maximum amount of raw materials you intend to have on site at any time.

Annual throughput: Specify the total amount of each raw material that you will use annually.

Description including any hazard code: Describe each raw material and specify the appropriate hazard code. Fill in a separate sheet (one per facility) if your list of raw materials is extensive and give a document reference here.

3d Information for specific sectors

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

Combustion: [appendix 1](#)

Chemicals: [appendix 2](#)

Incinerating waste: [appendix 3](#)

Landfill and recovery of hazardous waste on land: [appendix 4](#)

The guidance on completing these questions is provided in the corresponding sections of this guidance document.

General information

4 Monitoring

4a 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 installation.

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, the sample location must meet the requirements of BS EN 15259. You will be required to demonstrate this once your installation is operational.

For new installations the sample location and associated facilities must be considered at the design stage.

For guidance on sampling requirements for monitoring stack emissions see:

<https://www.gov.uk/government/publications/m1-sampling-requirements-for-stack-emission-monitoring> (TGN M1).

To ensure that facilities used for monitoring will meet BS EN 15259 and to avoid expensive post-construction costs, the sample locations should meet the following conditions:

- They should be positioned in a section of parallel walled, ideally circular, vertical stack, with an upward flow
- They should be **at least** 5 HD from the stack exit. HD is the hydraulic diameter defined as 4 times the sampling plane area (πr^2) divided by the length of the sample plane perimeter
- They should be **at least** 2 HD upstream and 5 HD downstream of any bend or obstruction
- If monitoring in a horizontal duct is unavoidable, the duct should be square or rectangular (unless it is less than or equal to 0.35m in diameter, in which case circular ducts are acceptable)
- MCERTS-accredited monitoring contractors must be able to gain access to all the required sample points, in order to undertake periodic monitoring using their own equipment
- Ports should be a BS 10 flange with a minimum 125 mm internal diameter or, if the duct is less than 0.7 m in diameter, be an appropriately standardised port (e.g. 2" BSP)
- Ports should be located in accordance with section 6 and appendix A of BS EN 15259
- No part of the port should project into the flow of the gas stream. The pipe stub outside the duct should be kept to a minimum
- A space adjacent to the ports should provide sufficient working area, support and clearance for a sample team to work safely with their equipment. This is normally considered to include:
 - a **minimum** area of 5 m²
 - clearance of at least 2 m, or the probe length + 1.5 m, whichever is longer
- If the platform is at height, it needs to have a suitable lifting point fitted to allow equipment to be lifted safely, without the need to lean on handrails. Alternatively, access to the platform can be made via stairs or a lift, if this is suitable and practical for moving equipment
- Access ladders to elevated platforms should have gates or other suitable self-closing facilities at the platform, to prevent falls from height

Always consult BS EN 15259 and TGN M1 before committing to any expenditure. Annex 1 of TGN M1 provides a checklist of sample location requirements. Annex 2 of TGN M1 provides some sample locations.

For some smaller installations, when you are monitoring gas concentrations only, we may be able to accept simpler monitoring arrangements but these need to be agreed by us in writing.

Further information

- BS EN 15259:2007: 'Air quality – measurement of stationary source emissions – requirements for measurement sections and sites and for the objective, plan and report', available at <https://shop.bsigroup.com/>
- Environment Agency Technical Guidance Note M1, available at <https://www.gov.uk/government/publications/m1-sampling-requirements-for-stack-emission-monitoring>

5 Environmental impact assessment

Tell us if your proposals have been the subject of an environmental impact assessment (EIA). If they have, you will need to send us a copy of the environmental statement.

If the procedure has been completed, you will also need to send us:

- a copy of the planning permission
- the committee report and decision on the EIA

6 Resource efficiency and climate change

If the site is a landfill or a recovery of hazardous waste on land activity, you only need to complete this section if the application includes gas engines.

The relationship between the IPPC Directive energy efficiency requirements and the climate change levy (CCL) is dealt with in questions 6b, 6c and 6d. The requirements will be met provided that either:

- the operator meets the basic energy requirements set out in the relevant technical guidance and holds a valid climate change levy agreement (CCLA) or Trading Agreement with the Government
- the operator meets the basic energy requirements and the further, sector specific energy requirements, both of which are set out in the relevant technical guidance

If you are relying on a CCLA, we need proof that you have indeed entered into such an agreement.

