

**P-IND-IA2**

# **The Environmental Authorisations (Scotland) Regulations 2018 (EASR)**

## **Industrial Permit Activity: Schedule 20 Emissions Activities**



## Contents

How to use this activity form .....	4
Before you apply.....	5
Multiple activities under a single permit .....	5
How to apply .....	6
Section 1 - Location of the installation .....	7
1.1 Location details .....	7
1.2 Nuclear site licence .....	7
1.3 Control of Major Accident Hazards (COMAH).....	8
1.4 Environmental impact assessment .....	8
1.5 Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), Special Protection Area (SPA) and RAMSAR sites .....	9
1.6 Pre-application engagement .....	10
Section 2 - About your proposed activities .....	11
2.1 Non-technical summary.....	11
2.2 Stationary technical unit and directly associated activities .....	11
2.3 Location plan .....	15
2.4 Infrastructure plan .....	16
2.5 Process flow diagram .....	16
2.6 Installation and process description .....	17
Section 3 - Technical description of your process.....	19
3.1 Compliance with Best Available Techniques .....	21
3.2 Environmental management system.....	22
3.3 Air emissions .....	24
3.4 Water emissions .....	27
3.5 Energy use .....	32

3.6	Materials use .....	32
3.7	Waste .....	34
3.8	Odour emissions .....	35
3.9	Noise emissions.....	35
3.10	Emissions and environmental monitoring .....	37
3.11	Installation commissioning .....	37
Section 4 - Site and baseline reports.....		38
4.1	Site report .....	38
4.2	Baseline report .....	38
4.3	Baseline report waiver agreement.....	40
Section 5 - Any other information .....		41
Appendices for additional information.....		42
Appendix 1: Waste management activities.....		43
Section A1-1 - Technical competence .....		43
Section A1-2 - Financial provision.....		46
Appendix 2: Incineration and co-incineration of waste .....		50
Section A2-1 - Design and operation.....		50
Section A2-2 - Request for SEPA to vary an operational condition .....		52
Section A2-3 - Heat recovery .....		53
Section A2-4 - Residues .....		53
Appendix 3: Organic solvent emissions activities .....		54
Section A3-1 - About your proposed solvent activities .....		54
Section A3-2 - Hazard statements .....		56
Section A3-3 - VOC compliance .....		60
Appendix 4: Medium combustion plant .....		62
Section A4-1 - MCP details .....		63

Section A4-2 - Air emissions risk assessment.....	69
Section A4-3 - Aggregation details for new MCP.....	71
Appendix 5: Energy efficiency.....	72
Section A5-1 - Energy efficiency.....	73
Section A5-2 - Cost benefit analysis .....	73

If you would like this document in an accessible format, such as large print, audio recording or braille, please contact SEPA by emailing [equalities@sepa.org.uk](mailto:equalities@sepa.org.uk).

---

## How to use this activity form

Use this form to apply for:

- A **new permit** for an industrial activity under the schedules listed below.
- A **variation of an existing permit** to add a new industrial activity under the schedules listed below.

You can use this form to apply for the following EASR industrial activities:

- Schedule 20: Emissions activities (including schedule 21: large combustion plant, schedule 24: titanium dioxide activities and schedule 25: energy efficiency)
- Schedule 22: Incineration and co-incineration of waste
- Schedule 23: Organic solvent emissions activities (when combined with schedule 20 emissions activities)
- Schedule 26: Other emissions activities (when combined with schedule 20 emissions activities)
- Schedule 27: Operating a medium combustion plant (when combined with schedule 20 emissions activities)

### Additional information required

Please complete Sections 1 to 5 for all applications. If your application includes any of the activities listed below, please also complete the relevant appendices of this form:

- Appendix 1: Waste management activities (activities defined under schedule 20, chapter 5 of EASR)
- Appendix 2: Incineration and co-incineration of waste (activities defined under schedule 20, chapter 5, paragraph 24 and/or schedule 22 of EASR)
- Appendix 3: Organic solvent emissions activities (activities defined under schedule 23 of EASR)
- Appendix 4: Medium combustion plant (activities defined under schedule 27 of EASR)

- Appendix 5: Energy efficiency (activities defined under schedule 25 of EASR)

If you are applying for a medium combustion plant that is standalone and not associated with any other regulated activities, you must use the application form [P-IND-MCP](#).

## Before you apply

- Check your permit to identify the type of authorised activities (e.g. water, waste, industrial activities).
- Use the correct variation form for the type of activity you want to vary. For example, use the waste variation form to vary a waste permit activity, the water variation form to vary a water permit activity, or the appropriate variation form for other activities.
- Read the guidance for the activity you are applying for on the relevant activity specific page on our [website](#).
- Where you see the term 'document reference', enter the document reference(s) for the information you have provided. These must be submitted along with the completed form.
- For applications made with insufficient or inadequate information; we will return these to the applicant with an explanation of what additional information is required and may retain part of the application fee in accordance with our published charging scheme.

## Multiple activities under a single permit

We may authorise multiple activities under a single permit, but only if the activities are connected. Activities may be considered connected if they are:

- located at the same geographical location,
- part of the same project, or
- operationally linked.

If the activities are connected, you may submit a single application for multiple activities under one permit.

If the activities are not connected, you must submit a separate application for each activity.

## How to apply

### Digital application service:

The quickest and easiest way to [apply is via our digital application service](#) on our website.

You will need to upload:

1. Completed activity form(s)
2. Any required supporting information

### Email/Post application:

If you cannot apply using our digital application service, you can complete and submit an application via email or by post.

- For **a new permit**, your application must include:
  1. A completed APP-GEN1 form
  2. Completed activity form(s)
  3. Any required supporting information
- For **a variation of a permit to add a new activity**, your application must include:
  1. A completed APP-GEN1 form
  2. Completed variation form(s)
  3. Completed activity form(s)
  4. Any required supporting information

Email and postal addresses for submitting your application are included in the APP-GEN1 form.

You can download [APP-GEN1, activity forms and variation forms](#) from our website.

## Section 1 - Location of the installation

### 1.1 Location details

Please provide the following information about the location of the installation.

**Table 1: Location details**

Question	Answer
<b>Installation name</b>	MiAlgae Grangemouth Facility
<b>Address</b>	To be confirmed – applying.
<b>Postcode</b>	FK3 8XG
<b>National Grid Reference (NGR)</b> (At least 2 letters followed by 8 digits, e.g. AB 1234 6789. You can use our <a href="#">SEPA NGR Tool</a> to find your NGR.)	NS 9199 8155

### 1.2 Nuclear site licence

Is the installation on a location for which a nuclear site licence is required under Section 1 of the Nuclear Installations Act 1965?

Yes

No

### 1.3 Control of Major Accident Hazards (COMAH)

Is the installation on, or near, a location which requires notification under Control of Major Accident Hazards (COMAH) Regulations 2015?

