

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Scottish Power Generation Limited

Rye House Power Station
Ratty's Lane
Hoddesdon
Hertfordshire
EN11 0RF

Variation application number

EPR/RP3632SF/V002

Permit number

EPR/RP3632SF

Rye House Power Station

Permit number EPR/RP3632SF

Introductory note

This introductory note does not form a part of the notice.

Under the Environmental Permitting (England & Wales) Regulations 2010 (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 that all the conditions of the permit have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made and contains all conditions relevant to this permit.

The requirements of the Industrial Emissions Directive (IED) 2010/75/EU are given force in England through the Environmental Permitting (England and Wales) Regulations 2010 (the EPR) (as amended).

This Permit, for the operation of large combustion plant (LCP), as defined by articles 28 and 29 of the Industrial Emissions Directive (IED), is varied by the Environment Agency to implement the special provisions for LCP given in the IED, by the 1 January 2016 (Article 82(3)). The IED makes special provisions for LCP under Chapter III, introducing new Emission Limit Values (ELVs) applicable to LCP, referred to in Article 30(2) and set out in Annex V.

As well as implementing Chapter III of IED, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issued. It also modernises all conditions to reflect the conditions contained in our current generic permit template.

The Operator has chosen to operate this LCP under the ELV compliance route.

The rest of the installation is unchanged and continues to be operated as follows:

Rye House Power Station is a gas-fired power station operated by Scottish Power Generation Limited. The site covers an area of 7 ha and is centred at National Grid Reference TL 3880 0880.

Rye House Power Station lies in the valley of the River Lea on the eastern outskirts of Hoddesdon in Hertfordshire. It is bounded to the northwest by the London to Cambridge railway, beyond which is an industrial area. To the East is vacant land intended for light industry and to the south is another industrial area. The River Lea runs north to south and at its nearest point is some 140 m to the east of the site. Previous site usage was that of a coal fired power station demolished in the 1980's.

The site sits upon a major aquifer from which there is major potable water abstraction

The principal activity carried out on this site is listed under Section 1.1 A(1)(a): Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more. The activity comprises one combined cycle gas turbine (CCGT) module having a combined total thermal input of 1355 MWth and capable of a net rated power output of 715 MW of electricity. The module consists of three natural gas fired gas turbines (155 MW of electricity each) and a single steam turbine (254 MW of electricity). There are no provisions for light oil firing of the gas turbines.

The net rated thermal input for the three units combined is 1355 MWth based on the performance test and not 1500 MWth as previously stated. It is now based on OEM (original equipment manufacturer) plant guarantees. The site has been reassessed as comprising 3 separate LCPs and so has been given new LCP references being LCP387, LCP388 and LCP389 (it was previously regarded as one LCP with reference LCP263)

The hot combustion gases from each gas turbine pass into a dedicated heat recovery steam generator (HRSG). There are no facilities for supplementary firing of the HRSGs. The high pressure superheated steam raised in the three HRSGs is combined together and powers a single steam turbine, driving a hydrogen-cooled electricity generator.

The module can only operate in the combined cycle mode described above, as the HRSGs cannot be bypassed. The cooled combustion gases are finally released to atmosphere through three dedicated stacks 63m high 6.75m diameter each mounted on top of its heat recovery boiler. The plant uses an air cooled condenser to cool steam after the steam turbine.

There is a small gas fired auxiliary boiler (7.8 MWth) with separate 30.7m stack which is used to keep the HRSGs and steam turbine warm when the gas turbines are not firing.

Expanded low pressure steam from the steam turbine passes to a bank of electrical fan driven modular air blast chillers where it condenses and returns to the process as boiler feed water. As this process relies solely on dry air cooling there are no evaporative losses to air and no condensing cooling tower plumes.

Natural gas, without odorant, is supplied to the site directly from a high pressure main through a pressure reducing station, operated by the supplier, within a secure compound having a common boundary with the site.

Town's water and filtered rainwater are further purified in an ion-exchange demineralisation plant and then used as boiler make-up water. Hydrochloric acid and sodium hydroxide used for ion-exchange resin bed regeneration are stored in bunded bulk tanks on site. There is also a small storage facility for hydrazine and ammonia solutions, which are injected into the boilers as a corrosion inhibitor. There are storage tanks on site for treated and untreated boiler water

Ion exchange resin bed regeneration and boiler water blowdown are neutralised to produce sodium chloride and released to sewer, along with water from oily water separators, in compliance with conditions contained within a consent to discharge granted by Thames Water Utilities Ltd.

