

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

INEOS Nitriles (UK) Limited

RWE Npower Cogen (INEOS Nitriles)
Seal Sands
PO Box 62
Middlesbrough
TS2 1TX

Variation application number

EPR/HP3137ZK/V002

Permit number

EPR/HP3137ZK

RWE Npower Cogen (INEOS Nitriles)

Permit number EPR/HP3137ZK

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.

Purpose of the permit

The main features of the installation are as follows (details have been updated to reflect the status at the time EPR/HP3137ZK/V002 was issued).

The Seal Sands installation includes production and storage facilities for the manufacture of intermediate chemicals principally used in the production of nylon and engineering plastics. INEOS Nitriles (UK) Limited is the main operator on site and holds permit EPR/FP3435GZ covering the bulk of the activities undertaken at the installation. This permit (EPR/HP3137ZK/V002) is also issued to INEOS Nitriles (UK) Limited who owns the combined heat and power (CHP) plant on the site. The CHP plant is directly associated with the stationary technical unit and therefore forms part of the Installation.

The principal purpose of the CHP plant is to provide energy (electricity and steam) for use by INEOS Nitriles (UK) Limited, with surplus power, if any, supplied to the National Grid. The CHP comprises principally a single gas turbine (net thermal input of 131 MW) with a heat recovery steam generator, a steam turbine and associated generating equipment. INEOS Nitriles (UK) Limited operates boilers which are covered by the main installation permit (EPR/FP3435GZ), these also supply steam to the steam turbine. A diesel engine is used to start turbine rotation before steam is introduced to the turbine. Cooling for the CHP plant is provided by a cooling water circuit with a two cell induced draught cooling tower.

Principal raw materials used are natural gas and water (supplied by INEOS Nitriles). The only potentially significant releases are to atmosphere via a 50 m high stack and comprise principally of oxides of nitrogen and carbon dioxide. All effluent discharges pass to the INEOS Nitriles (UK) Limited effluent treatment plant (EPR/FP3435GZ). There are no discharges to groundwater.

There are no potential sources of odour from the plant and techniques used to control noise ensure that there is little likelihood of annoyance.

Purpose of variation EPR/HP3137ZK/V002

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 Transitional National Plan (TNP) compliance route. For the parameters specified under the TNP the Operator is required to achieve IED standards by no later

than June 2020. This is a change from the previous operating regime which was operation under emission limits determined by an assessment of the best available techniques (BAT).

The variation notice uses an updated LCP number in accordance with the most recent DEFRA LCP reference numbers. The LCP reference has changed as follows:

- LCP237 is changed to LCP271

The rest of the installation is unchanged and continues to be operated as described above. 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 BV2867IZ (A001)	22/08/03	Received
Response to request dated 10/11/03 for additional site report information	25/11/03	
Permit BV2867IZ	Determined 21/04/04	
Variation KP3239BW (V002)	Determined 5/11/04	This variation notice is served to introduce monitoring and reporting requirements for large combustion plant required for compliance with the revised Large Combustion Plants Directive [Directive 2001/80/EC]
Request for variation BP3134UE	09/03/07	Request accepted as a request for a variation 09/04/07
Variation BP3134UE (V003) determined	05/07/07	Minor amendment to monitoring requirements.
Application for transfer EPR/HP3137ZK/T001	Duly made 12/03/13	Application to transfer the permit from nPower Cogen Limited to INEOS Nitriles (UK) Limited
Transfer determined EPR/HP3137ZK/T001	20/03/13	New EPR number issued. Permit issued to INEOS Nitriles (UK) Limited
Regulation 60 Notice sent to the Operator	31/10/14	Issue of a Notice under Regulation 60(1) of the EPR. Environment Agency Initiated review and variation to vary the permit under IED to implement the 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. The permit is also updated to modern conditions
Regulation 60 Notice response	09/04/15	Response received from the Operator.
Additional information received	10/07/15	Response to request for further information (RFI) dated 23/06/15
Variation determined EPR/HP3137ZK/V002 (PAS Billing ref: FP3934AE)	17/12/15	Varied and consolidated permit issued in modern condition format. Variation effective from 01/01/2016.

