Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Viridis 178 Limited

Viridis 178 Gloucester Power Plant
Sudmeadow Road
Gloucester
GL2 5HS

Variation application number

EPR/GP3834DW/V002

Permit number

EPR/GP3834DW

Viridis 178 Gloucester Power Plant
Permit number EPR/GP3834DW

Introductory note

This introductory note does not form a part of the notice

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. Only the variations specified in schedule 1 are subject to a right of appeal.

The changes brought in by this variation are:

The installation consists of 27 gas engines that are designed to operate to provide electricity to the grid under the capacity market. The plant operates for short period to provide electricity during peak demand. Each engines is designed to generate 1.227 MWe. The engines have total thermal input of 80.73 MW.

The main change requested is to increase the turbo boost pressures, allowing more fuel to be burned resulting in increased electrical output of 1.487 MWe for each engine. The total thermal input will be 96.4 MW. The emission concentration (mg/m^3) of NOx and CO will not change but increased combustion will result in an increase emission flow rate and increase emission rates (g/s) of pollutants.

The operator has also amended the stack configurations to provide increase dispersion as follows:

- Increased stack height from 7.2 m to 10 m
- Combined flue stacks to improve dispersion

As well as the changes in the thermal input the following are amended:

- Allow all 27 engines to be operated
- Amend operating hour restriction to 06:00 to 23:00.
- Amend operating hours to 1500 hours as a five year average.

The main features of the permit are now as follows:

The Power Plant will supply electrical power on a short term basis meeting peak demand with the electrical distribution network. It is expected to operate for ~ 1500 hours per year as and when called upon by the National Grid.

The Installation at the Sudmeadow Site, Gloucester has 27 identical spark ignition gas engines installed. Each engine has an electrical generating capacity of 1.487 MW_e. The total thermal input of the 27 engines is 96.4 MW_{th}. The purpose of the facility is to provide generation to the National Grid during period of peak demand.

Mains gas is supplied to the engines via underground HDPE pipes from the local gas distribution system with the resultant electricity being exported via bunded transformers to the main electrical distribution grid.

The engines operate using the principle of lean-burn combustion to offer high rate of efficiency and a primary method of minimising exhaust emissions to air. Each engine has an individual air blast cooler and silencer mounted on the top of the engine's acoustic container. The stacks are grouped into windshields, each with a height of 10 m. Routine spot sample analysis of emissions will be undertaken in line with an agreed emissions monitoring programme.

There are no discharges to water of process effluents from the installation.

Engines will normally be started using electricity imported from the local distribution grid, however, an emergency backup diesel generator is also available onsite.

The schedules specify the changes made to the permit.

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

Status log of the permit		
Description	**Date**	**Comments**
Application EPR/GP3834DW/A001	Duly made 15/07/2016	Application for 81MW thermal input Power Station
Additional information received	27/01/2017	Response to Schedule 5 Notice issued on 24/01/2017.
Permit determined EPR/GP3834DW	20/03/2017	Permit issued to Viridis 178 Limited.
Variation Application (EPR/GP3834DW/V002)	Duly made 12/09/2017	Variation to increase thermal input of engines, increase stack height and amend restrictions on operating times.
Variation issued (EPR/GP3834DW/V002) (PAS Billing ref. CP3637YC)	28/09/17	

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/GP3834DW

Issued to

Viridis 178 Limited ("the operator")

whose registered office is

17 The Courtyard
Gorsey Lane
Coleshill
Birmingham
B46 1JA

company registration number 09464998

to operate an installation at

Viridis 178 Gloucester Power Plant
Sudmeadow Road
Gloucester
GL2 5HS

to the extent set out in the schedules.