Yes

No

If 'Yes', please provide any relevant information obtained or conclusion arrived at in relation to a safety report within the meaning of part 3 of the COMAH regulations.

#### Document reference

Site is within proximity to CalaChem Ltd and HWCoates Ltd.

### 1.4 Environmental impact assessment

Have you been required to carry out an environmental impact assessment for the proposed authorised place under the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017?

Yes

No

If 'Yes', please provide any relevant information obtained through production of this report.

#### Document reference

## 1.5 Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), Special Protection Area (SPA) and RAMSAR sites

Use the [NatureScot website map](#) to check if your activity is located within or could impact an SSSI, SAC, SPA or a RAMSAR site, based on the screening distance in the screening distance table found on our [Air emissions risk assessment webpage](#).

If your activity falls within the screening distance or could affect any of these sites, please provide details in the table below.

**Table 2: Designated sites details**

Site name	Designation (e.g. SSSI, SAC, SPA)	Distance from the proposed authorised place (km)
Firth of Forth	SPA, SSSI, Ramsar	1km

## 1.6 Pre-application engagement

Pre-application public consultation is required for some industrial activities. You should check the relevant [industrial activity webpages](#) to see if your activity requires pre-application engagement.

SEPA may also require consultation with members of the public likely to be affected by a proposed activity. This depends on the nature or location of the activity, and when experience has shown that engaging with the local community is beneficial to the application process. If you think your activity may require pre-application engagement, please contact our permitting team to discuss.

Before submitting your application for these activities, you must engage with the local community and relevant stakeholders to find out the views of those likely to be affected by the proposed activity and to gather relevant information about the potential impacts of the proposed activity.

Provide evidence of the engagement carried out and share the feedback received.

### Document reference(s)

Consultation with [REDACTED] has been ongoing since mid/late 2025. All documents produced have been reviewed ahead of time by him, with monitoring plans and commissioning plans outstanding. These have been agreed to be submitted to SEPA alongside this active application, as there is still some information to be compiled and submitted on these areas.

## Section 2 - About your proposed activities

### 2.1 Non-technical summary

Please provide a non-technical summary of your application, including:

- A brief overview of the proposed activities.
- A description of the processes that will be carried on.
- The measures you will implement to control the main environmental emissions from the proposed authorised place.

This summary will be published on our website as part of the public consultation process. Ensure it is written in simple and plain language so that all members of the public can clearly understand the details of your application.

#### Document reference

5. Non-Technical Summary

### 2.2 Stationary technical unit and directly associated activities

Before applying for an industrial emissions activity permit, it is important that you are clear what parts of your activity constitute the regulated parts, namely the:

- Stationary technical unit (STU)
- Directly associated activities (DAA)

Together, the STU and DAAs form the installation, which is authorised by the permit.

### 2.2.1 Stationary technical unit (STU)

Please provide the following details in Table 3 for the STU:

#### EASR activities

Use the [activity webpages](#) to identify the activities you wish to apply for and enter the industrial activity description in Table 3. Please note that this could include industrial activities in other EASR schedules.

#### EASR reference

For each activity, provide the EASR schedule, chapter number, paragraph and sub-paragraph number. This information is available on the [activity webpages](#).

#### Authorised person

Name of the authorised person in control of each activity. If multiple persons are in control, each may need their own permit.

#### Activity capacity

Refer to [SEPA capacity and threshold guidance](#) and specify the activity capacity or throughput for each activity in the table below. For example, for combustion activities provide the 'aggregated net thermal input'; for waste disposal activities provide the 'tonnes per day'.

**Table 3: Activities in the STU**

EASR activities	EASR reference	Authorised person	Activity capacity
Example: Combustion of fuels in installations with a total rated thermal input of 50 MW or more.	schedule 20, chapter 1, paragraph 1	AN Other	52 MW net thermal input
Manufacture of Organic Chemicals, Document Pack 10. STU 1-12	Sch 20, Ch1, 4.1(a), para 16.	██████████	1t product output per year

EASR activities	EASR reference	Authorised person	Activity capacity

**2.2.2 Directly associated activities**

Please complete Table 4 by identifying any DAAs proposed to be carried on at the same installation which:

- have a technical connection with the schedule 20 activities, and
- could have an effect on emissions and pollution.

**Table 4: Directly associated activities**

Directly associated activity	Authorised person
Document Pack 10. STU + DAA. DAA 1-62	[REDACTED]

## 2.3 Location plan

Please provide a location plan showing the area where the activity will take place.

The site boundary and installation boundary may not necessarily be the same.

For an installation where there are multiple persons in control, each operational area must be clearly marked in a different colour.

The location plan must:

1. Clearly outline and identify the boundary of the area where the activity will be carried on. Once authorised, this area will be known as the authorised place.
2. Limit the boundary of the proposed authorised place strictly to the extent of the activities.
3. Be based on an Ordnance Survey (OS) map.
4. Be clear and easy to read on an A4 page, avoiding unnecessary details.
5. Include a defined scale, the date it was created, a north direction indicator, and context such as roads and building.

### Document reference

Document Pack 8. Site Location Plan.

## 2.4 Infrastructure plan

Please provide an infrastructure plan that clearly shows the layout of the proposed authorised place. The plan should include key features such as:

- Plant and equipment (including abatement)
- Storage areas (e.g. silos, bunded areas, tanks)
- Permeable and impermeable areas
- Buildings and enclosed areas
- Site drainage
- Emission and monitoring points

If the installation is large or complex, it may be difficult to include all the information on a single plan. In this case, please provide separate plans for different aspects of the proposed authorised place, such as underground infrastructure, air emission points, water emission points and process flow.

### Document reference

Document Pack 7. Site Infrastructure.

## 2.5 Process flow diagram

Provide a detailed process flow diagram to show the interconnections between STU and DAA, and all emission points to the environment.

Depending on the nature of the process, you may also need to include a piping and instrumentation diagram (P&ID).

### Document reference

Document Pack 10. STU + DAA – flow chart related to STU + DAA within this pack.

## 2.6 Installation and process description

Provide a detailed written description of the installation and the processes to be carried on, making reference to all activities listed as part of the STU and DAA and the process flow diagrams provided above.

### Document reference

Document Pack 5. Non-Technical Summary



---

## Section 3 - Technical description of your process

To issue an industrial activities permit, SEPA must be confident that you will operate the installation in compliance with the permit conditions.

This includes using Best Available Techniques (BAT), which are a combination of methods, equipment, training, and practices designed to prevent or, where prevention is not possible, reduce emissions from the installation.