In response to question 9d, therefore, please provide as a minimum a copy of the front sheet of the underlying agreement signed by Defra (CCLA certificates will not be issued by Defra in the first instance), together with a list of participating sites. If you want to send us the complete underlying agreement, please do so.

6d Tell us about, and justify your reasons for, the raw and other materials, other substances and water that you will use

6e Describe how you avoid producing waste in line with Council Directive 2008/98/EC on waste

Describe how each installation in your application will avoid waste production in accordance with Council Directive 2008/98/EC on waste. Where you do produce waste you must describe how it is recovered. If it is technically or economically impossible to recover the waste you produce, you must describe how it will be disposed of in a way that avoids or reduces any impact on the environment.

Note: are you applying for a municipal waste-only incinerator?

An incineration plant dedicated to the processing of municipal solid waste can qualify as a recovery operation using the R1 Energy Efficiency formula in Annex II of the Waste Framework Directive 2008/98/EC (WfD).

Operators applying for a new EPR permit can make a R1 application at the time of the permit application provided there is sufficient design information to complete the application form.

There is no fee associated with making an application but, in some cases, it may be necessary for us to instruct an independent expert to review or verify elements of the application. This is only likely to take place in stage 3, when actual plant data is being assessed, and in these instances the costs will be recharged to the applicant.

See for 'Municipal waste incinerators: apply to qualify as a recovery operation' at

<https://www.gov.uk/government/publications/applying-to-qualify-as-a-recovery-operation-municipal-waste-incinerators>

7 Installations that include a combustion plant (excluding waste incinerators)

If the combined net thermal input of all the combustion equipment in your installation is more than 20 MW you may need to carry out a cost-benefit assessment for combined heat and power or district heating. See [appendix 1](#) for more detail.

8 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

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.

Appendix 1 – Specific questions for the combustion sector

Complete questions 1 to 10 if your installation is in the combustion sector.

1. Identify the type of fuel burned in your combustion units, (including when your units are started up, shut down and run as normal). If your units are dual fuelled (that is, use two types of fuel), list both the fuels you use.

Complete a separate table for each installation. Use the unique identifier for your installation that you used in Table 1.

You may need to provide supplementary information where it helps explain your fuel use. Give the document reference here and send the document with the application form when you've completed it.

2. Give the composition range of any fuels you are currently allowed to burn in your combustion plant. Complete a separate fuel use and analysis table for each installation. Use the unique identifier for your installation that you used in Table 1.

3. If NO_x factors are necessary for reporting purposes (that is, if you do not need to monitor emissions), please provide the factors associated with burning the relevant fuels.

Complete a separate table for each installation. Use the unique identifier for your installation that you used in Table 1.

4. Will your combustion plant be subject to Chapter III of the Industrial Emissions Directive? (see Government guidance)

If yes, move on to question 5. If no, complete application form part F, assuming all other relevant parts have been completed.

5. Tick the box to indicate the type of plant.

6. Complete the table if you operate more than one type of plant or multiples of one type on your installation.

Complete a separate table for each installation. Use the unique identifier for your installation that you used in Table 1.

7. If you operate an existing plant, tick the box to indicate whether you have submitted a declaration for the 'limited life derogation' specified in Article 33 of Chapter III of the Industrial Emissions Directive.

If yes, move on to question 8. If no, go to question 9.

8. Tick the box to indicate whether you have subsequently withdrawn your declaration.

9. Complete the table to list all existing Large Combustion Plant which have annual mass allowances under the National Emission Reduction Plan and those with emission limit values under the Industrial Emissions Directive.

Use the unique identifier for your installation that you used in Table 1.

10. Tick the box to indicate whether you meet the monitoring requirements of Chapter III of the Industrial Emissions Directive.

If no, provide details. Give the document reference here and send the document with the application form when you've completed it.

11. Schedule 7A and Schedule 8 of the Environmental Permitting Regulations 2010 (EPR) implement Article 14 of the Energy Efficiency Directive which requires a cost-benefit assessment (CBA) to be carried out for certain combustion installations listed in Part 2 of Schedule 1 of EPR. Go to <https://www.gov.uk/guidance/energy-efficiency-standards-for-industrial-plants-to-get-environmental-permits> to see if this requirement applies to your installation and for guidance on how to carry out the assessment. If Article 14 applies, you should agree with us at the pre-application stage whether or not a CBA is required; please tick the relevant box and provide either your CBA or confirmation from us that a CBA is not required.