Other Part A installation permits relating to this installation		
Operator	Permit number	Date of issue
INEOS Nitriles (UK) Limited	EPR/FP3435GZ	19/12/2008

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/HP3137ZK

Issued to

INEOS Nitriles (UK) Limited (“the operator”)

whose registered office is

Seal Sands

PO Box 62

Middlesbrough

TS2 1TX

company registration number **06238238**

to operate part of a regulated facility at

RWE Npower Cogen (INEOS Nitriles)

Seal Sands

PO Box 62

Middlesbrough

TS2 1TX

to the extent set out in the schedules.

The notice shall take effect from 01/01/2016.

Name	Date
Mike Jenkins	17 December 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/HP3137ZK

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/HP3137ZK/V002 authorising,

INEOS Nitriles (UK) Limited (“the operator”),

whose registered office is

**Seal Sands
PO Box 62
Middlesbrough
TS2 1TX**

company registration number **06238238**

to operate part of an installation at

**RWE Npower Cogen (INEOS Nitriles)
Seal Sands
PO Box 62
Middlesbrough
TS2 1TX**

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

Name	Date
Mike Jenkins	17 December 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.

1.5 Multiple operator installations

This is not a multi operator installation.

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, which is within the area edged in red on the site plan that represents the extent of the installation covered by this permit and the permit covering the other activities on the site carried on by the operator.

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 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 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.

2.5 Pre-operational conditions

There are no pre-operational conditions.

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 Total annual emissions from the LCP271 emission point set out in schedule 3 table S3.1 of a substance listed in schedule 3 table S3.4 shall not exceed the relevant limit in table S3.4.
- 3.1.4 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.

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 S3.4 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 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 of a single measured result shall be taken to be 20%;
 - (c) the 95% confidence interval for carbon monoxide releases of a single measured result shall be taken to be 10%;
 - (d) 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
 - (e) 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 annual production /treatment data set out in schedule 4 table S4.2;
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

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

4.2.5 For the following activities referenced in schedule 1, table S1.1: LCP271. Unless otherwise agreed in writing with the Environment Agency, within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form IED RTA1, listed in table S4.4, the information specified on the form relating to the site's mass emissions.

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), 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 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.	LCP271: Combined heat and power (CHP) plant, comprising a single gas turbine (thermal input of 131 MW) with a heat recovery steam generator, steam turbine and associated generating equipment	From receipt of natural gas to discharge of exhaust gases, and the generation of electricity and steam.
Directly Associated Activity		
Associated activity: Cooling tower	Cooling water circuit with a two cell induced draught cooling tower	Cooling for CHP
Associated activity: Start up Generator	14 litre 12 valve Detroit Diesel engine for starting turbine rotation	Start up and weekly routine testing only. From receipt of diesel oil to discharge of exhaust gases.
Associated activity: Discharge of effluent	Discharge of effluent and surface water to INEOS Nitriles Limited drains	Discharge in accordance with agreement with INEOS Nitriles Limited

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to questions 2.1, 2.2 and 2.3 given in sections 2.1, 2.2 and 2.3 of the application	22/8/03
Response to regulation 60(1) Notice – request for information dated 31/10/14	Compliance route(s) and operating techniques identified in response to questions 2 (164 compliance route), 4 (166 fuel type), 5 (167 net rated thermal input), 6 (168 MSUL/MSDL), 7 (169 proposed ELVs), 8 (170 Monitoring on standby fuels), 9 (171 Monitoring requirements).	09/04/15
Receipt of additional information to the regulation 60(1) Notice. requested by letter dated 23/06/15	Compliance routes and operating techniques identified in response to notice questions 4 (166 plant configuration), 5 (167 net rated thermal input), 6 (168 MSUL/MSDL), 7 (169 proposed ELVs)	10/07/15

