Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

UK Power Reserve Limited

Kings Road Power Plant
Kings Road
Immingham
Lincolnshire
DN40 1QT

Permit number

EPR/PP3339YQ

Kings Road Power Plant
Permit number EPR/PP3339YQ

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows:

The facility is located on Kings Road approximately 0.5 km east of Immingham at grid reference TA 19627 14753. The site is bounded to the north and east by Kings Road, and rough grassland to the south and west.

The proposed facility will consist of twelve Cummins natural gas spark ignition engines (or equivalent) with stacks heights of 12.6 metres, an aggregated thermal input of 59.316MW_{th} and an exporting capacity of 24.792MWe. Natural gas will be utilised as the fuel source for the engines. The purpose of the engines is to prevent instability on the electricity grid by rapidly providing additional short term supply to meet peak demand or where there is a shortfall of available supply from other sources.

The proposed installation of 12 engines will ensure the contractual Short Term Operating Reserve (STOR) requirements are met, which include delivery of a minimum of 3MWe of electrical generation within 240 minutes for at least 2 hours with the ability to operate at least 90% of available capacity. It will also allow the Operator to meet the contractual Fast Reserve Programme requirements, which include active power delivery within 2 minutes of the despatch instruction and a delivery rate in excess of 25MWe/minute for a minimum of 15 minutes.

The main pollutants from the facility will be gaseous combustion products (oxides of nitrogen and carbon monoxide). Emissions from the engines will be controlled by manual and automatic engine tuning for optimal combustion conditions. This will be supported by continual performance monitoring and maintenance in accordance with engine specifications.

There will be no process discharges to controlled waters or sewer. Uncontaminated surface water run-off will be directed to an off-site drain after passing through an oil interceptor.

All plant areas are surfaced to the appropriate standards for the activities within those areas. All liquids such as lubricating oil, whose emissions to water or land could cause pollution, will be stored in integrally bunded, steel oil tanks which have a capacity of 5,000 litres each. The bund will have a capacity of 110% of the volume of the liquid being stored. The tanks are designed to meet the requirements of the Control of Pollution (Oil storage) Regulations.

The Humber Estuary (Special Area of Conservation, Special Protection Area, Ramsar and Site of Special Scientific Interest) is located about 1.7 km from the Installation. There are also three non-statutory sites located within 2 km of the Installation. Assessment by the Environment Agency shows that emissions from activities undertaken at the Installation are unlikely to have a significant impact on the habitat sites.

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/PP3339YQ/A001	Duly made 03/01/17	Application for a combustion facility. Application and all supporting documents adopted by UK Power Reserve Limited from previous application EPR/QP3531AC/A001 made by dissolved company UK Power Reserve (Kings Road) Limited.
Additional information	07/01/16	Clarification on spark ignition operation and stack heights.
Additional information	08/01/16	Justification for individual stacks.
Additional information	26/04/16	Operating hours BAT justification.
Additional information	24/06/16	Confirmation of methane slippage control.
Schedule 5 Notice dated 16/08/16	04/10/16	Justification for single stacks (cost benefit analysis).
Additional information	21/10/16	Justification behind efficiency reduction figures for aggregated stacks.
Additional information	17/11/16	Updated site plan.
Additional information	28/11/16	Justification and assessment of changes to air and water emission point locations.
Additional information	30/11/16	Confirmation that engine thermal input figures reduced by 0.4 MW to correct error.
Additional information	08/12/16	Details of oil tank containment infrastruture.
Permit determined EPR/PP3339YQ (Billing reference PP3339YQ)	07/02/17	Permit issued to UK Power Reserve Limited.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/PP3339YQ

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010

UK Power Reserve Limited ("the operator"),

whose registered office is

6th Floor, Radcliffe House
Blenheim Court
Solihull
B91 2AA

company registration number 07385282

to operate an installation at

Kings Road Power Plant
Kings Road
Immingham
Lincolnshire
DN40 1QT

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

Name	Date
Mike Jenkins	**07/02/2017**

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.

1.3 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; and

(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 following activities referenced in schedule 1, table S1.1: AR1 shall operate for less than 1,500 hours per year.

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 and S3.2.

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 and S3.2;

(b) process monitoring specified in table S3.3

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 continual), 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 and S3.2 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, or in the case of the following records until permit surrender:

(i) off-site environmental effects; and

(ii) matters which affect the condition of the land and groundwater.

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; and

(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 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, 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 Reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity**	**Limits of specified activity**
AR1	Section 1.1 A(1) (a)	Burning any fuel in an appliance with a rated thermal input of 50 MW or more via 12 x Cummins 4.943 MW_{th} spark ignition engines with a combined thermal input of 59.316 MW_{th}.	From receipt of fuel (natural gas) from the National Grid, to combustion with release of combustion products and the generation of electricity. Operation of combustion plant for less than 1500 hours per year solely for the purpose of providing electricity to the National Grid during peak demand periods.
Directly Associated Activity			
AR2	Storage of raw materials		From receipt of raw materials to use within the facility, including all associated pipe work, handling and transfer to and from storage tanks.
AR3	Surface water drainage		Handling and storage of site drainage until discharge to the site surface water system.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	All Supporting Information Documents referenced in response to Part B2 and B3 of the Application Form.	19/10/15
Additional information	Clarification on spark ignition engine operation and stack heights.	07/01/16 and 08/01/16
Additional information	Operating hours BAT justification.	26/04/16
Additional information	Confirmation of methane slip control.	24/06/16
Schedule 5 Notice dated 16/08/16	Justification for single stack arrangement and backpressure efficiency figures.	04/10/16 & 21/10/16
Additional information	Engine total thermal input figures reduced by 0.48 MW_{th} to 59.316$MW_{th.}$	30/11/16
Additional information	Oil tank containment infrastructure, details of integrally bunded tank.	08/12/16