The notice shall take effect from 28/09/2017

Name	Date
Philip Lamb	**28/09/2017**

Authorised on behalf of the Environment Agency

Schedule 1

The following conditions were varied as a result of the application made by the operator:

- 2.3.4
- Table S1.1
- Table S1.2
- Table S1.3
- Table S3.1
- Table S3.2
- Site plan in schedule 7

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/GP3834DW

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/GP3834DW/V002 authorising,

Viridis 178 Limited ("the operator"),

whose registered office is

17 The Courtyard
Gorsey Lane
Coleshill
Birmingham
B46 1JA

company registration number 09464998

to operate an installation at

Viridis 178 Gloucester Power Plant
Sudmeadow Road
Gloucester
GL2 5HS

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

Name	Date
Philip Lamb	**28/09/2017**

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, 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.

1.2 Energy efficiency

1.2.1 The operator shall:

(a) take appropriate measures to ensure that energy is used efficiently in the activities;

(b) take appropriate measures to ensure the efficiency of energy generation at the permitted installation is maximised;

(c) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and

(d) take any further appropriate measures identified by a review.

1.2.2 The operator shall review the viability of Combined Heat and Power (CHP) implementation at least every 4 years, or in response to any of the following factors, whichever comes sooner:

(a) new plans for significant developments within 15 km of the installation;

(b) changes to the Local Plan;

(c) changes to the DECC UK CHP Development Map or similar; and

(d) new financial or fiscal incentives for CHP.

The results shall be reported to the Agency within 2 months of each review, including where there has been no change to the original assessment in respect of the above factors.

1.3 Efficient use of raw materials

1.3.1 The operator shall:

(a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;

(b) maintain records of raw materials and water used in the activities;

(c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and

(d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

(a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities;

(b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

(c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

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 not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.

2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan , and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

2.3.4 The activities shall operate for less than 1,500 hours per year per engine as a rolling average over a period of five years and with operation of any one engine in any individual year limited to a maximum of 2,000 hours.

2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:

(a) the nature of the process producing the waste;

(b) the composition of the waste;

(c) the handling requirements of the waste;

(d) the hazardous property associated with the waste, if applicable; and

(e) the waste code of the waste.

2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1.

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;

(b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

3.3.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;

(b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

3.4.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

(b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

3.5.1 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 tables S3.1;

(b) process monitoring specified in table S3.2.

3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continuous), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 unless otherwise agreed in writing by the Environment Agency.

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 keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

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 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

(a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;

(b) the annual production / treatment data set out in schedule 4 table S4.2;

(c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

4.2.3 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 S4.4; and

(c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

4.3.1 In the event:

(a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

(i) inform the Environment Agency,

(ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and

(iii) take the measures necessary to prevent further possible incidents or accidents;

(b) of a breach of any permit condition 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;

(c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.2 Any information provided under condition 4.3 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

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.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

(a) the Environment Agency shall be notified at least 14 days before making the change; and

(b) the notification shall contain a description of the proposed change in operation.

4.3.6 The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 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		
Activity listed in Schedule 1 of the EP Regulations	**Description of specified activity**	**Limits of specified activity**
Section 1.1 A(1) (a)	Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more using 27 spark ignition, gas engines, with a combined thermal input of 96.4 MW.	From receipt of natural gas to discharge of exhaust gases, and the generation of electricity for export to the national Grid. Operation of any engine(s) is not to exceed a total combined operation above 1,500 hours per year as a five year rolling average with a maximum of 2000 hours in a single year. Operation of any engine(s) may only be between the hours of 06:00 and 23:00 solely for the purpose of providing electricity to the National Grid during peak demand periods.
Directly Associated Activity		
	Oil storage	From receipt of raw materials to dispatch for use.
	Surface water drainage	Handling and storage of site drainage until discharge to the site surface water system.
	Standby diesel generator.	To include storage of a suitable amount of diesel fuel.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application EPR/GP3834DW/A001	The response to question 3 of application form B3 as set out in document 'Final Report 16249i1', excluding mention of thermal input of the engines or stack configuration.	15/07/2016
Variation Application EPR/GP3834DW/V002	The response to question 3 of application form C3 as set out in document 'Final Report 17255i1'	Duly made 12/09/2017

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC01	The Operator shall submit a written report to the Environment Agency on the commissioning of the installation. The report shall summarise the environmental performance of the plant as installed against the design parameters set out in the Application. The report shall also include a review of the performance of the facility against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions.	Completed.