BAT guidance is available from several sources:

- The relevant BAT Reference (BRef) documents for your sector on the European IPPC Bureau website and UK BAT (once developed). If available, you must comply with associated BAT conclusions (BAT-C) and the emission limits associated with BAT (BAT-AELs) for your sector.
- Horizontal/cross-sector BRef notes (e.g. Energy Efficiency and Emissions from Storage) on the European IPPC Bureau website.
- [Process Guidance notes](#) for your sector, especially if a schedule 26 'other emissions activity' is part of the installation.
- [Industrial activities practical guide for EASR schedules 20 and 26 activities](#) which provides an overview of industrial activities requirements.
- [Industrial activities webpages](#) which cover topics like site reports, monitoring, noise, odour, best available techniques, and sector-specific guidance.
- If your installation involves waste management activities, visit our [waste activity webpages](#) for guidance.
- If your installation involves discharges to water, BAT-AELs are in the relevant BAT-C and BRefs, with additional information, including water quality standards, on our [water activity webpages](#).
- [CIRIA](#) Construction Standards, particularly for bunding and sustainable urban drainage systems (SuDs).

Before completing this section, you need to identify which BRefs and if relevant, BAT-C apply to your proposed installation. Depending on your activities, you may need to refer to more than one document e.g. a food, drink and milk production installation may also have a large combustion plant.

If your activity does not relate directly to a specific sector BRef, you can refer to related sector BRefs, cross-sector BRefs, or other BAT guidance. Emission limit values (ELVs) will be determined with reference to the BAT-AEL performance standard where they exist, or by considering the requirements of schedules 20-27 of EASR.

SEPA will assess your application based on how it compares to any relevant BRef, BAT-C, BAT-AEL, and other BAT guidance. Please ensure that your submission covers all the points in the relevant BAT guidance. You should explain the main options you considered and why you think the techniques you have chosen are BAT for your installation. In some cases, you might need to provide a detailed analysis of your options, including a cost-benefit analysis.

Any ELVs included in your permit will be based on BAT-AELs where available. In some circumstances it may be necessary to impose stricter emission limit values based on the assessment of environmental impact.

If you are not sure, please contact our permitting team to clarify which BAT guidance applies.

### 3.1 Compliance with Best Available Techniques

Please provide a systematic assessment of your activity to demonstrate that your installation will be designed, operated and maintained in accordance with BAT. You should confirm that the emissions from your installation will comply with the BAT-AELs and explain how you will demonstrate this.

This should include:

- A list all relevant BAT-C, BRef, or other technical guidance.
- A statement of whether your installation can meet the requirements of each BAT-C, BRef, or technical guidance.
- A summary of how you plan to meet standards outlined in the relevant BAT-C, BRef, or technical guidance.
- A reference to where you've provided further evidence showing how you comply with each relevant BAT-C or standard.

Sections 3.2 to 3.11 provide more details on the evidence SEPA will require.

#### Document reference

Document Pack 1. BAT Documentation.

## 3.2 Environmental management system

### 3.2.1 Proposed management system

Please describe the environmental management system you intend to implement to manage, monitor and control your environmental issues and maintain efficiency. Please indicate whether you intend to certify the management system, e.g. ISO 14001, BS 8555 (Phases 1–5), EMAS Global. Where you are already certified please provide a copy of the accreditation.

#### Document reference

ISO 14001 currently accredited. Copy of this within Document Pack 3. Environmental Management Systems.

### 3.2.2 Decommissioning plan

Please provide a decommissioning plan detailing how your installation would be closed to avoid any pollution risk and restore the environment of the installation to a satisfactory state (including relevant measures for the design and construction of the installation).

#### Document reference

Within Document Pack 4. Management Plans. Decommissioning Plan.

### 3.2.3 Accident, prevention and mitigation plan

Please provide an accident prevention and mitigation plan which must identify, assess, prevent and where that is not possible, minimise the environmental risks and hazards of accidents and their consequences and the actions to be taken if they occur (e.g. fire and spillages).

#### Document reference

Within Document Pack 4. Management Plans. Accident Management Plan.

### 3.2.4 Other management plans

Please provide all other relevant management plans required by the relevant BAT guidance for your installation, e.g. startup/shut down, dust, solvents.

Odour and noise management plans are requested in Sections 3.8 and 3.9 of this form.

#### Document reference

Within Document Pack 4. Management Plans.

Dust & Emissions Monitoring Plan.

Energy Efficiency Plan.

Noise and Vibration Management Plan.

Odour Management Plan.

Raw Materials Management Plan.

Waste Management Plan.

### 3.3 Air emissions

In assessing BAT for your air emissions, you must take account of any relevant BAT-C, relevant air quality standards, BAT-AELs and where relevant the ELVs in schedules 20-27 of EASR.

#### 3.3.1 Air emissions inventory

Please provide an air emissions inventory describing all emissions to air from your installation including the location, source, stack height, composition, quantities released and their fate and behaviour in the environment. Some of this information should be available within your environmental management system.

##### Document reference

Within Document Pack 2. Emissions. MiAlgae Emissions Inventory.

#### 3.3.2 Risk assessment

Please provide an appropriate risk assessment which screens emissions in accordance with our guidance on [air emission risk assessments](#). This assessment should demonstrate that your installation will not cause significant harm to the environment, human health, or designated sites.

As a minimum, the assessment must demonstrate that your installation will meet the BAT-AEL performance standards (where stated), and, where relevant, the ELVs specified in:

- Large combustion plant: schedule 21, chapter 3 of EASR;
- Incineration and co-incineration of waste: schedule 22, chapter 2 of EASR; and
- Medium combustion plant: schedule 27, chapter 3 of EASR.

Where required, you must submit detailed air modelling to support your application.

##### Document reference

Document within Pack 2. Emissions. MiAlgae Emissions Inventory.  
Modelling carried out via consultant and documentation attached.



### 3.3.3 Technologies and techniques assessment to prevent or reduce emissions to air

Please describe the main alternatives to the proposed technology, techniques and measures. Include an evaluation of the different options you considered for preventing or, where that is not practicable, reducing and rendering harmless emissions to air from your installation.

#### Document reference

Document within Pack 2. Emissions and BAT.

### 3.4 Water emissions

In assessing BAT for your water emissions, you must take account of BAT-C and environmental quality standards (EQS) and any relevant EASR general binding rules (GBRs). In addition, if you are proposing to use SuDS you should also reference the relevant [CIRIA](#) guidance.

#### 3.4.1 Water emissions inventory

Please provide a water emissions inventory describing all emissions to the water environment (this includes groundwater and surface water) from your installation identifying the location, source, composition, quantities released and their fate and behaviour in the environment.

##### Document reference

Document within Pack 2. Emissions. MiAlgae Emissions Inventory.

Document within Pack 2. Emissions and BAT.

#### 3.4.2 Priority hazardous substances and priority substances

Please provide details of all priority hazardous substances and priority substances in the Water Framework Directive to be used at the installation.

##### Document reference

None applicable within development.

#### 3.4.3 Indirect discharges, including emissions to the sewer network

Wastewater emissions can be either direct or indirect:

- Direct emissions occur when wastewater is released directly to the receiving environment.