Clean site rainwater is collected in a large sump on site and pumped into the nearby River Lea according to a monitoring protocol. The operator has installed a water filtration system to enable this water to be recovered for use within the process thus reducing towns water consumption and reducing this routine release to water.

Of those substances, designated for control under the EPR Regulations, released to air from the three 65m stacks the main component comprises oxides of nitrogen (NO_x) (nitric oxide and nitrogen dioxide). Carbon monoxide (CO) is also released. Releases of particulate matter and sulphur dioxide are considered to be insignificant due to the use only of natural gas as a fuel.

Moisture is also a product of the combustion of natural gas and is released as water vapour. Occasionally during periods of high atmospheric relative humidity the plume may condense and become visible.

NO_x is created in the hot combustion zone by the combination of atmospheric oxygen and nitrogen. Minimisation of NO_x creation is achieved by design of the turbine combustor configuration and fuel nozzle. The original gas turbines as supplied minimised the creation of NO_x through the use of dry low NO_x burners. One of the three gas turbines has already had an advanced combustor design (HR3) retrofitted and is already demonstrating significant reductions in NO_x creation over the original design. This major engineering modification for the remaining two turbines occurred in planned outages in 2008 and 2009.

Gas turbine exhaust gases are monitored continuously and parameters measured include NO_x and CO along with other parameters that measure combustion performance such as temperature and oxygen content. The sampling ports are located in the hot zone between the gas turbine exhaust and the inlet to the boilers within the buildings. The Continuous Emission Monitors (CEMs) meet the Environment Agency's requirements for MCERTS certification.

All main items of equipment are housed within large buildings, which act as acoustic enclosures, and noise levels outside of these buildings but within the site are low.

There is a low risk for generating odours having potential to create annoyance off-site.

Within 10km of the site there are a number of ecologically sensitive designated sites, notably Special Areas of Conservation including Epping Forest, and Wormley-Hoddesdon Park Woods, Special Protection Areas including Lea Valley (Rye Meads – also Ramsar). There is also one Site of Special Scientific Interest within a radius of 2km. The site is expected to have no significant effect on these.

Rye House Power Station has an Environmental Management System, which is certified to ISO14001: 2004. The site is not subject to The Control of Major Accident Hazard (COMAH) Regulations (SI 1999 No.743) as the quantity of hydrazine solution stored on site and which is used for boiler water treatment is below the threshold weight prescribed by the regulations.

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 received	Duly made 30/03/06	Application for >50MW thermal input Power Station
Submission of modified GT test results	06/10/06	
Submission of site plan for permit	12/10/06	
Permit determined EPR/RP3632SF	19/12/06	Permit issued
Regulation 60 Notice sent to the Operator	09/12/14	Issue of a Notice under Regulation 60(1) of the EPR. Environment Agency Initiated review and variation to vary and update the permit to modern conditions.
Regulation 60 Notice response	30/03/15	Response received from the Operator.
Additional information received	24/06/15	Response to request for further information (RFI) dated 05/06/15.
Variation determined EPR/RP3632SF/V002 (PAS Billing ref: NP3238AW)	18/12/15	Varied and consolidated permit issued in modern condition format. Variation effective from 01/01/2016.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

Permit number

EPR/RP3632SF

Issued to

Scottish Power Generation Limited ("the operator")

whose registered office is

**1 Atlantic Quay
Robertson Street
Glasgow
G2 8SP**

company registration number SC189124

to operate a regulated facility at

**Rye House Power Station
Ratty's Lane
Hoddesdon
Hertfordshire
EN11 0RF**

to the extent set out in the schedules.

The notice shall take effect from 01/01/2016

Name	Date
J Linton	18/12/2015

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/RP3632SF

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/RP3632SF/V002 authorising,

Scottish Power Generation Limited (“the operator”),

whose registered office is

**1 Atlantic Quay
Robertson Street
Glasgow
G2 8SP**

company registration number SC189124

to operate an installation at

**Rye House Power Station
Ratty's Lane
Hoddesdon
Hertfordshire
EN11 0RF**

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

Name	Date
J Linton	18/12/2015

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;
- (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 red 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 For the following activities referenced in schedule 1, table S1.1: LCP387, LCP388 and LCP389. Without prejudice to condition 2.3.1, the activities shall be operated in accordance with the “Electricity Supply Industry IED Compliance Protocol for Utility Boilers and Gas Turbines” revision 1 dated February 2015 or any later version unless otherwise agreed in writing by the Environment Agency.