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>The operator shall review existing site procedures and implement any changes necessary to ensure compliance with section 2.3 of this permit; in particular procedures should be in place :</p> <ul style="list-style-type: none"> to identify, review (using maintenance records) and prioritise items of plant for which a preventative maintenance regime is appropriate. to identify a preventative maintenance programme covering all plant, failure of which could lead to an acute impact on the environment, including items such as, but not restricted to, tanks, pipework, bunds, ducts and abatement equipment. 	Complete

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC2	The operator shall submit a written report to the Environment Agency that summarises a review of the provision of MCERTS accreditation for the monitoring equipment, personnel and organisations employed for the emissions monitoring program in condition 2.10.1. The report shall also propose a timetable for achieving this standard for any elements that are not MCERTS certified.	Complete
IC3	The Operator shall submit a written report to the Environment Agency. The report shall provide details of the protocol used by the Operator to determine 'uncertainty' values associated with each parameter to be reported for each emission point together with an indication of the likely uncertainty values associated with the test methods to be used.	Complete
IC4	The Operator shall submit a written report to the Environment Agency confirming that all monitoring required for all parameters listed in Table 2.2.2 are representative. Specific derogation from requirements of BS EN 13284-1:2002 and ISO 10396:1993, as appropriate for particulate and gaseous emissions respectively, are to be indicated. The report shall include the feasibility, cost and time required to implement changes to meet the standard requirements.	Complete
IC5	The operator shall undertake analysis of historic monitoring data and submit a written report to the Environment Agency that compares releases of oxides of nitrogen for each of the years 2001, 2002 and 2003 against the compliance criteria and reference conditions contained within this permit.	Complete
IC6	IC Number not used	
IC7	The Operator shall install and commence operation and use of continuous emission monitors for oxides of nitrogen (on release point A1). Alternatively, the Operator may provide an undertaking to the Agency not to operate the combustion plant for more than 10,000 operational hours starting from 27 November 2004.	Complete
IC8	The Operator shall install and commence operation and use of continuous monitors for exhaust gas oxygen concentration, temperature, pressure and water vapour+ content on release points listed in IC7 above. [+Continuous monitoring of water vapour content is not required where the flue gases are dried before analysis.]	Complete
IC9	For LCPD LCP237 (now LCP271 under IED). 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	Minimum Shut-Down Load
	Load in MW and as percent of rated power output (%)	Load in MW and as percent of rated power output (%)
A1: LCP271	26 MWth output; 68%	26 MWth output; 68%

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Diesel oil	Not exceeding 0.1% w/w sulphur content

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air from Gas Turbines >100MWth operating under the Transitional National Plan					
Emission point ref. & location	Parameter	Limit [1][2]	Reference period	Monitoring frequency	Monitoring standard or method
LCP271 Gas turbine fired on natural gas; Emitting via A1 Located at NGR: NZ 5309 2367	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	60 mg/m ³	Monthly mean of validated hourly averages	Continuous	BS EN 14181
		66 mg/m ³	95% of validated daily means within a calendar year		
		120 mg/m ³	95% of validated hourly averages within a calendar year		
	Carbon Monoxide	100 mg/m ³	Monthly mean of validated hourly averages	Continuous	BS EN 14181
		110 mg/m ³	Daily mean of validated hourly averages		
		200 mg/m ³	95% of validated hourly averages within a calendar year		
	Sulphur dioxide	-	-	At least every 6 months	Concentration by calculation, as agreed in writing with the Environment Agency
	Oxygen, Water Vapour	-	-	Continuous As appropriate to reference	BS EN 14181
	Stack gas temperature, Stack gas pressure	-	-	Continuous As appropriate to reference	Traceable to national standards
	Stack Gas Volume Flow	-	-	Continuous	BS EN 16911 & TGN M2
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] These limits do not apply during start up or shut down.