- Indirect emissions occur when wastewater is discharged to another treatment facility. Discharges to a sewage treatment works are always considered indirect from the installation.

Please provide the following:

1. Evidence that the pollutant concentration in your indirect discharge will be reduced at the downstream treatment facility by an appropriate percentage, ensuring that the final discharge to the waterbody is within the relevant BAT-AEL range:
  - If the BAT-C for your activity specify BAT-AELs for indirect emissions, demonstrate that the emissions from the installation will be within the relevant BAT-AEL range(s).
  - If the BAT-C for your activity does not specify BAT-AELs for indirect emissions, use the published BAT-AELs for direct emissions (as outlined in the UK cross cutting interpretational guidance) and demonstrate that an equivalent level will be met at the final discharge to the waterbody.
2. Confirmation that you have a trade effluent agreement or agreement in principle from the service provider.

#### Document reference

Document within Pack 2. Emissions.

Drainage of site location is directly linked with ETP within local area. Focussed waste streams (weak stream, foul wastes) will be directed to this location via drainage locations within site.

Waste not able to be treated by these ETP systems are stored at scale and transported to external locations for treatment off site. No waste streams are unaccounted for.

#### 3.4.4 Risk assessment

Please provide a risk assessment (such as H1, WAT-G-069, discharge impact modelling).

This assessment should demonstrate that your installation will not cause significant harm to the environment, human health, or designated sites by ensuring EQS's are complied with. As a minimum, the assessment must demonstrate that your installation will meet the BAT-AEL performance standards (where stated), and the ELVs for the incineration and co-incineration of waste specified in schedule 22, chapter 5 of EASR (where relevant).

Where required, you must submit detailed water modelling to support your application.

**Document reference**

Document within Pack 2. Emission. MiAlgae Emissions Inventory. No modelling required.

### 3.4.5 Technologies and techniques assessment to prevent or reduce emissions to water

Please describe the selected option and main alternatives to the proposed technology, techniques and measures. Include an evaluation of the different options you have considered for preventing or, where that is not practicable, reducing and rendering harmless emissions to water from your installation.

#### Document reference

Document within Pack 2. Emissions. MiAlgae Emissions Inventory.

Document within Pack 9. Site Report and Land Condition.

Selected options to prevent or reduce emissions to water are covered within this document along with Site Report and Land Condition documentation.

### 3.4.6 Water abstraction

Do you intend to abstract water?

Yes

No

If you intend to abstract water from surface water, groundwater, coastal or transitional water you also need to complete and submit the relevant water activity form. Activity forms are available on the relevant activity specific page on our [website](#).

#### Document reference

NO ABSTRATCTION OF WATER REQUIRED.

### 3.5 Energy use

Please provide the following details about the energy use for the proposed activity:

1. A breakdown of the proposed energy consumption and generation by source and end-use.
2. A description of the main alternatives to the proposed technology, techniques and measures considered to ensure the installation is operated in the most energy efficient way possible and evidence these comply with any relevant BAT-AELs.
3. If you are, or will be, subject to a Climate Change Levy Agreement please confirm the date of entry and written confirmation of the terms of that agreement.

#### Document reference

Document within Pack 4. Management Plans, Energy Efficiency Plan + Energy Use in Plant Location.

### 3.6 Materials use

Please provide the following details about materials use for the proposed activity:

1. A materials inventory which includes all raw and auxiliary materials, water and other substances used and/or are generated by the activities at your installation.
2. Identify all raw material storage locations and quantities. Confirm that the storage methods do not pose a risk to the environment and that all relevant mitigation measures will be implemented, e.g. bunding, alarms, procedures, separation and segregation.
3. Provide evidence that systems are in place to monitor and track raw material consumption to ensure efficient use.
4. For incineration and co-incineration of hazardous waste please provide:
  - The minimum and maximum mass flows of any hazardous wastes;
  - Their lowest and maximum calorific values; and
  - Their maximum contents of polychlorinated biphenyls, pentachlorophenol, chlorine, fluorine, sulphur, heavy metals and other polluting substances.

**Document reference**

1 & 2 ) Document within Pack 4. Management Plans. Raw Materials Management Plan and Waste Management Plan packs.

MiAlgae are currently onboarding a Enterprise Resource Planning (ERP) system to support and manage/track resources within the development, to ensure efficient use.

### 3.7 Waste

Please provide the following details about the waste received and/or generated by the proposed activity:

1. A waste inventory describing all wastes received and/or generated by the installation including the details of the source, composition, quantities, list of waste code and waste acceptance criteria (where relevant).
2. Identify all waste storage locations and the maximum quantity that can be stored at each location. Confirm that the storage methods do not pose a risk to the environment and that all relevant mitigation measures will be implemented, e.g. bunding, alarms, procedures, separation and segregation.
3. Demonstrate how the installation will manage waste sustainably and in line with the waste hierarchy, focusing on prevention, re-use, recycling, and recovery of the waste produced.
4. A description of the proposed techniques and measures to prevent and reduce the quantity and harmfulness of waste arising and emissions of substances and heat (including during periods of start-up or shut-down, momentary stoppage, leak or malfunction).
5. Confirm that any waste which cannot be prevented, reduced or recycled will be disposed of appropriately.
6. For incineration and co-incineration of hazardous waste please provide:
  - The minimum and maximum mass flows of any hazardous wastes;
  - Their lowest and maximum calorific values; and
  - Their maximum contents of polychlorinated biphenyls, pentachlorophenol, chlorine, fluorine, sulphur, heavy metals and other polluting substances.

#### Document reference

Document within Pack 4. Management Plans, Waste Management Plan, Waste Inventory. Waste Management Planning Map, Hazardous Substances Table.

### 3.8 Odour emissions

Please provide the following information on odour emissions from the proposed activity:

1. A detailed odour assessment which identifies and characterises the main sources of odour from your installation, and odour sensitive receptors.
2. Where odour is identified as a potential issue, provide evidence that the technology and techniques you propose will ensure offensive odours are not emitted beyond the boundary of the installation. Please refer to our [Odour Guidance](#) for more details on managing and controlling odour emissions.
3. An odour management plan (OMP). An [OMP template](#) is available with our Odour Guidance.
4. If there is evidence of potential harm, especially near sensitive receptors, detailed modelling may be required.

#### Document reference

Document within Pack 4. Management Plans, Odour Management Plan.

### 3.9 Noise emissions

Please provide the following information on noise emissions from the proposed activity:

1. A plan which clearly identifies the main sources of noise and vibration from your installation (including infrequent and tonal sources) and the nearest noise sensitive locations.
2. A detailed environmental noise assessment (BS 4142) and the proposed techniques and measures for control of noise. Please demonstrate how these proposals constitute BAT and justify your proposals against any relevant BAT-C or guidance.
3. If the proposed installation has potential to have a noise impact on nearby noise sensitive receptors, please provide a noise management plan.

#### Document reference

Document within Pack 4. Management Plans, Noise and Vibration Management Plan.