12. New combustion power plants and Energy from Waste plants require a CHP-ready assessment if there are potential future heat loads nearby that will not be supplied by the plant from the outset. Go to <https://www.gov.uk/guidance/energy-efficiency-standards-for-industrial-plants-to-get-environmental-permits> for more information and a copy of the assessment template. You should agree with us at the pre-application stage whether or not a CHP-ready assessment is required.

Appendix 2 – Specific questions for the chemical sector

Complete questions 1 to 3 if your installation is in the chemical sector.

1. Please provide a technical description of your activities.

The description should be enough to allow us to understand the following:

- process description
- the main plant and equipment used for each process
- the principle reactions, including significant side reactions i.e. process chemistry
- the material mass flows (including by products and side streams) and the temperatures and pressures in major vessels
- the all emission control systems, both hardware and management systems, for situations with the potential for significant release, as relevant to the minimisation of emissions, in particular the main reactions and their control
- comparison with the indicative BATs and benchmark emission levels standards in the Inorganic Chemicals TGNs, additional guidance EPR 4.01 'The production of large volume organic chemicals', EPR 4.02 'Speciality organic chemicals sector', EPR 4.03 'Inorganic chemicals sector', and the seven chemical sector BREFs

Give the document reference here and send the document with the application form when you've completed it.

1. If you are applying for a multi-purpose plant, tick the box to indicate whether you have a multi-product protocol in place to control the changes.

If yes, provide a copy of your protocol. Give the document reference here and send the document with the application form when you've completed it.

Tick the box to indicate whether Chapter V of the Industrial Emissions Directive applies to your activities.
If yes, answer questions (a) and (b).

- (a) List the activities which are subject to control under SED, in the table. Use the unique identifier for your installation that you used in Table 1.
- (b) Describe how the activities you have listed comply with the requirements of Chapter V of the Industrial Emissions Directive.

Give the document reference here and send the document with the application form when you've completed it.

Appendix 3 – Specific questions for the waste incineration sector

Complete questions 1 to 13 if your installation is in the incineration sector.

Refer to the technical guidance note that applies to the waste incineration sector. Decide whether or not you can meet the technical standards described.

1. Tick the box to indicate whether you operate incineration plant as defined by Chapter IV of the Industrial Emissions Directive.

If no, you do not need to complete any further questions in this appendix. If yes, move on to question 2.

2. Tick the box to indicate whether any of the installations contain more than one incineration line.

If no, go to question 4.

3. Complete the table with the number of incineration lines there are within each installation.

Complete a separate table for each installation. Use the unique identifier for your installation that you used in Table 1.

You must provide the information required in questions 4, 5 and 6 below in separate documents.

The information must, as a minimum, include all the details specified in Technical Guidance Note S5.01, section 2, 'Key Issues', sub heading 'European legislation and your application for an EP Permit'.

4. Describe how the plant is designed, equipped and will be operated to ensure that the requirements of the Industrial Emissions Directive on the incineration of waste are met, taking into account the categories of waste to be incinerated.

5. Describe how the heat generated during the incineration and co-incineration process is recovered as far as practicable, for example, through combined heat and power, the generating of process steam or district heating.

6. Describe how you will minimise the amount and harmfulness of residues and describe how they will be recycled where this is appropriate.

Answer questions 7 to 15 for each incineration line identified in question 3.

7. Tick the box to indicate whether you want to take advantage of the Article 45(1)(f) allowance in the event that the particulates, CO or TOC continuous emission monitors (CEM) fail. Describe the alternative mechanism you employ to demonstrate compliance with the requirements of Annex VI, Part 3(2) (e.g. operation of a duplicate CEM, provision of a portable CEM to insert on failure of the main CEM, etc.).

8. Tick the box to indicate whether you want to substitute periodic HF emission monitoring in place of continuous HF emission monitoring by relying on continuous HCl monitoring as allowed by IED Annex VI, Part 6(2.3). Provide a justification for your decision.

9. Tick the box to indicate whether you want to substitute pre-analysis drying of exhaust gas samples for continuous water vapour monitoring as allowed by IED Annex VI, Part 6 (2.4), first paragraph. Provide a justification for your decision.