2.3.3 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.

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

2.3.5 For the following activities referenced in schedule 1, table S1.1: LCP387, LCP388 and LCP389. The end of the start up period and the start of the shutdown period shall conform to the specifications set out in Schedule 1, tables S1.2 and S1.4.

2.3.6 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.

2.3.7 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, S3.2 and S3.3.
- 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, S3.2 and 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 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, S3.2 and S3.3 unless otherwise agreed in writing by the Environment Agency.

3.6 Monitoring for the purposes of the Industrial Emissions Directive Chapter III

3.6.1 All LCP monitoring required by this permit shall be carried out in accordance with the provisions of Annex V of the Industrial Emissions Directive.

3.6.2 If the monitoring results for more than 10 days a year are invalidated within the meaning set out in condition 3.6.7, the operator shall:

- (a) within 28 days of becoming aware of this fact, review the causes of the invalidations and submit to the Environment Agency for approval, proposals for measures to improve the reliability of the continuous measurement systems, including a timetable for the implementation of those measures; and
- (b) implement the approved proposals.

3.6.3 Continuous measurement systems on emission points from the LCP shall be subject to quality control by means of parallel measurements with reference methods at least once every calendar year.

3.6.4 Unless otherwise agreed in writing by the Environment Agency in accordance with condition 3.6.5 below, the operator shall carry out the methods, including the reference measurement methods, to

use and calibrate continuous measurement systems in accordance with the appropriate CEN standards.

- 3.6.5 If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall be used, as agreed in writing with the Environment Agency.
- 3.6.6 Where required by a condition of this permit to check the measurement equipment, the operator shall submit a report to the Environment Agency in writing, within 28 days of the completion of the check.
- 3.6.7 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3, table S3.1; the Continuous Emission Monitors shall be used such that:
- (a) for the continuous measurement systems fitted to the LCP release points defined in Table S3.1 the validated hourly, monthly and daily averages shall be determined from the measured valid hourly average values after having subtracted the value of the 95% confidence interval;
 - (b) the 95% confidence interval for nitrogen oxides and sulphur dioxide of a single measured result shall be taken to be 20%;
 - (c) the 95% confidence interval for dust releases of a single measured result shall be taken to be 30%;
 - (d) the 95% confidence interval for carbon monoxide releases of a single measured result shall be taken to be 10%;
 - (e) an invalid hourly average means an hourly average period invalidated due to malfunction of, or maintenance work being carried out on, the continuous measurement system. However, to allow some discretion for zero and span gas checking, or cleaning (by flushing), an hourly average period will count as valid as long as data has been accumulated for at least two thirds of the period (40 minutes). Such discretionary periods are not to exceed more than 5 in any one 24-hour period unless agreed in writing. Where plant may be operating for less than the 24-hour period, such discretionary periods are not to exceed more than one quarter of the overall valid hourly average periods unless agreed in writing; and
 - (f) any day, in which more than three hourly average values are invalid shall be invalidated.

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 resource efficiency metrics 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 4.3.1(a)(i) or 4.3.1 (b)(i) where the information relates to the breach of a condition 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.
- 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.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
- (a) a decision by the Secretary of State not to re-certify the agreement;
 - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
 - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.
- 4.3.8 The operator shall inform the Environment Agency in writing of the closure of any LCP within 28 days of the date of closure.