### 3.10 Emissions and environmental monitoring

Please provide the following information in relation to emissions, operational parameters (for emissions control) and environmental monitoring of the proposed activity:

1. A description of the proposed monitoring locations, parameters, frequency and methods. Monitoring must meet or exceed the requirements of any relevant BAT guidance or as specified in EASR and comply with latest CEN standards (or where no CEN standard is available the default method for that substance)
2. Confirmation that all sampling and monitoring locations are designed and comply with the most up to date published standards (e.g. BS EN 15259).
3. Provide details of any monitoring equipment to be used, for example, periodic monitoring equipment, autosamplers, duty and standby continuous emissions monitoring (CEMs).  
You must:
  - confirm that these are calibrated to the relevant standards (e.g. CEN standards); and
  - detail the method of recording, processing or presenting any continuous emissions monitoring data.

#### Document reference

Future document will be within Document Pack 4. Management Plans.

### 3.11 Installation commissioning

Please provide the following information in relation to commissioning of the proposed installation:

1. A commissioning plan that details how you will commission your installation and sets out the steps to be taken before operations begin.
2. Details on the performance validation tests required to demonstrate that the installation will operate without harming the environment or human health. This should include how you will meet the relevant BAT emission limits in the shortest possible time.

#### Document reference

Commissioning Document to follow, as agreed with SEPA consultant [REDACTED]  
Being created currently, to be submitted alongside this application.

## Section 4 - Site and baseline reports

Before completing this section, please review [SEPA's site and baseline report guidance](#).

### 4.1 Site report

Please provide a site report describing the condition of the installation.

The site report should include:

- The substances to be used, produced, stored or released at the installation.
- The condition of the installation and infrastructure to prevent emissions to soil and groundwater (or proposed standard of containment).
- The current state of soil and groundwater, considering the sites historical land use and the substances to be used on the installation.

#### Document reference

Document within Document Pack 9. Site Report and Land Condition Report, MiAlgae SCBR

### 4.2 Baseline report

A baseline report is required if there is a risk of contamination to soil and groundwater from the Relevant Hazardous Substances (RHS) that will be used, produced, stored, or released by the installation. The baseline report should provide a quantified statement of the current condition of the soil and groundwater, focusing on the RHS and any other substances that may pose a risk of pollution.

If you are using RHS at the installation, you will be required to carry out periodic monitoring of the soil and groundwater throughout the life of the permit. SEPA will use information from the site and baseline report and the application to determine the monitoring requirements.

Where required, please provide a baseline report.

#### Document reference

Baseline report included.

Document within Document Pack 9. Site Report and Land Condition Report, MiAlgae SCBR

**Document reference**

--

### 4.3 Baseline report waiver agreement

If you have not provided a baseline report, have SEPA agreed a waiver to the requirement to produce a baseline report?

Yes

No

If 'Yes', please provide a copy of the waiver agreement.

#### Document reference

## Section 5 - Any other information

If there is any other information you wish to submit in support of your application, please provide details in a separate document.

### Document reference

This application will contain documentation which is confidential to MiAlgae, and contains in some areas Intellectual Property details. As such, all information within the document pack "Public" are for public facing documents, those with "Confidential" are for SEPA viewing only.

## Appendices for additional information

To help us fully assess your application, additional information is required under EASR for the activities listed below. Please complete the relevant appendix for your activity, if applicable:

- **Appendix 1: Waste management activities**  
For activities defined under schedule 20, chapter 5 of EASR.
- **Appendix 2: Incineration and co-incineration of waste**  
For activities defined under schedule 20, chapter 5, paragraph 24 and schedule 22 of EASR.
- **Appendix 3: Organic solvent emissions activities**  
For activities defined under schedule 23 of EASR.
- **Appendix 4: Medium combustion plant**  
For activities defined under schedule 27 of EASR.
- **Appendix 5: Energy efficiency**  
For activities defined under schedule 25 of EASR.

Note: More than one appendix may apply to your activity.

## Appendix 1: Waste management activities

Complete this appendix if your application involves waste management activities as defined under schedule 20, chapter 5 of EASR.

When determining an application to grant a permit we must be satisfied that the applicant is a fit and proper person to be in control of the regulated activity.

Please read our guidance on [Who can hold an authorisation](#) to understand our criteria for assessing if you are a fit and proper person to hold or continue to hold an authorisation.

### Section A1-1 - Technical competence

The regulated activities must be carried on by someone who is technically competent.

Before completing this section, please review our guidance on [Provision and assessment of technically competent management at waste management facility](#).

Please select the relevant box to indicate how you will demonstrate that the proposed authorised place will have technically competent management.

<b>Formal qualification</b> (e.g. WAMITAB Certificate, vocational certificates SVQ and NVQ) Proceed to Section A1-1.1	<input type="checkbox"/>
<b>Competency Management Scheme (CMS)</b> Proceed to Section A1-1.2	<input type="checkbox"/>

**A1-1.1 Formal qualification**

Please provide details of the person(s) providing technically competent management of the regulated activities, along with copies of the relevant certificates. Add more entries, if required.

**Table A1-1(a): Technically competent person 1 details**

Question	Answer
<b>Name</b>	
<b>Date of birth</b>	
<b>Position</b>	
<b>Business name and address</b>	
<b>Certification scheme name</b>	
<b>Level of qualification obtained</b>	
<b>Copy of certificate (Document reference)</b>	

**Table A1-1(b): Technically competent person 2 details**

Question	Answer
<b>Name</b>	
<b>Date of birth</b>	
<b>Position</b>	
<b>Business name and address</b>	
<b>Certification scheme name</b>	
<b>Level of qualification obtained</b>	
<b>Copy of certificate (Document reference)</b>	

If the proposed technically competent person(s) also provides technically competent management at other authorised places, please provide a separate document explaining how they will manage all authorised places effectively and meet the attendance requirements.

Additionally, complete Table A1-2 below with the necessary details.

Document reference

**Table A1-2: Management of other authorised places**

Technically competent person name	SEPA Authorisation reference	Authorised place name and address

### A1-1.2 Competency Management Scheme (CMS)

We recognise the Competency Management Scheme (CMS) as evidence of technical competence. If you are using a CMS, it is not necessary to identify an individual technically competent person to manage regulated activities. However, a responsible person must be appointed to ensure that the CMS is established, implemented and maintained.

**Table A1-3: Competency Management Scheme (CMS) details**

Question	Answer
<b>CMS provider</b>	
<b>Responsible person</b>	
<b>Position</b>	
<b>Business name and address</b>	
<b>Certification Body name</b>	
<b>Proof of certification</b> (Document reference)	

### Section A1-2 - Financial provision

Financial provision must be sufficient to meet all obligations of the authorised person and adequately cover the costs of closure and environmental liability risks.

The amount of financial provision required is normally based on the maximum quantity of wastes that you can keep or treat at the proposed authorised place at any one time, and the haulage costs associated with their removal.