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC02	The operator shall submit a written report to the Environment Agency for approval, describing the results of the noise survey carried out at the site and at sensitive receptors following the plant commissioning. The report, which shall include night time and weekend monitoring, shall identify locations, time, frequency and method of monitoring employed during the noise survey. Following the submission of the report, the operator shall submit an amended Noise Management Plan together with proposals and timescales for the implementation of appropriate noise mitigation measures (if required) to ensure that site noise levels are not significantly above background levels. The proposals for noise mitigation shall be in accordance with the Technical Guidance Note IPPC H3 Part 2. The proposals shall be implemented by the operator from the date of approval in writing by the Environment Agency subject to any amendments or additions as notified by the Environment Agency.	Within 3 months of commissioning the plant. Within 6 months of commissioning the plant.
IC03	The Operator shall establish the methane emissions from the engines and compare these to the manufacturer's specification and appropriate benchmark level as agreed in writing with the Environment Agency. Based on the conclusions of this assessment the Operator shall propose an appropriate proposal to assess potential methane slip for the lifespan of the engines and outline an action plan that will be followed in the instance that emissions above the manufacturer's specification or appropriate benchmark level are identified. The result of the assessment and the proposed action plan shall be submitted in writing to the Environment Agency for approval.	Within 12 months of the date on which fuel is first burnt.
IC04	The Operator shall establish emissions of carbon monoxide and formaldehyde from the engines. Using this information, an assessment of the impacts of carbon monoxide emissions and possible impacts of formaldehyde should be undertaken in line with our H1 guidance or equivalent methodology. A review of the emission levels in comparison to the relevant benchmark levels shall also be carried out. A written report detailing the findings of the assessment of the emissions, predicted impacts and the review in comparison to the relevant benchmarks should be submitted to the Environment Agency for approval.	Within 12 months of the date on which fuel is first burnt.

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC05	The operator shall submit a written report to the Environment Agency which will determine whether the use of secondary abatement (e.g. SCR (Selective catalytic reduction), can be considered BAT based on the frequency and duration of engine operation. The report shall also consider whether further improvement of dispersion of emissions to air can be achieved by optimising exhaust stack height or combining a number of engine exhausts into a single stack of optimum height. Should operation of additional engines, above the twenty three permitted by this permit, or any increase in operational hours, be desirable, then a "Variation" to this Permit will be required, in which case such an Application for Variation shall additionally; • Outline the number of annual operational hours, the number of annual operational requests from National Grid, and the length of each run as a maximum anticipated requirement. • Provide detailed environmental and human health impact assessments including detailed air dispersion modelling of all proposed emissions to air. • Provide a cost benefit analysis to determine, based on the hours and duration of operation, whether the investment in secondary abatement is viable. A revised environmental risk assessment, supported by updated air dispersion modelling as appropriate, must be submitted to demonstrate how compliance with the relevant Environmental Standards relating to Air Quality for Human Health, Wildlife and Critical Levels for the protection of Sensitive Receptor Sites and Habitats.	Completed through submission of variation V002

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	**Specification**
-	-

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air from spark ignition engines – emission limits and monitoring requirements.						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)-these limits do not apply during start up or shut down.**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A15, A16, A17, A18, A19, A20, A21, A22, A23, A24, A25, A26 and A27 as shown on site plan in schedule 7	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Individual engine exhaust stacks.	95mg/m^3	Periodic	Annually	BS EN 14792
	Carbon Monoxide		No limit set	Periodic	Annually	BS EN 15058
	Oxygen		No limit set	Periodic	Annually	BS EN 14789
	Water Vapour		No limit set	Periodic	Annually	BS EN 14790
	Sulphur Dioxide		No limit set	Periodic	Annually	By calculation method as agreed in writing with the Environment Agency.