10. Tick the box to indicate whether you want to substitute periodic HCl emission monitoring in place of continuous HCl emission monitoring as allowed by IED Annex VI, Part 6 (2.5), first paragraph. Provide a justification for your decision.
11. Tick the box to indicate whether you want to substitute periodic HF emission monitoring in place of continuous HF emission monitoring as allowed by IED Annex VI, Part 6 (2.5), first paragraph. Provide a justification for your decision.
12. Tick the box to indicate whether you want to substitute periodic SO² emission monitoring in place of continuous SO² emission monitoring as allowed by IED Annex VI, Part 6 (2.5), first paragraph. Provide a justification for your decision.
13. Tick the box to indicate whether you want to apply for a derogation of the CO WID ELV to a maximum of 100 mg/m³ as an hourly average, as provided for in IED Annex VI, Part 3 if your plant uses fluidised bed technology. Provide a justification for your decision.
14. Schedule 7A and Schedule 8 of the Environmental Permitting Regulations 2016 (EPR) implement Article 14 of the Energy Efficiency Directive which requires a cost-benefit assessment (CBA) to be carried out for certain combustion installations listed in Part 2 of Schedule 1 of EPR. Go to <https://www.gov.uk/guidance/energy-efficiency-standards-for-industrial-plants-to-get-environmental-permits> to see if this requirement applies to your installation and for guidance on how to carry out the assessment. If Article 14 applies, you should agree with us at the pre-application stage whether or not a CBA is required; please tick the relevant box and provide either your CBA or confirmation from us that a CBA is not required.
15. New combustion power plants and Energy from Waste plants require a CHP-ready assessment if there are potential future heat loads nearby that will not be supplied by the plant from the outset. Go to <https://www.gov.uk/guidance/energy-efficiency-standards-for-industrial-plants-to-get-environmental-permits> more information and a copy of the assessment template. You should agree with us at the pre-application stage whether or not a CHP-ready assessment is required.

Appendix 4 – Specific questions for the landfill sector and recovery of hazardous waste on land activities

Complete questions 1 to 8 if you are applying for a landfill operation or a recovery of hazardous waste on land activity.

Landfill operation

You should refer to our Landfill sector guidance note EPR 5.02 at <https://www.gov.uk/government/publications/landfill-epr-502-and-other-permanent-deposits-of-waste-how-to-surrender-your-environmental-permit> and decide whether you will meet the standards and recommendations laid out in that guidance. If you plan to deviate from these you must submit written justification for your alternative proposals that you feel are equivalent to those in the guidance. We will not give you a permit if your proposals do not meet those in EPR 5.02 or an equivalent level.

After reading EPR 5.02 and completing your risk assessment (see <https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit>) you should submit documentation which shows how you will control emissions and manage your site, including monitoring plans, landfill engineering, development and maintenance of infrastructure, and so on.

As well as any additional risk assessments required by the above risk assessment, the following are key issues for landfill and management plans should be submitted as part of your application:

- Waste Acceptance Procedures
- Odour*
- Pests*
- Landfill Fires
- Closure
- Aftercare Procedures

* for landfills accepting biodegradable waste.

Recovery of hazardous waste on land activities

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 B3 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. 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 <https://www.gov.uk/government/collections/environmental-permitting-landfill-sector-technical-guidance> for further details.

3. Outline engineering plan

Engineering is necessary for recovery of hazardous waste on land activities where your ESSD shows that you need to protect the environment, particularly groundwater, from your activity (e.g. with an attenuation layer).

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/government/organisations/environment-agency for further details.

If waste is to be used to complete the engineering works and you wish for this to be included in your permit as a recovery activity, supporting information must be provided to demonstrate that the waste is being recovered rather than disposed of. Refer to guidance on <https://www.gov.uk/government/collections/environmental-permitting-landfill-sector-technical-guidance>

4. 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 (e.g. 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

5. Landfill gas risk assessment (LFGRA)

This is necessary where your ESSD shows that your activity may result in gas generation. Refer to the guidance on <https://www.gov.uk/government/collections/environmental-permitting-landfill-sector-technical-guidance> for further details.

6. Plan for closing the site and procedures for looking after the site once it has closed

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 recovery of hazardous waste on land 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).

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 <https://www.gov.uk/government/collections/environmental-permitting-landfill-sector-technical-guidance>

7. 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.

8. Monitoring plan

This is necessary where your ESSD shows that there may be emissions from your site into the wider environment, (see <https://www.gov.uk/guidance/landfill-operators-environmental-permits/what-to-include-in-your-environmental-setting-and-site-design-report> for information). For recovery of hazardous waste on land activities 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 <https://www.gov.uk/guidance/landfill-operators-environmental-permits/monitor-and-report-your-performance> for further details.