For details on how we assess financial provision, please review our guidance on [Financial provision for Non-Landfill Waste Management Activities](#).

### A1-2.1 Other SEPA authorisations subject to financial provision

Please note that we will assess the applicant's financial suitability considering the financial provision cumulative value for all the authorisations held by the applicant.

If the applicant already holds other SEPA authorisations subject to financial provision, please provide details below.

**Table A1-4: SEPA authorisations subject to financial provision**

SEPA authorisation reference	Authorised place name and address

### A1-2.2 Expenditure plan

Please provide a plan of the estimated expenditure for each phase of the specified waste management activities.

The plan should include the likely costs of:

- Monitoring and maintenance.
- Clearing the installation (including drainage systems) of all wastes.
- Remedial action in the event of the failure of pollution control systems.

**Document reference**

--

### A1-2.3 Financial provision evidence

Please select how you intend to demonstrate adequate financial provision and provide copies of the relevant documents.

**Credit reference check**

Carried out by SEPA during application determination.

**A bank statement that:**

- lists all transactions (deposits, charges, withdrawals) for the account;
- is addressed to the applicant from a financial institution;
- covers at least 3 months (continuous) and is no more than 3 months old.

**A letter from a financial institution, that:**

- demonstrates that the applicant has sufficient overdraft or loan facilities;
- is addressed to the applicant from a financial institution; and
- is no more than 3 months old.

**Company accounts, that:**

- show all money received and expended by the company;
- record the assets and liabilities of the company;
- cover at least 1 financial year; and
- are for the previous financial year.

**Provision of alternative evidence**

(e.g. a guarantee from a parent company, bank or other third party, bonds or ring-fenced funds)

If you plan to use a parent company guarantee, please specify the type of guarantee and provide a copy of the parent company's audited trading accounts for the last three years, or for the period they have been trading if less than three years.

Please provide copies of the relevant documents in a separate document.

**Document reference**

--

## Appendix 2: Incineration and co-incineration of waste

Complete this appendix if your installation carries out incineration or co-incineration of waste under schedule 20, chapter 5, and/or schedule 22 of EASR.

Waste incineration or waste co-incineration plants are regulated under EASR which includes the controls required under the European Waste Incineration Directive (WID) and must be permitted.

In addition to Best Available Techniques, Waste incineration or waste co-incineration plants must consider the requirements of [SEPA Thermal Treatment of Waste Guidelines \(as amended\)](#) when describing the proposed activity and its environmental effects, particularly with regard to satisfying the requirements of Regulation 9F of the Waste (Scotland) Regulations 2011, which demands that the recovery of energy takes place with a high level of energy efficiency.

Further guidance on the requirements of [energy from waste](#) is included on the SEPA website.

### Section A2-1 - Design and operation

#### A2-1.1 Plant design

Unless covered elsewhere in this application form, please demonstrate that the plant is designed, equipped and will be maintained and operated in a manner that meets the requirements of schedule 22 of EASR, considering the type of waste to be incinerated or co-incinerated.

#### Document reference

### A2-1.2 Emissions

Please provide the following information for waste co-incineration plants:

1. Details of the conventional fuels to be used in the co-incineration process.
2. The process and circumstances for using these fuels.
3. Predicted or measured emissions from the use of these fuels.

#### Document reference

### A2-1.3 Computational fluid dynamic modelling

Please provide the following information for waste incineration or waste co-incineration plants:

1. The temperature and residence time that apply for the relevant waste type, along with details of the methods used to verify and measure temperature, residence time and oxygen content.
2. A computational fluid dynamic modelling report demonstrating that the secondary combustion gas can be raised to the relevant temperature for two seconds at a range of operating rates, including the most unfavourable operating conditions.

#### Document reference

### A2-1.4 Abnormal operating conditions

In the case of abnormal operating conditions show how dust emissions will be controlled to remain below 150 mg/m<sup>3</sup> as a half hourly average.

#### Document reference

---

## Section A2-2 - Request for SEPA to vary an operational condition

### A2-2.1 Specify a level of incineration or temperature different to those in EASR

If you are requesting that SEPA specify a different temperature or residence time from those stated in EASR, provide justification for the proposal:

1. For waste incineration plants include an assessment of its effects on the quality and quantity of residues produced.
2. For waste co-incineration plants demonstrate that you can comply with the limits in chapter 3 of part 3 of schedule 22 of EASR for of total organic carbon (TOC) and carbon monoxide (CO) into air.

Document reference

### A2-2.2 Specify a level of NOx

If you are requesting a time-limited derogation from NOx limits, you must provide a BAT justification for these higher limits.

Document reference

### Section A2-3 - Heat recovery

Please demonstrate that the heat generated during the waste incineration and/or waste co-incineration process is recovered with a high level of efficiency through the generation of heat, steam or power.

This should be provided in the form of a heat and power plan, which must, at a minimum, contain the information specified in Annex 2 of the [SEPA Thermal Treatment of Waste Guidelines \(as amended\)](#).

The plan must also provide a BAT assessment taking into consideration the BAT associated energy efficiency levels (BAT-AEELs) outlined in the 2019 Waste Incineration BAT Conclusions. If you cannot achieve the BAT-AEEL then you will need to explain why you cannot achieve the BAT-AEEL and describe what, if any, alternative techniques you will use to achieve, or partially achieve, the environmental objective.

#### Document reference

### Section A2-4 - Residues

Demonstrate that the requirements of the BAT-C have been met in relation to the TOC content and loss on ignition of slag and bottom ashes.

#### Document reference

## Appendix 3: Organic solvent emissions activities

Complete this appendix if your application involves organic solvent emissions activities, as defined under schedule 23 of EASR.

Information and guidance on [organic solvent emissions activities](#) is available on our website.

### Section A3-1 - About your proposed solvent activities

#### A3-1.1 Solvent emissions activities (SEAs)

Please list all organic solvent emissions activities (SEAs) and calculate the annual solvent consumption for each activity.

**Table A3-1: SEA details**

Solvent emissions activities (SEAs)	Annual solvent consumption (tonnes/year)

**A3-1.2 Directly associated activities (DAAs)**

Please list any directly associated activities (DAAs) you plan to carry out at the proposed authorised place that:

- are technically connected to the proposed organic solvent emissions activities, and
- could have an effect on the organic solvent emissions from the activities into the environment (e.g. change, increase, or decrease the Volatile Organic Carbon (VOC) emissions).

If the DAA involves the use of solvents, please calculate the annual solvent consumption.

**Table A3-2: DAA details**

Directly associated activities (DAAs)	Annual solvent consumption (tonnes/year) (if applicable)

**A3-1.3 Total annual solvent consumption (SEAs and DAAs)**

Please provide below the total annual solvent consumption (in tonnes/year) combining both SEAs and DAAs.