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC1	The Operator will provide written notification to the Environment Agency of the date when commissioning of the gas engine units is completed.	1 month after completion of commissioning.
IC2	Following the commissioning of the plant, the Operator shall submit a	Within 3 months of

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	report to the Environment Agency, detailing the outcome of the commissioning programme. The report shall include: • The confirmation of the energy efficiency information provided in the application EPR/QP3531AC/A001 and; • Identification of any changes to the operating techniques provided in the application EPR/QP3531AC/A001.	commissioning
IC3	The Operator shall submit a written report to the Environment Agency to confirm the net rated thermal input of the Installation. The methodology used should be based on a British Standard or other method as agreed with the Environment Agency.	Within 3 months of commissioning.
IC4	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 following the plant commissioning. The report shall include confirmation of locations, time, frequency and method of monitoring employed during the noise survey. Following the submission of the above report, the Operator shall submit 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.	2 months following commissioning. 3 months following commissioning.
IC5	The Operator shall submit a written report to the Environment Agency which will determine whether after 3 years of operation the use of secondary NOx abatement e.g. SCR (Selective catalytic reduction) or SNCR (Selective Non Catalytic Reduction) can be considered BAT based on the frequency and duration of engine operation. The report shall: • Outline the number of annual operational hours, the number of annual operational requests from National Grid and the length of each run over the last 3 years; and • Provide a cost benefit analysis to determine, based on the hours and duration of operation, whether the investment in secondary abatement is viable.	3 years following commissioning.
IC6	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.	12 months from commissioning or as otherwise agreed in writing with the Environment Agency.
IC7	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 shall be undertaken in line with Environment Agency H1 guidance or an 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,	12 months from commissioning or as otherwise agreed in writing with the Environment Agency.

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	predicted impacts and the review in comparison to the relevant benchmarks shall be submitted to the Environment Agency for approval.	
IC8	Following the commissioning of the plant, the Operator shall submit a report to the Environment Agency for written approval assessing the operational parameters outlined in the application (EPR/QP3531AC/A001) and the supporting cost benefit analysis. The following parameters shall be assessed as a minimum during operation of the plant: • Energy efficiency • Fuel use • Stack pressures • Carbon cost • NOx.	12 months from commissioning or as otherwise agreed in writing with the Environment Agency.
IC9	The Operator shall submit a report in writing to the Environment Agency for acceptance. The report shall define and provide a justification for start-up and shut down definitions for the gas engines.	3 months following commissioning.

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 – emissions limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12 on site plan in schedule 7	Oxides of Nitrogen(NO and NO_2 expressed as NO_2)	Spark ignition engine exhaust Number 1 - 12 fired on Natural Gas	95 mg/m^3 [1]	-	Annually	BS EN 14792
	Carbon Monoxide		No limit set	-	Annually	BS EN 15058
	Oxygen		No limit set	-	Periodic. As appropriate to reference	BS EN 14789
	Water Vapour		No limit set	-	Periodic. As appropriate to reference	BS EN 14790
	Sulphur Dioxide		No limit set	-	Annually	Concentration by calculation as agreed in writing with the Environment Agency
	As required by the Method Implementation Document for BS EN 15259		No limit set		Pre-operation and when there is a significant operational change	BS EN 15259
Note [1]: This limit does not apply during start up and shut down.						

Table S3.2 Point source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W1 on site plan in schedule 7 emission to off-site drain	Oil or grease	Uncontaminated site surface water	No visible oil or grease	--	Weekly	Visual Check

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
Cummins spark ignition gas engines or equivalent	Natural Gas flow rate	As described in Application	In accordance with engine specification	Reference period to be agreed in writing with the Environment Agency.
	Natural Gas delivery system pressure			
	Inlet Manifold pressures			
	Cylinder temperature			
	Lube Oil temperature/pressure			

Schedule 4 – Reporting

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	Annually	1 January
Emissions to water Parameters as required by condition 3.5.1	W1	Every 6 months	1 July
Process monitoring Parameters as required by condition 3.5.1	Cummins spark ignition engines or equivalent	Every 6 months	1 July

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

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Total raw material used	Annually	Tonnes or cubic metres
Engine operating hours	Every 6 months	Total hours (hours), total number of runs (quantity), duration of longest run (hours) and number of runs >2 hours duration (quantity)
Oil changes	Every 6 months	Total number of changes and frequency

Table S4.4 Reporting forms		
Media/ parameter	**Reporting format**	**Date of form**
Air	Form Air 1 or other form as agreed in writing by the Environment Agency	07/02/2017
Water usage	Form Water usage 1 or other form as agreed in writing by the Environment Agency	07/02/2017
Energy usage	Form Energy 1 or other form as agreed in writing by the Environment Agency	07/02/2017
Other performance indicators	Form Performance 1 or other form as agreed in writing by the Environment Agency	07/02/2017
Gas engine operating hours	Form Operating hours or other form as agreed in writing by the Environment Agency	07/02/2017

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 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.

“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 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.

“natural gas” means naturally occurring methane with no more than 20% by volume of inert or other constituents.

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

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

“shut down” is defined in accordance with the definition agreed under Improvement Condition IC9.

“start up” is defined in accordance with the definition agreed under Improvement Condition IC9

“year” means calendar year ending 31 December.

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, 6% dry for solid 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.

Schedule 7 – Site plan