Table S3.2 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A15, A16, A17, A18, A19, A20, A21, A22, A23, A24, A25, A26 and A27, as shown on site plan in schedule 7	Beginning and end of operation periods of individual engines	continuous	Engine performance parameters	Record the time of day and duration of operation of each engine.
	Total operating hours	Continuous	Engine performance parameters	As specified in condition 2.3.4

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 3.5.1	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A15, A16, A17, A18, A19, A20, A21, A22, A23, A24, A25, A26, A27, on site plan in schedule 7	Annually	1 January
Process monitoring requirements as required by condition 3.5.1	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A15, A16, A17, A18, A19, A20, A21, A22, A23, A24, A25, A26, A27, on site plan in schedule 7	Every 6 months	1 January and 1 July

Table S4.2: Annual production/treatment	
Parameter	**Units**
Power generated	MWhr

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	m^3/MWh_e generated
Energy usage	Annually	Total energy used/MWh_e generated
Engine operating hours	Annually	hours
Oil changes	Annually	MWh_e generated between oil changes

Table S4.4 Reporting Forms			
Media/ parameter	**Reporting format**	**Agency recipient**	**Date of form**
Air	Form Air 01 or other form as agreed in writing by the Environment Agency	Area Office	07/02/16
Water usage	Form water usage 01 or other form as agreed in writing by the Environment Agency	Area Office	07/02/16
Energy usage	Form energy 01 or other form as agreed in writing by the Environment Agency	Area Office	07/02/16
Other performance indicators	Form performance 01 or other form as agreed in writing by the Environment Agency	Area Office	07/02/16
Gas engine operating hours	Form operational engine hours or other form as agreed in writing by the Environment Agency	Area Office	07/02/16

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	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Measures taken, or intended to be 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.

"emissions to land" includes emissions to groundwater.

"Energy efficiency" the annual net plant energy efficiency means the value calculated from the operational data collected over the year.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"emissions of substances not controlled by emission limits" means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission or background concentration limit.

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"Industrial Emissions Directive" means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"MCR" means maximum continuous rating.

"MSDL" means minimum shut-down load as defined in Implementing Decision 2012/249/EU.

"MSUL" means minimum start-up load as defined in Implementing Decision 2012/249/EU.

"Natural gas" means naturally occurring methane with no more than 20% by volume of inert or other constituents.

"ncv" means net calorific value.

"operational hours" are whole hours commencing from the first unit ending start up and ending when the last unit commences shut down.

Pests" means Birds, Vermin and Insects.

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

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

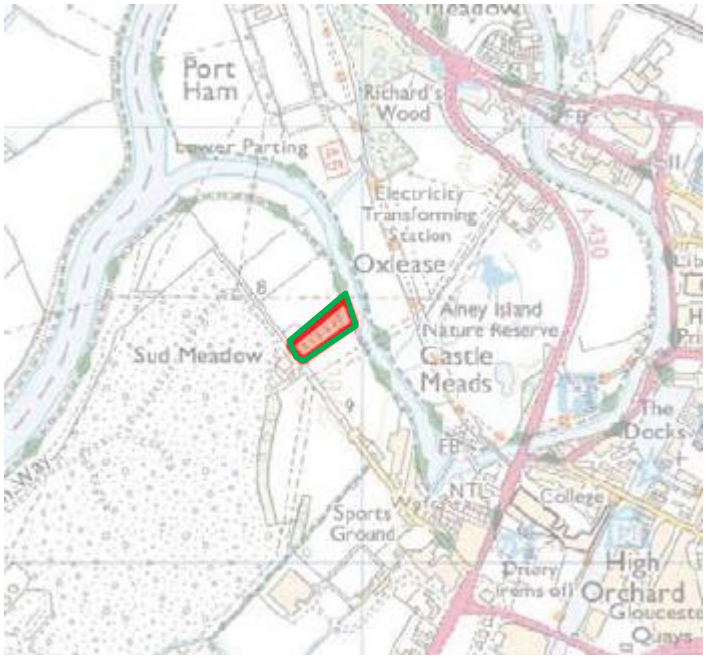
(a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 15% dry for liquid and gaseous fuels, and/or

