

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Energyst Limited
Rockingham South
Smoke Lane
Smoke Lane Industrial Estate
Avonmouth
Bristol
BS11 0YA

Permit number

EPR/QP3332QS

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Introductory note

This introductory note does not form a part of the permit

This permit will allow the operator to operate one Tranche B Specified Generator aggregated to <50MWth at a specified location.

The details of the units and associated limits and monitoring requirements are specified in Tables S1.1 and S3.1.

The generators were commissioned in August 2018 and are therefore classified as existing Medium Combustion Plant under the Environmental Permitting (England and Wales) (Amendment) Regulations 2018.

This permit allows Enersyst Limited to operate ten gas fired spark ignition engines for the purpose of generating electricity for 2,000 hours per annum to be supplied to the National Grid at Rockingham South in Avonmouth. Each generator has a capacity of 4.7MWth input, with the aggregated capacity being 47.1MWth input. Each generator has its own independent stack with a height of 5.5m.

The site is located in an industrial setting with the nearest human health receptor located in Avonmouth 2.1km to the south, followed by Lawrence Weston 2.5km to the south-east and the village of Catbrain 4.7km to the east. The Severn Estuary passes the site from the north to the west and is 0.7km at its closest point. The River Severn is designated as a Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar, Site of Special Scientific Interest (SSSI) and Local Wildlife Site. Lawrence Western Moor Local Nature Reserve and Local Wildlife Site is 2.2km away and the following Local Wildlife Sites are between 0.3km and 2.2km away; Barracks Lane Rhine Complex, Lawrence Weston Bowl, Long Cross Tip, Kings Weston Lane Rhine, Lawrence Western Road Rhines, Fields Along M5 Hallen, St Andrews Road Rhine, Avonmouth Sewage Works and Hoar Gout, Salt Rhine and Moorhouse Rhine, Moorhouse Farm and Stuppill Rhines and Hallen Marsh Junction.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

| Status log of the permit | | |
|-----------------------------------|-------------------------|--|
| Description | Date | Comments |
| Application EPR/QP3332QS/A001 | Duly made 04/12/2018 | Bespoke application for Specified Generator. |
| Permit determined EPR/QP3332QS | 02/01/2019 | Permit issued to Enersyst Limited. |

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/QP3332QS

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Energyst Limited (“the operator”),

whose registered office is

**Hirwaun House
Hirwaun Industrial Estate
Hirwaun
Aberdare
CF44 9UL**

company registration number 08894952

to operate one or more Medium Combustion Plant and/or Specified Generators at

**Rockingham South
Smoke Lane
Smoke Lane Industrial Estate
Avonmouth
Bristol
BS11 0YA**

to the extent authorised by and subject to the conditions of this permit.

| Name | Date |
|------------------------|-------------------|
| David Griffiths | 02/01/2019 |

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, so far as is reasonably practicable, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

2.2 The site

- 2.2.1 The activities shall only be carried out at the address in this permit where the plant is located.

2.3 Operating techniques

- 2.3.1 The activities shall be operated using the techniques and in the manner described in table S1.2.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to air except from the sources and emission points listed in schedule 3 table S3.1.
- 3.1.2 The limits given in schedule 2 shall not be exceeded.

3.2 Monitoring

- 3.2.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in table S3.1.
- 3.2.2 Monitoring shall not take place during periods of start up or shut down.

- 3.2.3 The operator shall maintain records of all monitoring including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, test and surveys and any assessment or evaluation made on the basis of such data.

4 Information

4.1 Records

- 4.1.1 All records required to be made by this permit shall:
- (a) be legible;
 - (b) be made as soon as reasonably practicable;
 - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
 - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made.
- 4.1.2 The operator shall maintain convenient access, in either electronic or hard copy, to the records, plans and management system required to be maintained by this permit.
- 4.1.3 The operator shall maintain a record of the type and quantity of fuel used and the total annual hours of operation for each MCP and/or generator.
- 4.1.4 The operator shall maintain a record of any events of non-compliance and the measures taken to ensure compliance is restored in the shortest possible time

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
 - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2; and
 - (c) giving the information from such results as required by the forms specified in those tables.

4.3 Notifications

- 4.3.1 In the event:
- (a) of a breach of any of the permit conditions the operator must immediately—
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
 - (b) of a breach of any of the permit conditions which causes a significant degradation of local air quality, the operator must immediately suspend the operation of the activities or the relevant part of them until compliance with the conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed in writing within 24 hours.

4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (c) any change in the operator's name or address; and
- (d) any steps taken with a view to the dissolution of the operator.