<b>Total annual solvent consumption (SEAs and DAAs)</b>

---

## Section A3-2 - Hazard statements

If you use designated hazardous materials, especially volatile organic compounds (VOCs) and halogenated VOCs (listed below), you must either:

- replace them, or
- control, contain, and limit their use.

Where these substances are in use, you must comply with the relevant emission limits.

The hazard statements for VOCs include:

- H340 - May cause genetic defect
- H350 - May cause cancer
- H350i - May cause cancer by inhalation
- H360D - May damage the unborn child
- H360F - May damage fertility

The hazard statements for halogenated VOCs include:

- H341 - Suspected of causing genetic defects
- H351 - Suspected of causing cancer

If you do not use any substances labelled with the above hazard statements, please proceed to Section A3-3 VOC compliance routes.

**A3-2.1 Substances and preparations**

Please provide the details in Table A3-3 for each substance or preparation used, or planned for use, that has the hazard statements listed above:

**Table A3-3: Substances and preparations details**

Substance or preparation name	Hazard statement	Annual substance consumption (tonnes/year)

Please provide the Material Safety Data Sheet (MSDS) separately for each substance or preparation listed in the table above and include the corresponding MSDS document reference below.

**Table A3-4: Material Safety Data Sheet (MSDS)**

Substance/preparation name	MSDS Document reference

**A3-2.2 Substances and preparations substitution assessment**

Please assess whether any substances or preparations listed in Table A3-3 can be replaced with a safer alternative and provide details below. You do not need to assess substances or preparations with hazard statements H341 or H351.

**Table A3-5: Proposed substitutions for substances or preparations details**

Substance or preparation name	Hazard statement	Proposed substitution date	Substitute substance or preparation name

Please provide the Material Safety Data Sheet (MSDS) separately for each proposed substitute substance or preparation and include the corresponding MSDS document reference below.

**Table A3-6: Material Safety Data Sheet (MSDS)**

Substitute substance/preparation name	MSDS Document reference

### A3-2.3 Justification for not replacing substances or preparations

If you do not plan to implement a substitution program, please provide a detailed explanation of why any substance or preparation listed in Table A3-3 cannot be replaced. Consider factors like human health, environmental impact, suitability, and the costs and benefits of alternatives.

#### Document reference

### A3-2.4 VOCs discharge and emission compliance

Please identify where volatile organic compounds (VOCs) are discharged from the proposed activities and meet the following criteria:

1. Assigned or required to carry hazard statements H340, H350, H350i, H360D, or H360F.
2. The mass emission of these compounds is greater than, or equal to, 10 g/h.

If any VOCs are identified, please also explain how you will ensure that the emissions at the waste gas discharge point meet the 2 mg/m<sup>3</sup> emission limit specified in EASR.

#### Document reference

### A3-2.5 Halogenated VOCs discharge and emission compliance

Please identify where halogenated VOCs are discharged from the proposed activities and meet the following criteria:

1. Assigned the hazard statements H341 and/or H351.
2. The mass emission of these compounds is greater than or equal to 100 g/h.

If any halogenated VOCs are identified, please also explain how you will ensure that the emissions at the waste gas discharge point meet the 20 mg/m<sup>3</sup> emission limit specified in EASR.

#### Document reference

## Section A3-3 - VOC compliance

### A3-3.1 VOC compliance route

For each organic solvent emissions activity, you must demonstrate compliance with EASR by selecting one of three VOC compliance routes and submitting a solvent management plan.

Please note that not all compliance routes are available for each activity. To find out which routes apply to your specific activity, please consult the relevant [Process Guidance notes \(PG notes\)](#) for your activity.

Please indicate the VOC compliance route you intend to use by selecting the appropriate box below and then complete the relevant sections.

1. **Meet an Emission Limit Value (ELV) for VOCs in waste gases and a fugitive ELV.**

(complete Section A3-3.2)

2. **Meet a total Emission Limit Value (ELV) for VOCs.**

(e.g. solvent emissions per unit product)

(complete Section A3-3.2)

3. **Implement a solvent reduction scheme to reduce VOC emissions.**

(complete Section A3-3.3)

### A3-3.2 Demonstrating compliance with emission limits

Please provide information on how the emission limit values (ELVs) of EASR will be met for:

1. VOCs mentioned above.
2. Halogenated VOCs that are assigned or need to carry the hazard statements H341 and H351, and that will be used at the proposed authorised place.

#### Document reference

### A3-3.3 Solvent reduction scheme

Please provide details of any solvent reduction scheme for the proposed activity.

This should include:

- An overview of the proposed scheme.
- How you plan to achieve compliance with the scheme.
- Relevant timelines for implementation.

#### Document reference

## Appendix 4: Medium combustion plant

Complete this appendix if you intend to operate MCP(s), as defined under schedule 27 of EASR (such as a boiler, engine, or turbine) with a net rated thermal input equal to or greater than 1 megawatt (MW) and less than 50 MW, in addition to other emission activities.

The information in this appendix will be used to assess your application and establish appropriate emissions limits for your MCP.

### Excluded activities

Some activities do not need an MCP authorisation.

EASR lists a number of excluded activities, including but not limited to:

- Combustion plant used to propel a vehicle, ship or aircraft
- Turbines and engines used on offshore platforms
- Some driers
- Thermal oxidisers

For the full list of excluded activities, please check the [activity webpage](#).

---

## Section A4-1 - MCP details

### A4-1.1 MCP specifications

Please provide the details requested in Table A4-1 for each MCP.

Each MCP must have a unique plant number (Plant No.) and be listed separately. If you need to include additional plants, please use a separate sheet.

When completing Table A4-1 please use the following descriptions of plant and fuel:

#### Type of plant\*:

- Diesel engine
- Gas turbine
- Dual fuel engine
- Other engine
- Other medium combustion plant

#### Type of fuel\*\*:

- Solid biomass
- Other solid fuels (e.g. coal, waste-derived fuel; please specify the type)
- Gas oil
- Liquid fuel other than gas oil (e.g. biodiesel; please specify the type)
- Natural gas
- Gaseous fuels other than natural gas (e.g. biogas, propane; please specify the type)

**Table A4-1: Medium combustion plant(s) details**

Plant no. (1,2,3, etc.)	Manufacturer (make, model and serial number)	Type of Plant*	Start date of operation	Expected annual operating hours	Average load in use	Rated thermal input (MW)	Type of fuel**	Thermal input of each fuel if mixed (MW)

**A4-1.2 Total rated thermal input (RTI)**

Please provide the total rated thermal input for all MCP equal to or greater than 1 MW and less than 50 MW at the proposed authorised place.

**Document reference****A4-1.3 Reduced or restricted RTI**

If you are applying for plant(s) with restricted or reduced RTI please provide your calculations or proposed restriction method.

Refer to [SEPA capacity and threshold guidance](#) for more information.