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	Gas turbine electricity generators and associated heat recovery steam generators Three Gas Turbine (GT) units: LCP387 - GT11 456 MW _{th} LCP388 - GT12 448 MW _{th} LCP389 - GT13 451 MW _{th}	From receipt of natural gas to generation of electricity and steam, releases to air and waste storage.
	7.8 MW _{th} Auxiliary Boiler	From receipt of natural gas to generation of steam and releases to air
Directly Associate Activities		
Directly associated activity	Fuel Oil storage	From receipt of raw materials to dispatch for use.
Directly associated activity	Steam Turbine Electricity Generator and Condenser.	From receipt of raw materials and treated water and steam input from HRSGs to generation of electricity, releases to air, boiler water blowdown to effluent water treatment and condensate return to HRSGs.
Directly associated activity	Water purification plant	From receipt and storage of towns water and filtered rainwater and raw materials to discharge to effluent water treatment and despatch to waste and to supply of water to treated water storage.
Directly associated activity	Effluent water treatment	From receipt of demineralisation regeneration, boiler blowdown and separated oily water and receipt and storage of raw materials to discharge to sewer.
Directly associated activity	Rain water collection and treatment	From rainwater collection system, clean sumps and drains to discharge to River Lea and filtered water to towns water storage.
Directly associated activity	Waste handling and storage	From waste generation, storage and monitoring to waste despatch.
Directly associated activity	Emergency Electricity Generators 2 units of 500kW _{elec}	From receipt of diesel to generation of electricity and releases to air
Directly associated activity	Fire Pumps	From receipt of diesel to releases to air.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application RP3632SF	Sections 2.1 and 2.2 of the application document	30/03/06
Response to regulation 60(1) Notice – request for information dated 31/10/14	Compliance route and operating techniques identified in response to questions question 2 (ELV compliance route) and question 6 (MSUL/MSDL definitions).	Received 30/03/15
Receipt of additional information to the regulation 60(1) Notice. requested by letter dated 05/06/15	Compliance route and operating techniques identified in response to questions 1 (LCP), 5 (net rated input) and question 6 (MSUL/MSDL definitions).	Received 24/06/15

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>A written procedure shall be submitted to the Agency detailing the measures to be used so that monitoring equipment, personnel and organisations employed for the emissions monitoring programme for water shall have either MCERTS certification or accreditation in accordance with condition 3.6.3.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure.</p> <p>The procedure shall be implemented by the operator from the date of approval in writing by the Agency.</p>	Completed 25/06/07
IC2	<p>A written report shall be submitted to the Agency for approval detailing the measures to be used in the event of site flooding.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report.</p> <p>The measures identified by the report shall be implemented by the operator within the accident management plan from the date of approval in writing by the Agency.</p>	Completed 25/06/07
IC3	<p>A written report shall be submitted to the Agency for approval detailing the results of a survey of hard-standing, kerbing and secondary containment for raw material and waste storage areas. The report shall assess the foregoing against the requirements of sections 2.2.6, 2.2.7 and 2.2.9 of the Combustion Technical Guidance Note. The report shall contain dates for the implementation of individual measures.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report.</p> <p>The improvements identified by the report shall be implemented by the operator from the date of approval in writing by the Agency.</p>	Completed 27/06/07
IC4	<p>A written site closure plan shall be prepared and submitted to the Agency for approval to demonstrate that, in its current state, the installation can be decommissioned to avoid any pollution risk and the site of operation returned into a satisfactory state. The plan should comply with the requirements of section 2.11 of the Combustion Technical Guidance Note and also follow the Agency's land protection guidance H7 and H8.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The procedure shall be implemented by the operator from the date of approval in writing by the Agency.</p>	Completed 01/10/07
IC5	The Operator shall install and commission advanced dry low NOx (HR3) combustors to Unit 12 gas turbine.	Completed 31/12/07

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC6	A written report shall be submitted to the Agency for approval detailing the results of a waste minimisation audit, which should also include a review of disposal options to comply with the requirements of sections 2.4.2 and 2.6 of the Combustion Technical Guidance Note. The report shall contain, where appropriate, the methodology used and a program for implementation of any measures proposed. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The program shall be implemented by the operator from the date of approval in writing by the Agency.	Completed 08/01/09
IC7	A written report shall be submitted to the Agency for approval detailing the results of a water efficiency audit to comply with the requirements of section 2.4. of the Combustion Technical Guidance Note The report shall contain, where appropriate, the methodology used and a program for implementation of any measures proposed. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The program shall be implemented by the operator from the date of approval in writing by the Agency.	Completed 08/01/09
IC8	The Operator shall install and commission advanced dry low NOx (HR3) combustors to Unit 11 gas turbine.	Completed 31/12/09
IC9	LCP263 (LCP387, LCP388 and LCP389 combined) annual emissions of dust, sulphur dioxide and oxides of nitrogen including energy usage for the year 01/01/2015 to 31/12/2015 shall be submitted to the Environment Agency using form AAE1 via the NERP Registry. If the LPCD LCP was a NERP plant the final quarter submissions shall be provided on the RTA 1 form to the NERP Registry.	28/01/16