(b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

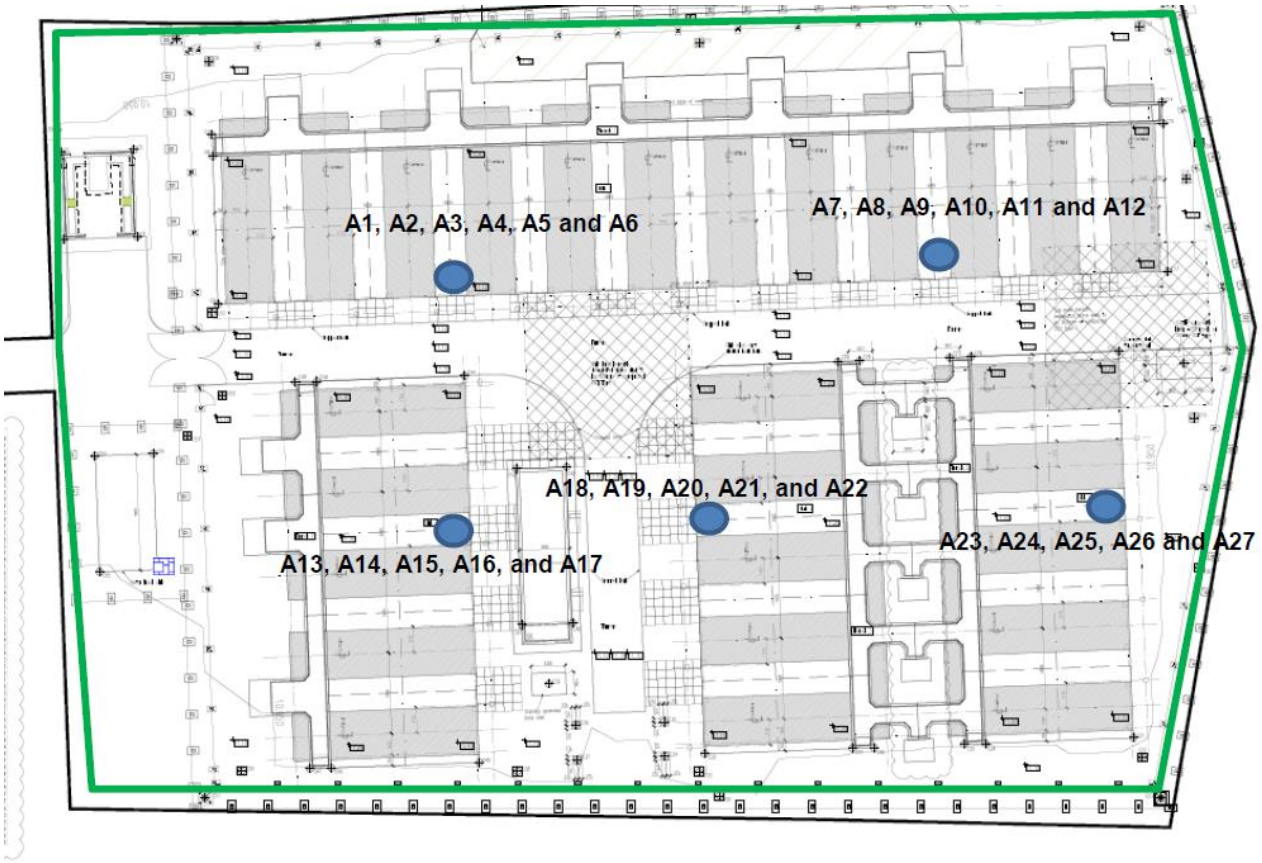
"year" means calendar year ending 31 December.

Schedule 7 – Site plan

Site location plan



Site Plan



END OF PERMIT