Note [2] These limits do not apply when diesel oil is used to start up the combustion unit

Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit
W1 (TP14 on figure 5 of application)	Site drainage from roads via interceptor and roof drainage	Oil or grease	None visible
W2 (TP15 on figure 5 of application)	Cooling tower purge		
W3 (TP16 on figure 5 of application)	Roof drainage		

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements

Emission point ref. and location	Source	Discharge to	Parameter
E1 (TP12 on figure 5 of application)	INEOS Nitriles (Cogen) Site Sump	INEOS Nitriles (Acrylonitrile) effluent treatment plant (EPR/FP3435GZ)	None specified
E2 (TP31 on figure 5 of application)	Boiler blowdown/ contaminated condensate		

Table S3.4 Annual limits (excluding start up and shut down except where otherwise stated).

Substance	Medium	Limit (including unit)		Emission Points
Oxides of nitrogen	Air	Assessment year	LCP271 TNP Limit	LCP271: A1
		01/01/16 and subsequent years until 31/12/19	Emission allowance figure shown in the TNP Register as at 30 April the following year	
		01/01/20-30/06/20		

Schedule 4 – Reporting

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

Table S4.1: Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Oxides of nitrogen	A1	Every 3 months	1 January, 1 April, 1 July, 1 October
Carbon Monoxide	A1	Every 3 months	1 January, 1 April, 1 July, 1 October
Sulphur dioxide	A1	Every 6 months	1 January, 1 July

Table S4.2: Annual production/treatment	
Parameter	Units
Steam exported to INEOS Nitriles (Acrylonitrile)	tonnes
Steam imported	tonnes
Electricity generated	GWh
Electricity exported to National Grid	GWh

Table S4.3: Chapter III Performance parameters for reporting to DEFRA and other performance parameters		
Parameter	Frequency of assessment	Units
Thermal Input Capacity for each LCP	Annually	MW
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 dust for each LCP	Annually	t
Operating Hours for each LCP	Annually	h
Energy efficiency	Annually	%
Water usage	Annually	
Waste disposal and/or recovery.	Annually	

Table S4.4: Reporting forms				
Media/ parameter	Reporting format	Starting Point	Agency recipient	Date of form
Air & Energy [1]	Form IED AR1 – SO ₂ , NO _x and dust mass emission and energy	01/01/16	National	31/12/15
Air [1]	Form IED RTA1 –TNP quarterly emissions summary log	01/01/16	National	31/12/15
LCP [1]	Form IED HR1 – operating hours	01/01/16	National	31/12/15
Air [1]	Form IED CON 2 – continuous monitoring	01/01/16	Area Office	31/12/15
CEMs [1]	Form IED CEM – Invalidation Log	01/01/16	Area Office	31/12/15
Water usage [2]	Form WU1 or other form as agreed in writing by the Environment Agency	01/01/16	Area Office	21/04/04
Waste Return [2]	Form R1 or other form as agreed in writing by the Environment Agency	01/01/16	Area Office	21/04/04
Energy Usage [2]	Form E1 or other form as agreed in writing by the Environment Agency (excluding data reported on Form IED AR1)	01/01/16	Area Office	21/04/04
Performance indicators [2]	Form PI1 or other form as agreed in writing by the Environment Agency (excluding data reported on Form IED AR1)	01/01/16	Area Office	21/04/04

Note [1]: Forms relating to LCP operation; these are standardised forms and not all parameters may be applicable to this permit.

Note [2]: Forms relating to non-LCP operation.

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.

“breakdown” has the meaning given in the ESI IED Compliance Protocol for Utility Boilers and Gas Turbines.

“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.

“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 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.

“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.

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

“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.