Table S1.4 Start-up and Shut-down thresholds		
Emission Point and Unit Reference	“Minimum start up load” Load in MW and as percent of rated power output (%)	“Minimum shut-down load” Load in MW and as percent of rated power output (%)
	net rated power output is 715 MW _{elec} .	net rated power output is 715 MW _{elec} .
A1:LCP387 (GT11) and A2:LCP388 (GT12) and A3:LCP389 (GT13)	410 MW _{elec} ; 57.34% Full module: all three units GT11, GT12 and GT13 and ST	410 MW _{elec} ; 57.34% Full module: all three units GT11, GT12 and GT13 and ST
A1:LCP387 (GT11) and A2:LCP388 (GT12); or A1:LCP387 (GT11) and A3:LCP389 (GT13); or A2:LCP388 (GT12) and A3:LCP389 (GT13)	300 MW _{elec} ; 41.95% Part module: two of the three units GT11, GT12 or GT13 functioning as a pair and ST	300 MW _{elec} ; 41.95% Part module: two of the three units GT11, GT12 or GT13 functioning as a pair and ST
A1:LCP387 (GT11) or A2:LCP388 (GT12) or A3:LCP389 (GT13)	150 MW _{elec} ; 20.97% Part module: a single unit of either GT11 or GT12 or GT13 functioning alone and ST	150 MW _{elec} ; 20.97% Part module: a single unit of either GT11 or GT12 or GT13 functioning alone and ST

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Natural gas	-
Gas oil	Not exceeding 0.1% w/w sulphur content
Water treatment plant raw materials used within the installation	Discharges of mercury and cadmium as a result of the impurities of raw materials used in the water treatment plant shall be controlled by ensuring that impurity levels are the minimum available in the commercial product.

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air						
Emission point ref. & location	Source	Parameter	Limit (including unit) ^{note1}	Reference period	Monitoring frequency	Monitoring standard or method
A1 [shown on site plan in Schedule 7]	GT11 fired on natural gas LCP387	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	55 mg/m ³	95% of validated hourly averages in a calendar year	Continuous	BS EN 14181
A1 [shown on site plan in Schedule 7]	GT11 fired on natural gas LCP387	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	55 mg/m ³	Daily mean of validated hourly averages	Continuous	BS EN 14181
A1 [shown on site plan in Schedule 7]	GT11 fired on natural gas LCP387	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	50 mg/m ³	Monthly mean of validated hourly averages	Continuous	BS EN 14181
A1 [shown on site plan in Schedule 7]	GT11 fired on natural gas LCP387	Carbon monoxide (CO)	200 mg/m ³	95% of validated hourly averages in a calendar year	Continuous	BS EN 14181
A1 [shown on site plan in Schedule 7]	GT11 fired on natural gas LCP387	Carbon monoxide (CO)	40 mg/m ³	Daily mean of validated hourly averages	Continuous	BS EN 14181
A1 [shown on site plan in Schedule 7]	GT11 fired on natural gas LCP387	Carbon monoxide (CO)	40 mg/m ³	Monthly mean of validated hourly averages	Continuous	BS EN 14181
A2 [shown on site plan in Schedule 7]	GT12 fired on natural gas LCP388	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	55 mg/m ³	95% of validated hourly averages in a calendar year	Continuous	BS EN 14181
A2 [shown on site plan in Schedule 7]	GT12 fired on natural gas LCP388	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	55 mg/m ³	Daily mean of validated hourly averages	Continuous	BS EN 14181

Table S3.1 Point source emissions to air						
Emission point ref. & location	Source	Parameter	Limit (including unit)^{note1}	Reference period	Monitoring frequency	Monitoring standard or method
A2 [shown on site plan in Schedule 7]	GT12 fired on natural gas LCP388	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	50 mg/m ³	Monthly mean of validated hourly averages	Continuous	BS EN 14181
A2 [shown on site plan in Schedule 7]	GT12 fired on natural gas LCP388	Carbon monoxide (CO)	200 mg/m ³	95% of validated hourly averages in a calendar year	Continuous	BS EN 14181
A2 [shown on site plan in Schedule 7]	GT12 fired on natural gas LCP388	Carbon monoxide (CO)	40 mg/m ³	Daily mean of validated hourly averages	Continuous	BS EN 14181
A2 [shown on site plan in Schedule 7]	GT12 fired on natural gas LCP388	Carbon monoxide (CO)	40 mg/m ³	Monthly mean of validated hourly averages	Continuous	BS EN 14181
A3 [shown on site plan in Schedule 7]	GT13 fired on natural gas LCP389	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	55 mg/m ³	95% of validated hourly averages in a calendar year	Continuous	BS EN 14181
A3 [shown on site plan in Schedule 7]	GT13 fired on natural gas LCP389	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	55 mg/m ³	Daily mean of validated hourly averages	Continuous	BS EN 14181
A3 [shown on site plan in Schedule 7]	GT13 fired on natural gas LCP389	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	50 mg/m ³	Monthly mean of validated hourly averages	Continuous	BS EN 14181
A3 [shown on site plan in Schedule 7]	GT13 fired on natural gas LCP389	Carbon monoxide (CO)	200 mg/m ³	95% of validated hourly averages in a calendar year	Continuous	BS EN 14181
A3 [shown on site plan in Schedule 7]	GT13 fired on natural gas LCP389	Carbon monoxide (CO)	40 mg/m ³	Daily mean of validated hourly averages	Continuous	BS EN 14181