**Document reference****A4-1.4 Existing plant**

If your existing plant was put into operation on or before 20 December 2018, please provide evidence below. Use the plant number from Table A4-1 to identify which plant you are referring to.

**Document reference**

#### A4-1.5 Secondary abatement

If applicable, please provide details of secondary abatement equipment fitted for each MCP. Describe the equipment, systems, or treatments that will be used to control, prevent, or minimise the likely air emissions from the MCP. Explain why these are the best options. Use the plant number from Table A4-1 to identify which plant you are referring to.

##### Document reference

#### A4-1.6 Other processes

If applicable, please provide details of any other processes or activities that will be carried on at the proposed authorised place and are associated with or support the operation of the MCP. For example, waste handling, energy recovery, onsite fuel processing, backup fuel, chemical or fuel storage.

##### Document reference

## A4-1.7 Emission limit values (ELV) exemptions

### A4-1.7.1 ELV exemptions

Some MCP may be exempt from complying with emission limit values (ELVs).

EASR lists a number of exemptions, including but not limited to:

- MCP operating under a certain number of hours
- MCP using biomass as its main fuel
- MCP serving a public district heating network

For the full list of exemptions, please check the [activity webpage](#).

If your MCP is exempt from complying with ELVs, please provide details.

#### Document reference

### A4-1.7.2 Plant operating less than 500 hours per year

You may request an exemption from compliance with the ELVs for:

- Existing plant (put into operation on or before 20 December 2018) that will not be operated for more than 500 hours per year (calculated as a rolling average over a period of 5 years).
- New plant (put into operation after 20 December 2018) that will not be operated for more than 500 hours per year (calculated as a rolling average over a period of 3 years).

If you would like to request an exemption from compliance with the ELVs and you are declaring that your plant(s) will operate for 500 hours or less per year, please provide the corresponding plant number(s) from Table A4-1 below.

#### Plant number(s)

Note: You are declaring that your plant(s) will operate for 500 hours or less per year.

#### A4-1.8 Standard Industry Classification (SIC)

The SIC system categorises businesses by industry sector in the UK. Your SIC code helps us understand the primary nature of your business. You can find the right SIC code using online search tools, such as the one available on Companies House website.

SIC code

## Section A4-2 - Air emissions risk assessment

### A4-2.1 Habitats impact and human health assessment

In Section 3.3 of this form, you should have already provided an air emissions inventory and demonstrated that your emissions to air will not cause significant harm to the environment, human health, or designated sites in accordance with our guidance on [air emission risk assessments](#).

Please provide the document references for these assessments.

Document reference

### A4-2.2 Stack height

To assess your application in accordance with The Conservation (Natural Habitats, &c.) Regulations 1994 (the Habitats Regulations), please complete Table A4-2 with the required details for each stack.

When completing the table, please assume the following:

- SO<sub>2</sub> emissions are 0 (zero) for natural gas, gas oil, biomass, and hydrotreated vegetable oil.
- For both SO<sub>2</sub> and NO<sub>x</sub> emission rates, provide the values in one of the following units: tonnes/year, kg/day, or grams/sec.

**Table A4-2: Stack(s) details**

Plant no. (as per Table A4-1)	National Grid Reference (NGR)	Inner diameter (m)	Gas temperature (°C)	Gas velocity (m/sec)	SO <sub>2</sub> emission rate (tonnes/year, kg/day, grams/sec)	NO <sub>x</sub> emission rate (tonnes/year, kg/day, grams/sec)	Stack height above ground (m)	Stack height above roof ridge (m)

### Section A4-3 - Aggregation details for new MCP

If you are applying to authorise two or more new MCPs, they may be combined and considered as a single plant if the waste gases are discharged through a common discharge point, such as a stack. This approach can help improve the dispersion of emissions.

Do you intend to discharge waste gases through a common stack?

Yes

No

- If 'Yes', please submit a map showing the location of each MCP and all discharge points (e.g. stacks).

**Document reference**

- If 'No', please provide technical and economic justification explaining why discharging through a common stack is not feasible.

**Document reference**

---

## Appendix 5: Energy efficiency

Complete this appendix if the requirements of schedule 25 apply to your activity.

You **do not** need to complete this appendix if:

- the activity is excluded by paragraph 3 of schedule 25,
- the activity began before 30 October 2014, or
- the plant or installation was substantially refurbished before 30 October 2014.

Schedule 25 applies to the activities listed below where:

- they generate electricity and have a rated thermal input exceeding 20 MW; or
- when one or more of these activities is operated at the same place and have a total rated thermal input exceeding 20 MW.

The activities are:

- Operating a large combustion plant.
- Waste incineration or waste co-incineration at a waste incineration plant or waste co-incineration plant.
- Operating a medium combustion plant.
- Burning any fuel in combustion plants which generate electricity on the same site with an aggregated rated thermal input of 1 MW or more as described in paragraph 1 of chapter 1 of part 3 of schedule 26 of EASR.

Schedule 25 also applies to industrial emissions activities or other emissions activities with a rated thermal input exceeding 20 MW, which:

- generate waste heat at a useful temperature level, or
- form part of a new or existing district heating or cooling network.

The appropriate energy efficiency application fee should be incorporated into your total application fee. Please see our charging scheme for further information.

Before completing the form, please contact our permitting team for our most recent guidance on energy efficiency cost benefit analysis which will explain the methodology to be applied.

**Section A5-1 - Energy efficiency**

Does schedule 25 apply to your installation?

Yes

No

If 'Yes', please provide full information in a separate document.

If 'No', please specify which exemption criteria apply.

**Document reference**

**Section A5-2 - Cost benefit analysis**

**A5-2.1 Cost benefit analysis**

Has a comprehensive national assessment and any associated cost benefit analysis demonstrated that a site-specific cost benefit is unlikely to be positive?

Yes

No

If 'Yes', please provide details.

If 'No', please supply a completed comprehensive cost benefit analysis in accordance with schedule 25, part 2 of EASR.

**Document reference**

**A5-2.2 Opportunities for cogeneration or district heating**

Please supply results of your own search for opportunities for high efficiency cogeneration or district heating.

**Document reference****A5-2.3 Potential heat loads**

Please supply any evidence of discussions with operators of potential heat loads which could be supplied.

**Document reference****A5-2.4 Heat availability or requirements at the installation**

Please supply any technical detail on the amount and type of heat available from/required by the installation.

**Document reference****A5-2.5 Heat availability or requirements at potential heat loads or sources**

Please supply any technical details on the amount and type of heat required by or available from potential heat loads or sources.

**Document reference**

**A5-2.6 High-efficiency co-generation calculations**

Please supply high-efficiency co-generation calculations.

**Document reference**

--

**A5-2.7 Plan to implement the scheme**

If the cost benefit analysis shows a positive result (i.e. the financial benefits are greater than the costs), provide a plan to implement the scheme, with justification and any supporting information. Include a discussion on any sensitivity analysis used.

**Document reference**

--