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

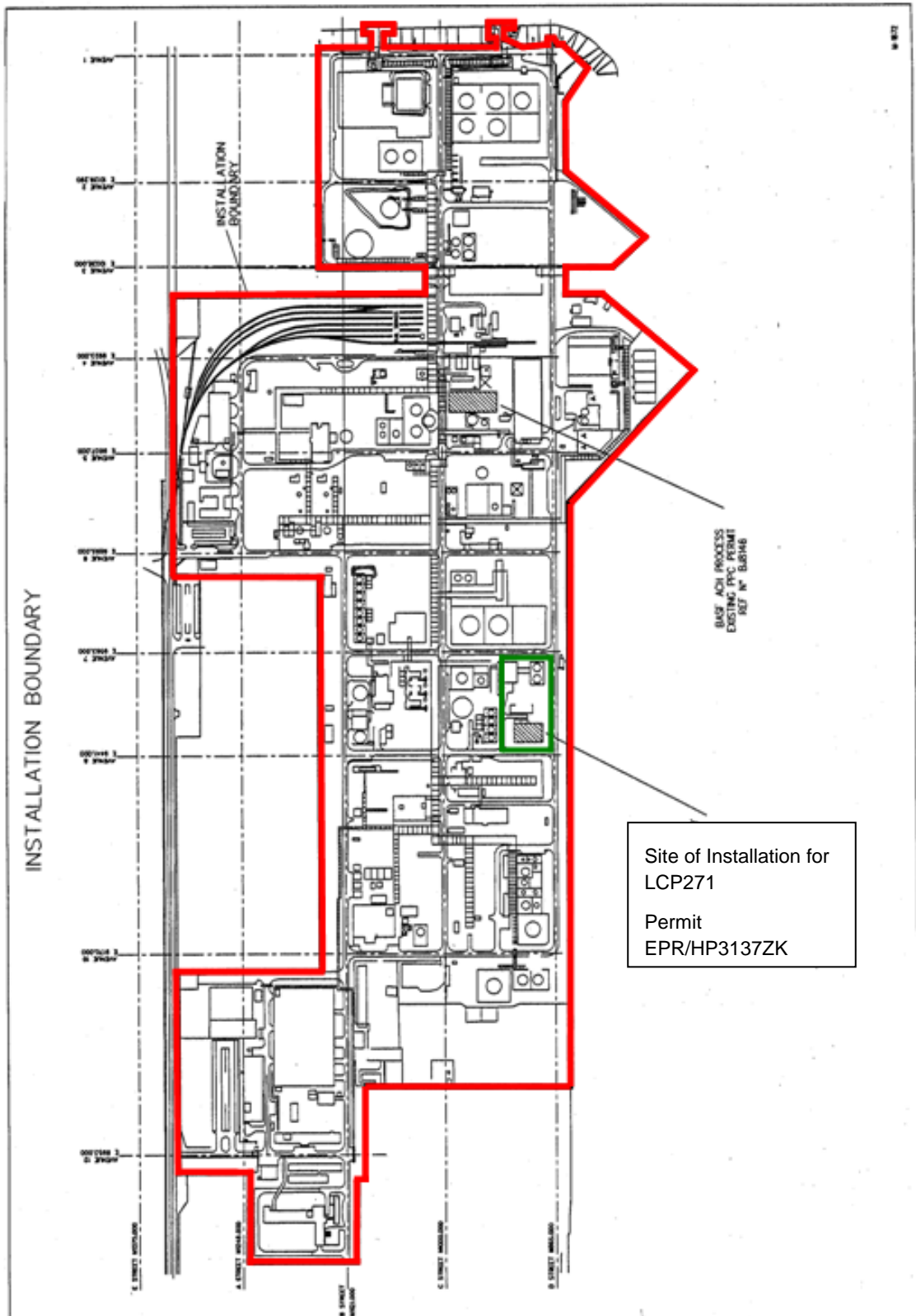
“recovery” means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“TNP Register” means the register maintained by the Environment Agency in accordance with regulation 4 of the Large Combustion Plants (Transitional National Plan) Regulations 2015 SI2015 No.1973.

“year” means calendar year ending 31 December.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means in relation to emissions from gas turbine combustion processes, the concentration in dry air at a temperature of 273.15 K, at a pressure of 101.3 kPa and with an oxygen content of 15% dry for liquid and gaseous fuels.

Schedule 7 – Site plan



END OF PERMIT