In any other case:

- (e) the death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 5 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

| Table S1.1 activities | | | | |
|---|--|--|-------------|---|
| National Grid Reference and or activity reference/ emission point | Activity listed in the EP Regulations | Description of MCP and/or specified generator | Fuel | Operating hours limit per unit per annum |
| G1 – ST 52685 80416 G2 – ST 52680 80412 G3 – ST 52677 80406 G4 – ST 52673 80400 G5 – ST 52669 80395 G6 – ST 52698 80408 G7 – ST 52694 80402 G8 – ST 52691 80397 G9 – ST 52687 80392 G10 – ST 52683 80386 | S25B – Specified generator | 10 x 4.71MWth engines (total 47.1 MWth) | Natural gas | 2,000 hours |

| Table S1.2 Operating techniques for Specified Generators |
|---|
| <p>(a) Each generator must be operated in accordance with the manufacturer’s instructions and records must be made and retained to demonstrate this.</p> <p>(b) The operator must keep periods of start-up and shut down of the generators as short as possible</p> <p>(c) There must be no persistent emission of ‘dark smoke’ as defined in section 3(1) of the Clean Air Act 1993.</p> <p>(d) Where secondary abatement is required to ensure compliance with the NOx ELV it must be met within 10 minutes from when the generator commences operation or within 20 minutes when the generator was a Tranche A and is now a Tranche B generator.</p> <p>(e) The stack must be vertical and unimpeded by cowls or caps.</p> |

Schedule 2 – Waste types, raw materials and fuels

This schedule is not used

Schedule 3 – Emissions and monitoring

| Table S3.1 Point source emissions to air – emission limits and monitoring requirements (applicable to each generator) | | | | | | |
|---|---|-----------------------|-----------------------------------|----------------------------------|----------------------|---|
| Emission point ref. & location as referenced in table S1.1 | Pollutant | Combustion Technology | Emission limit mg/Nm ³ | Reference period | Monitoring frequency | Monitoring standard or method ^{Note 1} |
| G1, G2, G3, G4, G5, G6, G7, G8, G9 and G10 | Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂) | Gas engine | 190 | Periodic (average over one hour) | Every 3 years | MCERTS BS EN 14792 |
| Note 1: Monitoring requirements are defined at a temperature of 273.15 K, a pressure of 101.3 kPa and after correction for the water vapour content of the waste gases at a standardised O ₂ content of 15% for engines. | | | | | | |

Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

| Table S4.1 Reporting of monitoring data | | | |
|--|---|-------------------------|----------------------|
| Parameter | Emission or monitoring point/reference | Reporting period | Period begins |
| Emissions to air Parameters as required by condition 3.2.1. | G1, G2, G3, G4, G5, G6, G7, G8, G9 and G10 | Every 3 years | 1 January 2019 |

| Table S4.2 Reporting forms | | |
|-----------------------------------|---|---------------------|
| Media/parameter | Reporting format | Date of form |
| Air | Form air 1 or other form as agreed in writing by the Environment Agency | 02/01/2019 |

Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

| | |
|--------------------------------|--|
| Permit Number | |
| Name of operator | |
| Location of Facility | |
| Time and date of the detection | |

| | |
|---|--|
| (a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution | |
| To be notified within 24 hours of detection | |
| Date and time of the event | |
| Reference or description of the location of the event | |
| Description of where any release into the environment took place | |
| Substances(s) potentially released | |
| Best estimate of the quantity or rate of release of substances | |
| Measures taken, or intended to be taken, to stop any emission | |
| Description of the failure or accident. | |

| | |
|---|--|
| (b) Notification requirements for the breach of a limit | |
| To be notified within 24 hours of detection unless otherwise specified below | |
| Emission point reference/ source | |
| Parameter(s) | |
| Limit | |
| Measured value and uncertainty | |
| Date and time of monitoring | |
| Measures taken, or intended to be | |

| | |
|---|--|
| (b) Notification requirements for the breach of a limit | |
| To be notified within 24 hours of detection unless otherwise specified below | |
| taken, to stop the emission | |

| | |
|---|----------------------------|
| Time periods for notification following detection of a breach of a limit | |
| Parameter | Notification period |
| | |
| | |
| | |

| | |
|--|--|
| (c) Notification requirements for the detection of any significant adverse environmental effect | |
| To be notified within 24 hours of detection | |
| Description of where the effect on the environment was detected | |
| Substances(s) detected | |
| Concentrations of substances detected | |
| Date of monitoring/sampling | |

Part B – to be submitted as soon as practicable

| | |
|--|--|
| Any more accurate information on the matters for notification under Part A. | |
| Measures taken, or intended to be taken, to prevent a recurrence of the incident | |
| Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission | |
| The dates of any unauthorised emissions from the facility in the preceding 24 months. | |

| | |
|-----------|--|
| Name* | |
| Post | |
| Signature | |
| Date | |

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“EA TGN M5” means the ‘Environment Agency Technical Guidance Note M5: Monitoring of stack gas emissions from medium combustion plants and specified generators’ guidance published on Gov.UK.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“First put into operation” means that the plant must have been fired with its design fuel up to its full load. This can be, but does not have to be, during commissioning.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“Medium Combustion Plant” or “MCP” means a combustion plant with a rated thermal input equal to or greater than 1 MW but less than 50 MW.

“Medium Combustion Plant Directive” or “MCPD” means Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants.

“Operating hours” means the time, expressed in hours, during which a combustion plant is operating and discharging emissions into the air, excluding start-up and shut-down periods.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“Specified generator” has the meaning given in paragraph 2(1) of Schedule 25B of The EP Regulations.

“year” means calendar year ending 31 December.

END OF PERMIT