Table S3.1 Point source emissions to air						
Emission point ref. & location	Source	Parameter	Limit (including unit)^{note1}	Reference period	Monitoring frequency	Monitoring standard or method
A3 [shown on site plan in Schedule 7]	GT13 fired on natural gas LCP389	Carbon monoxide (CO)	40 mg/m ³	Monthly mean of validated hourly averages	Continuous	BS EN 14181
A1 [shown on site plan in Schedule 7]	GT13 fired on natural gas LCP389	Sulphur dioxide (SO ₂)	-	-	6 monthly by calculation	Concentration by calculation as agreed in writing with the Environment Agency
A2 [shown on site plan in Schedule 7]	GT11 fired on natural gas LCP387	Sulphur dioxide (SO ₂)	-	-	6 monthly by calculation	Concentration by calculation as agreed in writing with the Environment Agency
A3 [shown on site plan in Schedule 7]	GT12 fired on natural gas LCP388	Sulphur dioxide (SO ₂)	-	-	6 monthly by calculation	Concentration by calculation as agreed in writing with the Environment Agency
A4 [shown on site plan in Schedule 7]	7.8 MW _{th} Auxiliary Boiler	No parameters set	-	-	Parameters and frequency on request by the Agency	Permanent sampling access not required.
Methane vents	Fuel supply to gas turbines	No parameters set	-	-	Parameters and frequency on request by the Agency	Permanent sampling access not required.
Hydrogen vents	Steam turbine generator cooling	No parameters set	-	-	Parameters and frequency on request by the Agency	Permanent sampling access not required.

Table S3.1 Point source emissions to air						
Emission point ref. & location	Source	Parameter	Limit (including unit)^{note1}	Reference period	Monitoring frequency	Monitoring standard or method
Emergency pressure relief vents	-	No parameters set	-	-	Parameters and frequency on request by the Agency	Permanent sampling access not required.
Vents from storage tanks	-	No parameters set	-	-	Parameters and frequency on request by the Agency	Permanent sampling access not required.
A8 & A9: Diesel engine exhausts	Emergency Electricity Generators 2 units of 500kW _{elec.}	No parameters set	-	-	Parameters and frequency on request by the Agency	Permanent sampling access not required.
A1, A2 and A3 [shown on site plan in Schedule 7]	GT11 fired on natural gas LCP387 GT12 fired on natural gas LCP388 GT13 fired on natural gas LCP389	% Oxygen (O ₂)	-	-	Continuous As appropriate to reference	BS EN 14181
A1, A2 and A3 [shown on site plan in Schedule 7]	GT11 fired on natural gas LCP387 GT12 fired on natural gas LCP388 GT13 fired on natural gas LCP389	Water Vapour (H ₂ O)	-	-	Continuous As appropriate to reference	BS EN 14181
A1, A2 and A3 [shown on site plan in Schedule 7]	GT11 fired on natural gas LCP387 GT12 fired on natural gas LCP388 GT13 fired on natural gas LCP389	Stack gas temperature (°C)	-	-	Continuous As appropriate to reference	Traceable to national standards

Table S3.1 Point source emissions to air						
Emission point ref. & location	Source	Parameter	Limit (including unit)^{note1}	Reference period	Monitoring frequency	Monitoring standard or method
A1, A2 and A3 [shown on site plan in Schedule 7]	GT11 fired on natural gas LCP387 GT12 fired on natural gas LCP388 GT13 fired on natural gas LCP389	Stack gas pressure (Pa)	-	-	Continuous As appropriate to reference	Traceable to national standards
A1, A2 and A3 [shown on site plan in Schedule 7]	GT11 fired on natural gas LCP387 GT12 fired on natural gas LCP388 GT13 fired on natural gas LCP389	As required by the Method Implementation Document for BS EN 15259	-	-	Pre-operation and when there is a significant operational change	BS EN 15259
Note 1 GT11, GT12 and GT13 limits apply both from MSUL/MSDL to base load and 70% to base load.						

Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference period	Monitoring frequency	Monitoring standard or method
W1 [W1 on site plan in schedule 7 emission to River Lee]	Site surface water	pH	6 – 9 (inclusive)	Instantaneous spot	Weekly	BS6068-2.50
W1 [W1 on site plan in schedule 7 emission to River Lee]	Site surface water	Oil or grease	No visible oil	Instantaneous spot	Daily	Visual check

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 [S1 on site plan in schedule 7 discharge to sewer]	Blowdown from boilers, demineralisation and service cooling towers	-	-	-	-	-
S2 [S2 on site plan in schedule 7 discharge to sewer]	Plant water sumps and rainwater from transformer compounds.	-	-	-	-	-

Schedule 4 – Reporting

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

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Oxides of nitrogen	A1, A2, A3	Every 3 months	1 January, 1 April, 1 July, 1 October
Carbon monoxide	A1, A2, A3	Every 3 months	1 January, 1 April, 1 July, 1 October
Sulphur dioxide	A1, A2, A3	Every 6 months	1 January, 1 July
Emissions to water parameters as required by condition 3.5.1	W1	Every 12 months	1 January

Parameter	Units
Electricity Exported	GWhr
Heat Exported	GWhr
Mechanical Power Provided	GWhr
Fossil Fuel Energy Consumption	GWhr
Non-Fossil Fuel Energy Consumption	GWhr
Annual Operating Hours	hr
Water Abstracted from Fresh Water Source	m ³
Water Abstracted from Borehole Source	m ³
Water Abstracted from Estuarine Water Source	m ³
Water Abstracted from Sea Water Source	m ³
Water Abstracted from Mains Water Source	m ³
Gross Total Water Used	m ³
Net Water Used	m ³
Hazardous Waste Transferred for Disposal at another installation	t
Hazardous Waste Transferred for Recovery at another installation	t
Non-Hazardous Waste Transferred for Disposal at another installation	t
Non-Hazardous Waste Transferred for Recovery at another installation	t
Waste recovered to Quality Protocol Specification and transferred off-site	t
Waste transferred directly off-site for use under an exemption / position statement	t

Parameter	Frequency of assessment	Units
Thermal Input Capacity for each LCP	Annually	MW

Table S4.3 Chapter III Performance parameters for reporting to DEFRA		
Parameter	Frequency of assessment	Units
Annual Fuel Usage for each LCP	Annually	TJ
Total Emissions to Air of NO _x for each LCP	Annually	t
Total Emissions to Air of SO ₂ for each LCP	Annually	t
Total Emissions to Air of CO for each LCP	Annually	t
Total Emissions to Air of dust for each LCP	Annually	t
Operating Hours for each LCP	Annually	hr

Table S4.4 Reporting forms				
Media/ parameter	Reporting format	Starting Point	Agency recipient	Date of form
LCP	Form IED HR1 – operating hours	01/01/16	National and Area	31/12/15
Air and energy	Form IED AR1 – SO ₂ , NO _x and dust mass emission and energy	01/01/16	National and Area	31/12/15
Air	Form IED CON 2 – continuous monitoring	01/01/16	Area Office	31/12/15
CEMs	Form IED CEM – Invalidation Log	01/01/16	Area Office	31/12/15
Resource Efficiency	Form REM1 – resource efficiency annual report	01/01/16	Area Office	31/12/15
Water	Form water 1 or other form as agreed in writing by the Environment Agency	01/01/16	Area Office	31/12/15

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.

“background concentration” means such concentration of that substance as is present in:

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

“base load” means: (i) as a mode of operation, operating for >4000hrs pa; and (ii) as a load, the maximum load under ISO conditions that can be sustained continuously, i.e. maximum continuous rating.

“calendar monthly mean” means the value across a calendar month of all validated hourly means.

“CEN” means Comité Européen de Normalisation.

“disposal”. Means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“DLN” means dry, low NO_x burners.

“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.

“hazardous property” has the meaning given in Schedule 3 of the Hazardous Waste (England and Wales) Regulations 2005 No.894 and the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138).

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

“large combustion plant” or “LCP” is a combustion plant or group of combustion plants discharging waste gases through a common windshield or stack, where the total thermal input is 50 MW or more, based on net calorific value. The calculation of thermal input, excludes individual combustion plants with a rated thermal input below 15MW.

“Mid-merit” means combustion plant operating between 1,500 and 4,000 hrs/yr.

“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.

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

“recovery” means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

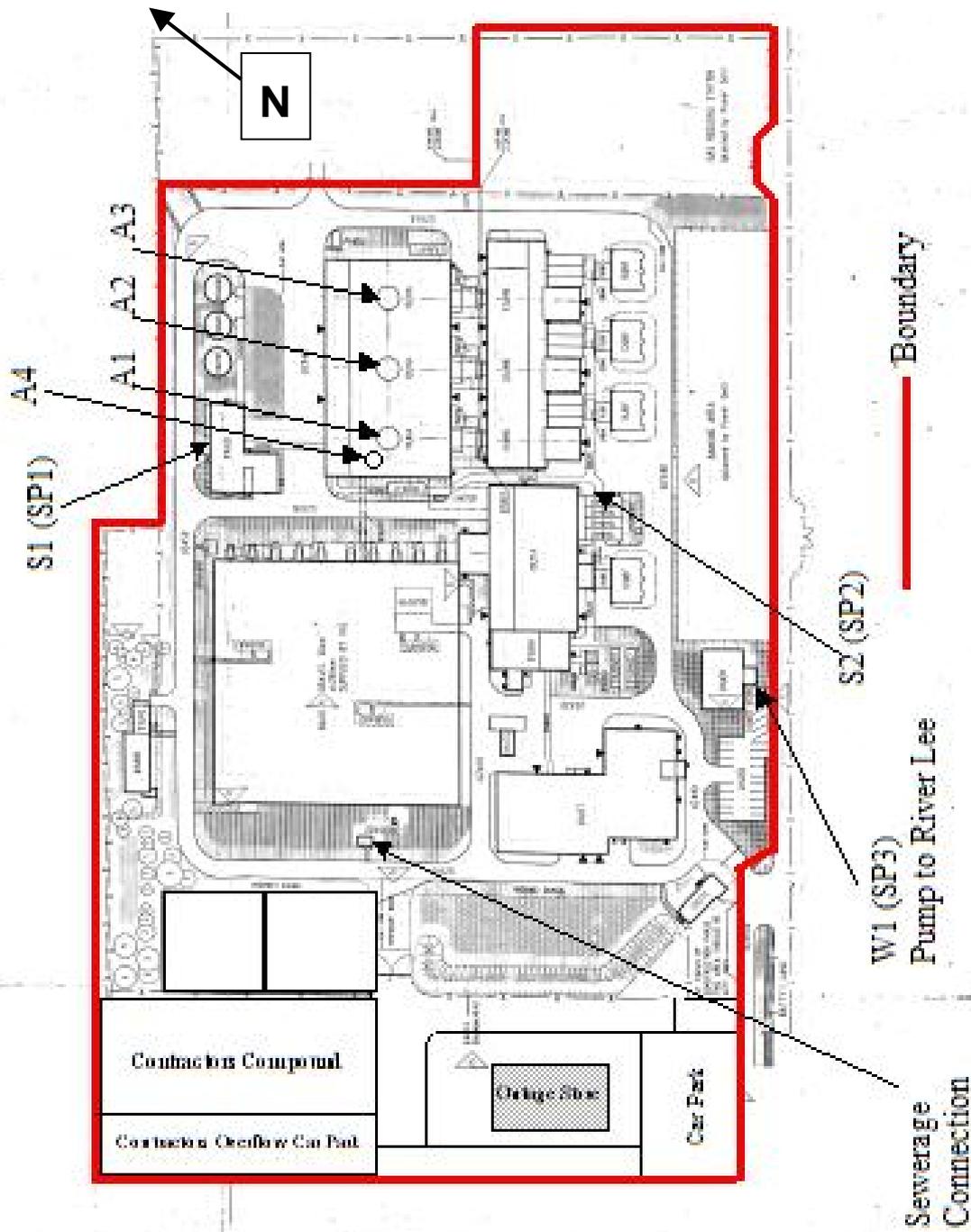
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

- in relation to emissions from gas turbine or compression ignition engine combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3kPa and with an oxygen content of 15% dry for liquid and gaseous fuels.

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT