Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Northumbrian Water Limited

Industrial Effluent Treatment Works
Bran Sands
Tees Dock Road
Middlesbrough
TS6 6UE

Variation application number

EPR/LP3439LK/V010

Permit number

EPR/LP3439LK

Industrial Effluent Treatment Works
Permit number EPR/LP3439LK

Introductory note

This introductory note does not form a part of the notice

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

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

This variation authorises the following:

- Addition of a new biogas upgrading plant as a directly associated activity (DAA), with two new emission points to air for the emergency flare stack serving the gas upgrading plant (A27) and the gas upgrading plant off-gas vent (A28);
- Conversion of the two existing 5.2 MWth boilers and three of the existing 3.5 MWth combined heat and power (CHP) engines to operate on either mains gas or biogas (previously solely run on biogas). The other existing 1.3 MWth CHP engine will continue to operate on biogas only as currently permitted.

The other main features of the site remain unchanged as follows:

This permit allows Northumbrian Water Ltd to operate a hazardous and non-hazardous waste treatment facility at the Bran Sands Effluent Treatment Works and Regional Sludge Treatment Centre in Middlesbrough. The activities are regulated by the Environment Agency under the following sections of Schedule 1 to the EPR Regulations:

- **Section S5.3 A(1)(a)(i)** – Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment;
- **Section S5.4 A(1)(a)(i)** – Disposal of non-hazardous waste in a facility with a capacity exceeding 50 tonnes per day involving biological treatment; and
- **Section S5.6 A(1)(a)** – Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.

The activities at the installation comprises the aerobic treatment of hazardous and non-hazardous wastes in a number of dedicated processes or “trains” and anaerobic treatment of non-hazardous wastes. The majority of the waste arrives via dedicated pipelines, with some waste also being brought in by tanker.

The anaerobic process pre-treats waste effluent from the production of pure Terephthalic acid (PTA 2 waste) while the advanced anaerobic process (known to the operator as the “Advanced Sludge Digestion” project), integrates a sludge digestion and biological treatment process. All aerobic treatment processes are activated sludge processes, with aerobic digestion followed by sludge settlement.

The effluents from the processes then combine prior to discharge to Dabholme Gut. The digested and dewatered sludge is then exported for use as fertiliser.

Emissions from the installation mainly consist of treated effluent discharged to Dabholme Gut, and emissions to air from combustion plant flues.

The operator has waste pre-acceptance and acceptance procedures in place to ensure that only waste that can be treated by the site activities are accepted.

The operator has the relevant Technical WAMITAB competence levels, and also has an Environmental Management System accredited to ISO 14001.

There is one sensitive European site within close proximity to the installation, which is the Teesmouth and Cleveland Coast SPA. This site also contains a number of SSSIs, which are Seal Sands SSSI, and South Gare and Coatham Sands SSSI.

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 LP3439LK	Duly made 22/12/05	Application for treatment of hazardous and non-hazardous waste.
Email requesting additional information	14/03/06	Response 26/04/06
Request for additional Information	12/05/06	25/05/06 & 09/06/06
E-mail Requesting additional Information	12/06/06	15/06/06
Permit determined EPR/LP3439LK	29/09/06	Original permit issued to Northumbrian Water Limited.
Variation notice TP3438ME issued	25/10/06	
Variation notice JP3535MB issued	27/02/07	
Application for variation EPR/LP3439LK/V004	05/01/09	
Email requesting inclusion of an extra Waste Code	02/04/09	
Variation Notice EPR/LP3439LK/V004 determined	03/12/09	
Application EPR/LP3439LK/V005 (variation and consolidation)	Duly made 22/10/12	Application to vary and update the permit to modern conditions.
Additional Information Received	09/11/12	Alternative sources of COD during Lotte (PTA) effluent shutdown.
Variation determined EPR/LP3439LK/V005	18/01/13	Varied and consolidated permits (EPR/LP3439LK & EPR/HP3937PN) issued in modern condition format as EPR/LP3439LK.
Agency variation determined EPR/LP3439LK/V006	30/05/13	Environment Agency variation to implement the changes introduced by IED.
Application EPR/LP3439LK/V007 (variation and consolidation)	Duly made 26/09/13	Application to amend ammoniacal nitrogen emission limit during Alternative Operating Mode, add bespoke conditions for the Alternative Operating Mode and update the permit to modern conditions.
Variation determined EPR/LP3439LK/V007	09/12/13	Variation and consolidated permit issued in modern condition format.
Variation application EPR/LP3439LK/V008	Duly made 16/06/14	Application to increase the volume of hazardous and non-hazardous waste to be accepted by tanker to 1,250 m^3/day.
Variation determined EPR/LP3439LK/V008	03/07/14	

Status log of the permit		
Description	**Date**	**Comments**
Variation application EPR/LP3439LK/V009	Duly made 18/11/15	Application to add waste codes to certain waste tables.
Variation determined EPR/LP3439LK	12/01/16	Varied permit issued.
Application EPR/LP3439LK/V010 (variation and consolidation)	Duly made 17/10/19	Variation to add a new biogas upgrading plant and to convert three existing CHP engines to run on natural gas and biogas (previously solely run on biogas).
Additional information received	12/12/19	Response to the Schedule 5 notice dated 11/12/19, including information on odour management techniques related to the gas upgrading process and confirmation of information related to the conversion of the CHP engines.
Additional information received	17/12/19 & 18/12/19	Response to request for information dated 16/12/19, including information related to odorant and propane receipt, handling and storage and the odour control unit serving the gas upgrading plant.
Additional information received	20/12/19	Response to request for information dated 19/12/19, including information related to odorant spillage procedures.
Additional information received	08/01/20	Confirmation of the thermal input of site boilers.
Additional information received	28/01/20	Confirmation of the status of site boilers.
Variation determined EPR/LP3439LK (Billing ref: TP3804PE)	30/01/20	Varied and consolidated permit issued.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

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

Permit number

EPR/LP3439LK

Issued to

Northumbrian Water Limited ("the operator")

whose registered office is

Northumbria House
Abbey Road
Pity Me
Durham
DH1 5FJ

company registration number **02366703**

to operate a regulated facility at

Industrial Effluent Treatment Works
Bran Sands
Tees Dock Road
Middlesbrough
TS6 6UE

to the extent set out in the schedules.

The notice shall take effect from 30/01/2020

Name	Date
Rebecca Warren	**30/01/2020**

Authorised on behalf of the Environment Agency

Schedule 1

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

- Table S1.1 (Activities) as referenced in conditions 2.1.1 and 2.3.6 is amended to incorporate the following:
    - AR8 – amended to incorporate the emergency flare serving the biogas upgrading plant and the existing advanced anaerobic digestion (AAD) flare in the description of the directly associated activity (DAA).
    - AR15 – added to incorporate the combustion of natural gas in the three (3.5 MWth each) CHP engines and two (5.2 MWth each) existing boilers which were varied to operate on dual-fuel in this variation as a DAA.
    - AR16 – added to incorporate gas upgrading as a DAA.
- Table S1.2 (Operating techniques) as referenced in conditions 2.3.1 (a) and 2.3.1 (b) is amended to include the operating techniques relevant to this variation application (V010).
- Table S1.3 (Improvement programme requirements) as referenced in condition 2.4.1 is amended to:
    - Incorporate the following improvement conditions (ICs):
        - IC20
        - IC21
        - IC22
    - Update the status of the following ICs:
        - IC13
        - IC15
        - IC17
        - IC18
    - Remove IC19 (no longer applicable, as explained in the decision document).
- Table S3.1 (Point source emissions to air) as referenced in conditions 3.1.1, 3.5.1(a), 3.5.4, is amended to remove note 3 (previously included in EPR/LP3439LK/V007, Table S3.1) and update the note numbering in this table accordingly.
- Table S3.1 (Point source emissions to air) as referenced in conditions 3.1.1, 3.5.1(a), 3.5.4 and Table S4.1, is amended to incorporate the following:
    - Emission point A27 - Gas upgrading plant emergency flare stack;
    - Emission point A28 - Biogas upgrading plant stack - off-gas vent;
    - Note 4 – relevant to emission point A27;
    - Note 5 – relevant to emission point A27;
    - Note 6 – relevant to emission point A28.
- Table S4.1 (Reporting of monitoring data) as referenced in conditions 4.2.3(a) and 4.2.3(b), is amended to incorporate the following:
    - Emissions to air row amended to include A27 (gas upgrading plant flare stack)
- Table S4.4 (Reporting forms) as referenced in 4.2.2(c) and 4.2.3(b) is amended to update the reporting form relevant to the new flare added (A27) to serve the gas upgrading plant:
    - Air1

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/LP3439LK

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/LP3439LK/V010 authorising,

Northumbrian Water Limited ("the operator"),

whose registered office is

Northumbria House
Abbey Road
Pity Me
Durham
DH1 5FJ

company registration number **02366703**

to operate an installation at

Industrial Effluent Treatment Works
Bran Sands
Tees Dock Road
Middlesbrough
TS6 6UE

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

Name	Date
Rebecca Warren	**30/01/2020**

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.

1.1.4 The operator shall comply with the requirements of an approved competence scheme.

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

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

1.3 Efficient use of raw materials

1.3.1 The operator shall:

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

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

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

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

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

1.4.1 The operator shall take appropriate measures to ensure that:

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

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

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

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

2 Operations

2.1 Permitted activities

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

2.1.2 Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

2.2 The site

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

2.3 Operating techniques

2.3.1 (a) 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.

(b) 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 specified in schedule 1, table S1.2 or otherwise required under this permit, 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.

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

2.3.3 Waste shall only be accepted if:

(a) it is of a type and quantity listed in schedule 2 tables S2.2, S2.3, S2.4A, S2.4B, S2.5, S2.6, 2.7 and 2.8; and

(b) it conforms to the description in the documentation supplied by the producer and holder.

2.3.4 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.

2.3.5 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.

Hazardous waste storage and treatment

2.3.6 Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.

Use of Settled Domestic Sewage

2.3.7 The operator shall only use settled domestic sewage as a feed of last resort to the Industrial Effluent Treatment Plant in the event of the interruption of the feed from the PTA plant.

2.3.8 While adding the settled domestic sewage, the operator shall:

(a) Monitor and report the operation of the IETP to ensure compliance with the BOD and Chemical Oxygen Demand (COD) destruction requirements of the Urban Waste Water Treatment Directive (UWWTD).

(b) Monitor the final effluent concentration from the IETP for presumptive E.coli on every second day, fifth day and then weekly while processing. Should these counts exceed 50,000 per 100ml during the bathing water season, the operator shall cease adding domestic sewage to the Industrial Effluent Treatment Plant.

(c) Monitor weekly for two weeks after the use of settled sewage has stopped.

(d) Monitor the Inlet, including the sampling and flow measurement of all relevant incoming flows to calculate the total influent BOD/COD concentrations.

(e) Monitor the Outlet, by taking samples and flow readings of the combined industrial/diverted sewage final effluent BOD/COD concentrations.

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 Alternative Operating Mode

2.5.1 Notwithstanding condition 3.1.2 during the Metastable Phase the ammoniacal nitrogen limit of 3 tonnes per day based on 5 day rolling average shall not be exceeded at the emission point W1 shown on drawing No CC0952 A. The operator shall inform the Environment Agency immediately in the event that the concentration of ammoniacal nitrogen exceeds 100 mg/l.

2.5.2 During the Flush-Out Phase the total daily emission of ammoniacal nitrogen at the emission point W1, shown on drawing No CC0952 A, shall not exceed 4 tonnes per day.

2.5.3 Every two years, the operator shall systematically review operations while running in the Alternative Operating Mode in order to check that the operation is minimising the environmental impact of operation in this mode. The operator shall submit a written summary report to the Environment Agency describing the review. The first summary report shall be submitted on or before 31st December 2015.

2.5.4 The operator shall monitor the daily average Ammoniacal Nitrogen concentration and effluent flow rate and calculate the quantity of Ammoniacal Nitrogen in the discharge to controlled waters daily during the Flush-Out Phase. These daily loads shall be reported in writing to the Environment Agency within one month of the cessation of any Flush-Out Phase.

2.5.5 In the event of the PTA plant being permanently shutdown, within two years of being notified of this shutdown, the operator shall reconfigure the IETP to meet the ammoniacal nitrogen limit for normal operating conditions.

2.5.6 The Operator shall notify the Environment Agency as soon as reasonably practicable of any planned switch to Alternative Operating Mode with the following details:

- Date the IETP will commence in Alternative Operating Mode

- Explanations for running the IETP in Alternative Operating Mode
- Anticipated duration of the Alternative Operating Mode.

2.5.7 The Operator shall notify the Environment Agency within 24 hours of the PTA plant starting to recommence discharges to the IETP.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.

3.1.2 The limits given in schedule 3 shall not be exceeded except for the limit for ammoniacal nitrogen when the alternative limits in conditions 2.5.1 and 2.5.2 apply.

3.1.3 Where a substance is specified in schedule 3 table S3.2 (R1, R2 and R3) but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.

3.1.4 Total annual emissions from the emission point(s) set out in schedule 3 table S3.2 of a substance listed in schedule 3 table S3.3 shall not exceed the relevant limit in table S3.3.

3.1.5 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;

(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;

(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;

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

3.5 Monitoring

3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

(a) point source emissions specified in tables S3.1 and S3.2;

(b) process monitoring specified in table S3.4.

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

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

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 and S3.2 unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

(a) be legible;

(b) be made as soon as reasonably practicable;

(c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and

(d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

(i) off-site environmental effects; and

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

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

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

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

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

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

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

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

(a) in respect of the parameters and emission points specified in schedule 4 table S4.1;

(b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and

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

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

4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.3 Notifications

4.3.1 In the event:

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

4.3.2 Any information provided under condition 4.3.1 (a)(i) or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

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

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

Where the operator is a registered company:

(a) any change in the operator's trading name, registered name or registered office address; and

(b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

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

(a) any change in the operator's name or address; and

(b) any steps taken with a view to the dissolution of the operator.

In any other case:

(a) the death of any of the named operators (where the operator consists of more than one named individual);

(b) any change in the operator's name(s) or address(es); and

(c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

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

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

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

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

4.3.7 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.

4.4 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 "without delay", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
AR1	S5.6 A(1)(a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in Section 5.1, 5.2, 5.3 and paragraph (b) of this Section, except – (i) temporary storage, pending collection, on the site where the waste is generated, or (ii) activities falling within Section 5.2.	D15 – Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.	Storage of waste types as specified in Schedule 2 tables S2.2, S2.4B and S2.5.
AR2	S5.4 A(1)(a)(i) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.	D8 - Anaerobic treatment of non-hazardous waste waters from PTA manufacturing plant (two reactors) with a capacity exceeding 50 tonnes per day.	Receipt of wastewater, treatment of waste water and transfer into Train A or Train B, discharge of biogas to flares and transfer of off-gas to municipal waste water treated train B. Waste specified in Schedule 2 table S2.2.
AR3	S5.3 A(1)(a)(i) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment.	D8 - Aerobic treatment of hazardous waste water in train B (cells B1 to B9) with a capacity exceeding 10 tonnes per day.	Receipt of waste water into the treatment process through to the discharge at emission point W1. Hazardous waste types as specified in Schedule 2 table S2.7.
AR4	S5.3 A(1)(a)(i) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment.	D8 - Aerobic treatment of hazardous waste water in train A with a capacity exceeding 10 tonnes per day.	Receipt of waste water into the treatment process through to the discharge at emission point W1. Hazardous waste types as specified in Schedule 2 table S2.6.
AR5	S5.4 A(1)(a)(i) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.	D8 - pH adjustment followed by aerobic treatment of non-hazardous wastewater in train A with a capacity exceeding 50 tonnes per day.	Receipt of waste water into the treatment process through to the discharge at emission point W1. Non-hazardous waste types as specified in Schedule 2 table S2.6.

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
AR6	S5.4 A(1)(a)(i) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.	D8 - Aerobic treatment of non-hazardous wastewater in train B (Cells B1 to B9) with a capacity exceeding 50 tonnes per day.	Receipt of wastewater into the treatment process through to the discharge at emission point W1. Non-hazardous waste types as specified in Schedule 2 table S2.7.
AR7	S5.4 A(1)(a)(i) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.	D8 - Anaerobic treatment of non-hazardous waste sludges in Advanced Anaerobic Digestion (AAD) Plant with a capacity exceeding 50 tonnes per day.	Receipt of sludge from pipeline, road tanker or tipping wagon (for sludge cake import) into the dewatering facilities and then treatment in the AAD plant. Non-hazardous waste types as specified in Schedule 2 table S2.8.
	Directly Associated Activity		
AR8	Flaring of biogas	Two biogas flares (4 MWth each), an Advanced Anaerobic Digestion (AAD) biogas flare and an emergency flare to serve the gas upgrading plant.	Only under emergency circumstances, or when the power units and/or auxiliary boilers are not in operation.
AR9	Biogas storage and transfer	Reuse of biogas in AAD plant.	From PTA Gas Buffer Tank via pipeline to the AAD boilers.
AR10	Storage of non-hazardous waste	D15 - Storage of non-hazardous waste.	Waste types as specified in Schedule 2 tables S2.2, S2.3 and S2.4A.
AR11	Cooling of industrial wastewater	Cooling of industrial wastewater using treated municipal final effluent.	Receipt and use of cooling water.
AR12	Sludge transfer	The transfer of sludge produced from the process to the Regional Sludge Treatment Centre.	From storage of the sludge produced to the point where it combines with other sludge.
AR13	Reuse of settled sewage	Reuse of settled sewage as COD source in Industrial Effluent Treatment Plant (IETP).	Only in the event of shutdown of the PTA plant. Operation of the IETP to comply with the BOD and COD destruction requirements of the Urban Waste Water Treatment Directive. Only in accordance with conditions 2.3.7 and 2.3.8.

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
AR14	Burning of waste as a fuel	Combustion of sewage biogas for the purpose of steam generation.	Combustion of biogas in four CHP engines, three 3.5 MWth and one 1.3 MWth, with an aggregated thermal input not exceeding 11.8 MWth. Combustion of biogas in two boilers, 5.23 MWth each, with an aggregated thermal input not exceeding 10.46 MWth.
AR15	Burning of natural gas as a fuel	Combustion of natural gas for the purpose of steam and electricity generation.	Combustion of natural gas in three CHP engines, 3.5 MWth each, with an aggregated thermal input not exceeding 10.5 MWth. Combustion of natural gas in two boilers, 5.23 MWth each, with an aggregated thermal input not exceeding 10.46 MWth.
AR16	Gas upgrading	Upgrading of biogas to biomethane (including the removal of moisture and other substances such as carbon dioxide, hydrogen sulphide and Volatile organic compounds) for injection into the National Grid.	From the receipt of biogas produced at the on-site anaerobic digestion process to injection into the National Grid. This includes return of off-specification biogas for combustion to the on-site CHP engines, auxiliary boilers and emergency flare.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Process Description	Section 5.1 of Application (document reference DOC 09762 AU3979 PPC Supplementary Technical Report for Bran Sands RSTC) (EPR/HP3937PN)	07/07/04
Control System	Section 5.3 of application document DOC 09762 AU3979. (EPR/HP3937PN)	07/07/04
Application	The response to section 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.1.12, 2.14, 2.17 to 2.1.24 and 2.2 in the Application and the relevant sections of the supplementary information referenced in the responses to the questions.	22/12/06
Receipt of additional information to the application	Sections 2.7 of the additional information, relating to the types and quantities of waste to be accepted.	26/04/06
Receipt of additional information to the application	Section 4.1 of the response to the request for information dated 12th May 2006 relating to the types and quantities of waste to be accepted.	30/05/06
Receipt of additional information to the application	E-mail providing clarification on the actual efflux velocity from the flares.	09/06/06
Receipt of additional information to the application	Details of waste types to be accepted at the installation.	24/08/06
Application for a variation	Operation of Treatment Train A.	20/10/06
Receipt of additional information to the application	Details of further waste types to be accepted at the installation.	20/10/06
Receipt of additional information to the application	Use of fully treated municipal effluent	17/11/06
Process Description and Control System	Section 2.1 of the Application for variation UP3032XG (EPR/HP3937PN)	30/07/08
Abatement of emissions to air	Section 2.2.1.1 – 2.2.1.3, 2.2.4 and 2.2.6.1 of the Application for variation UP3032XG (EPR/HP3937PN)	30/07/08
Abatement of emissions to water	Section 2.2.2.1, 2.2.2.2 and 2.2.5 of the Application for variation UP3032XG (EPR/HP3937PN)	30/07/08
Application for a variation	Sections 2 and 3 of the Supplementary Technical Information Report v1, ref PD/BS/LP3439LK/V4 dated Dec-08.	05/01/09
Application for variation EPR/LP3439LK/V005 & EPR/HP3937PN/V005	Accident risk assessment for industrial tanker discharges in response to section 6 - Environmental Risk Assessment, part C2 of the application form Liquid waste acceptance procedure reference 16007-000-DOC-SIN-B21-018-01 in response to section 3d - Information for specific sectors (Appendix 5)	17/10/12 23/10/12
Application for variation EPR/LP3439LK/V007	Operational plans for: • Train A COD Failure & Recovery • Train A TKN Failure & Recovery and • PTA Plant Shutdown (TKN)	20/09/13

Application for variation EPR/LP3439LK/V009	Email response to request for further information	22/12/15
Application for variation EPR/LP3439LK/V010	Application supporting document: *Environmental Permit Variation Application for Biogas to Biomethane at Bran Sands Industrial Effluent Treatment Works (Ref: LP3439LK)*	17/10/19
Additional information received	Response to the Schedule 5 notice dated 11/12/19, including information on odour management techniques related to the gas upgrading process and confirmation of information related to the conversion of the CHP engines.	12/12/19
Additional information received	Response to request for information dated 16/12/19, including information related to odorant and propane receipt, handling and storage and the odour control unit serving the gas upgrading plant.	17/12/19 & 18/12/19
Additional information received	Response to request for information dated 19/12/19, including information related to odorant spillage procedures.	20/12/19

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC13 From EPR/HP3937PN	By measurement, the operator shall undertake a rigorous heat balance over the gas engines, looking at the balance at normal, minimum and maximum gas rates. This balance shall be extended to include the ultimate disposal routes for the waste heat generated and absorbed by the cooling water. The operator is to review potential alternative beneficial use for the heat that is discharged to atmosphere by the air coolers. This review should include potential on site and off site uses. The conclusions of this work are to be summarised in a report to be sent to the Environment Agency.	Complete
IC15 From EPR/HP3937PN	The operator is to study the impact of operating controls on the generation efficiency of the gas engines and the emissions of NOx, CO and VOC's and demonstrate that the operation has been optimised to maximise the energy recovered while minimising the emissions of polluting materials. A written summary of this work, preferably including a graphical presentation of the results of the work done, is to be sent to the Environment Agency.	Complete
IC17 From EPR/HP3937PN	In the application, UP3032XG, the operator states that he intends to use Raw (Worsall) water for control of initial sludge cake dilution and Towns Water for the water feed for thermal hydrolysis. The operator is to review these requirements, and justify why treated effluent produced on site, possibly requiring sanitation prior to use, cannot be used for these and other process water requirements on site. A written report of this review is to be submitted to the Environment Agency.	Complete
IC18 From EPR/HP3937PN	The operator is to investigate ways in which the ammonia content of the effluent from the Phase 1 sump can be reduced to BAT levels prior to discharge to controlled waters. BAT for ammonia destruction should be taken as the levels of ammonia destruction achieved on the operators neighbouring Industrial Effluent Treatment Plant, authorised under EA/EPR/LP3439LK. A written report of this investigation, which is to include a realistic timetable for implementation, is to be submitted to the Environment Agency.	Complete
IC20	The operator shall carry out a monitoring study to verify the assumptions made in the application in relation to the release of pollutants to air from the gas upgrading plant (emission point A28). The study shall include the monitoring of point source releases to air from	31/01/21

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	the biogas upgrading plant during normal operation, having regard to the Environment Agency guidance, *Monitoring stack emissions: environmental permits* and to MCERTS standards. As a minimum, two separate monitoring campaigns in a year shall be completed as follows: • one initial monitoring survey six months following commissioning of the biogas upgrading plant and another monitoring survey six months thereafter The pollutants to be monitored shall include: • total volatile organic compounds; and • hydrogen sulphide	
IC21	Following the completion of IC20, the operator shall undertake a quantitative emissions impact assessment of all point source releases to air, using the information obtained through the emissions monitoring. The emissions impact assessment report and all associated monitoring reports and assessments shall be submitted in writing to the Environment Agency for review. The emissions impact assessment shall, as a minimum, include: • reports showing details of the monitoring undertaken and the results obtained; • results of the assessment of long and short term impacts from the emissions in accordance with Environment Agency Guidance – Air emissions risk assessment for your environmental permit • a completed H1 assessment software tool If the H1 assessment shows potential long or short term impacts from the emissions, the operator shall propose an action plan to reduce the impacts of the substances identified.	26/02/21
IC22	The operator shall submit an odour management plan to the Environment Agency for written agreement. The plan shall take into account the appropriate measures for odour control specified in Environment Agency Draft Technical Guidance for Anaerobic Digestion (Reference LIT 8737, November 2013) and H4 - Odour Management. Once the odour management plan has been agreed with the Environment Agency, the installation must be operated in accordance with this management plan.	31/07/20

Schedule 2 – Waste types, raw materials and fuels

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

Table S2.2 Permitted waste types and quantities for Storage of Waste in 2 No PTA Storage Tanks and Treatment in Train A or Train B	
Maximum quantity	**Total quantity stored – 7,360 m^3** **Total quantity accepted for treatment - 12,480 m^3 per day**
Waste code	**Description**
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 02	**Wastes from the MFSU of plastics, synthetic rubber and man-made fibres**
07 02 99	Waste not otherwise specified from the manufacture of thermoplastic polymers, (PTA effluent).

Table S2.3 Permitted waste types and quantities for Storage of Waste in 2 No SBCO Tanks	
Maximum quantity	**Total quantity stored 3,600 m^3** **Total quantity accepted for treatment – 1,200 m^3/day**
Waste code	**Description**
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**
16 10	**Aqueous liquid wastes destined for off-site treatment**
16 10 02	Aqueous liquid wastes other than those mentioned in 16 10 01 (SBCO cokeworks liquor)

Table S2.4A Permitted waste types and quantities for Storage of Waste in Road Tanker storage and transfer tank and No 1 Waste Tank	
Maximum quantity	**Total quantity stored 1,800 m^3** **Total quantity accepted for treatment 1,250 m^3/day**
Waste code	**Description**
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 02	**Wastes from the preparation and processing of meat, fish and other foods of animal origin**
02 02 99	aqueous waste from animal and fish processing including animal rendering.
06	**WASTES FROM INORGANIC CHEMICAL PROCESSES**
06 03	**Wastes from the MFSU of salts and their solutions and metallic oxides**
06 03 99	wastes not otherwise specified including Sump water for electronic component manufacturer.
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 01	**Wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals**
07 01 99	aqueous waste from biodiesel production.

Table S2.4A Permitted waste types and quantities for Storage of Waste in Road Tanker storage and transfer tank and No 1 Waste Tank	
Maximum quantity	**Total quantity stored 1,800 m^3** **Total quantity accepted for treatment 1,250 m^3/day**
Waste code	**Description**
07 02	**Wastes from the MFSU of plastics, synthetic rubber and man-made fibres**
07 02 99	waste not otherwise specified from the manufacture of thermoplastic polymers including PTA effluent.
07 07	**Wastes from the MFSU of fine chemicals and chemical products not otherwise specified**
07 07 99	waste not otherwise specified from manufacture of fine chemicals including IBC wash water containing trace vegetable oil, aqueous mixture of caustic, ethanol and drained effluent from pipeline.
08	**WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS**
08 03	**Wastes from MFSU of printing inks**
08 03 08	aqueous liquid waste containing ink.
08 04	**Wastes from MFSU of adhesives and sealants (including waterproofing products)**
08 04 16	aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15.
15	**WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**
15 01	**Packaging (including separately collected municipal packaging waste)**
15 01 01	aqueous effluent form paper and cardboard packaging, including cardboard Dryer Effluent.
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**
16 07	**Wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)**
16 07 99	wastes not otherwise specified from transport and stock tank cleaning including Pipeline condensate residues, Line washings and pipeline condensate.
16 10	**Aqueous liquid wastes destined for off-site treatment**
16 10 02	aqueous liquid waste destined for off site treatment including Dryer effluent and any other than those mentioned in 16 10 01.
18	**WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)**
18 02	**Wastes from research, diagnosis, treatment or prevention of disease involving animals**
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 01	**Wastes from incineration or pyrolysis of waste**
19 01 99	waste not otherwise specified in the category for waste from incineration or pyrolysis of waste.
19 07	**Landfill leachate**
19 07 03	landfill leachate other than those mentioned in 19 07 02.
19 08	**Wastes from waste water treatment plants not otherwise specified**
19 08 99	waste from waste water treatment plants not otherwise specified including bund water.

Table S2.4A Permitted waste types and quantities for Storage of Waste in Road Tanker storage and transfer tank and No 1 Waste Tank	
Maximum quantity	**Total quantity stored 1,800 m^3** **Total quantity accepted for treatment 1,250 m^3/day**
Waste code	**Description**
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 03	**Other municipal wastes**
20 03 99	municipal wastes not otherwise specified including lagoon water and recycled pit washings.

Table S2.4B Permitted waste types and quantities for Storage of Waste in Road Tanker storage and transfer tank and No 1 Waste Tank	
Maximum quantity	**Total quantity stored 1,800 m^3** **Total quantity accepted for treatment 1,250 m^3/day**
Waste code	**Description**
06	**WASTES FROM INORGANIC CHEMICAL PROCESSES**
06 01	**Wastes from the manufacture, formulation, supply and use (MFSU) of acids**
06 01 01*	sulphuric acid and sulphurous acid
06 01 02*	hydrochloric acid
06 02	**Wastes from the MFSU of bases**
06 02 01*	calcium hydroxide
06 02 04*	waste from inorganic chemical manufacture including bases.
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 01	**Wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals**
07 01 01*	aqueous washings and mother liquors from organic chemicals processes.
07 01 04*	other organic solvents, washing liquids and mother liquors from organic chemicals processes.
07 02	**Wastes from the MFSU of plastics, synthetic rubber and man-made fibres**
07 02 08*	other still bottoms and reaction residues – washings from a reactor vessel in polyester production.
07 03	**Wastes from the MFSU of organic dyes and pigments (except 06 11)**
07 03 01*	aqueous washing liquids and mother liquors
07 04	**Wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides**
07 04 01*	aqueous washing liquids and mother liquors
07 05	**Wastes from the MFSU of pharmaceuticals**
07 05 01*	aqueous washing liquids and mother liquors from the manufacture and use of pharmaceuticals.
07 06	**Wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics**
07 06 01*	aqueous washing liquids and mother liquors
07 07	**Wastes from the MFSU of fine chemicals and chemical products not otherwise specified**

Table S2.4B Permitted waste types and quantities for Storage of Waste in Road Tanker storage and transfer tank and No 1 Waste Tank	
Maximum quantity	**Total quantity stored 1,800 m^3** **Total quantity accepted for treatment 1,250 m^3/day**
Waste code	**Description**
07 07 01*	aqueous washing liquids and mother liquors from the manufacture and use of fine chemicals and chemical products.
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**
16 07	**Wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)**
16 07 09*	wastes containing Dangerous Substances resulting from transport and stock tank cleaning including Condensate from storage tanks and pipeline condensate containing trace hydrocarbons.
16 10	**Aqueous liquid wastes destined for off-site treatment**
16 10 01*	aqueous liquid wastes containing dangerous substances
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 07	**Landfill leachate**
19 07 02*	landfill leachate containing hazardous substances

Table S2.5 Permitted waste types and quantities for Storage of Waste in 2 No Invista Storage Tank	
Maximum quantity	**Total quantity stored - 190 m^3** **Total quantity accepted for treatment – 9,000 m^3/day**
Waste code	**Description**
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 01	**Wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals**
07 01 01*	aqueous washing liquids and mother liquors.

Table S2.6 Permitted waste types and quantities for Treatment of Waste in Train A	
Maximum quantity	**Treatment capacity 14,280 m^3/day**
Waste code	**Description**
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 02	**Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 02 99	aqueous waste from animal and fish processing including animal rendering.
06	**WASTES FROM INORGANIC CHEMICAL PROCESSES**
06 01	**Wastes from the manufacture, formulation, supply and use (MFSU) of acids**
06 01 01*	sulphuric acid and sulphurous acid
06 01 02*	hydrochloric acid
06 02	**Wastes from the MFSU of bases**

Table S2.6 Permitted waste types and quantities for Treatment of Waste in Train A	
Maximum quantity	**Treatment capacity 14,280 m^3/day**
Waste code	**Description**
06 02 01*	calcium hydroxide
06 02 04*	waste from inorganic chemical manufacture including bases.
06 03	**Wastes from the MFSU of salts and their solutions and metallic oxides**
06 03 99	wastes not otherwise specified including sump water for electronic component manufacturer.
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 01	**Wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals**
07 01 01*	aqueous washings and mother liquors from organic chemicals processes
07 01 04*	other organic solvents, washing liquids and mother liquors from organic chemicals processes.
07 01 99	aqueous waste from biodiesel production.
07 02	**Wastes from the MFSU of plastics, synthetic rubber and man-made fibres**
07 02 08*	other still bottoms and reaction residues – washings from a reactor vessel in polyester production.
07 02 99	PTA effluent and anaerobically treated PTA effluent.
07 02 99	waste not otherwise specified from the manufacture of thermoplastic polymers including PTA effluent.
07 03	**Wastes from the MFSU of organic dyes and pigments (except 06 11)**
07 03 01*	aqueous washing liquids and mother liquors
07 04	**Wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides**
07 04 01*	aqueous washing liquids and mother liquors
07 05	**Wastes from the MFSU of pharmaceuticals**
07 05 01*	aqueous washing liquids and mother liquors from the manufacture and use of pharmaceuticals
07 06	**Wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics**
07 06 01*	aqueous washing liquids and mother liquors
07 07	**Wastes from the MFSU of fine chemicals and chemical products not otherwise specified**
07 07 01*	aqueous washing liquids and mother liquors from the manufacture and use of fine chemicals and chemical products
07 07 99	waste not otherwise specified from manufacture of fine chemicals including IBC wash water containing trace vegetable oil, aqueous mixtures of caustic/ethanol and drained effluent from pipelines
08	**WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS**
08 03	**Wastes from MFSU of printing inks**
08 03 08	aqueous liquid waste containing ink
08 04	**Wastes from MFSU of adhesives and sealants (including waterproofing products)**
08 04 16	aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15

Table S2.6 Permitted waste types and quantities for Treatment of Waste in Train A	
Maximum quantity	**Treatment capacity 14,280 m^3/day**
Waste code	**Description**
15	**WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**
15 01	**Packaging (including separately collected municipal packaging waste)**
15 01 01	aqueous effluent from paper and cardboard packaging, including cardboard Drier Effluent
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**
16 07	**Wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)**
16 07 09*	wastes containing Dangerous Substances resulting from transport and stock tank cleaning including Condensate from storage tanks and pipeline condensate containing trace hydrocarbons
16 07 99	wastes not otherwise specified from transport and stock tank cleaning including Pipeline condensate residues, Line washings and pipeline condensate
16 10	**Aqueous liquid wastes destined for off-site treatment**
16 10 01*	aqueous liquid wastes containing dangerous substances
16 10 02	aqueous liquid waste destined for off site treatment including Dryer effluent and SBCO cokeworks liquor
18	**WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)**
18 02	**Wastes from research, diagnosis, treatment or prevention of disease involving animals**
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 01	**Wastes from incineration or pyrolysis of waste**
19 01 06*	aqueous liquid wastes from gas treatment and other aqueous liquid wastes
19 01 99	waste not otherwise specified in the category for waste from incineration or pyrolysis of waste
19 06	**Wastes from anaerobic treatment of waste**
19 06 03	liquor from anaerobic treatment of municipal waste
19 06 99	wastes not otherwise specified including from the anaerobic treatment of waste
19 07	**Landfill leachate**
19 07 02*	landfill leachate containing hazardous substances
19 07 03	landfill leachate other than those mentioned in 19 07 02
19 08	**Wastes from waste water treatment plants not otherwise specified**
19 08 05	sludges from treatment of urban waste water - municipal mixed liquor
19 08 99	waste from waste water treatment plants not otherwise specified including bund water
19 08 99	wastes not otherwise specified – settled domestic sewage as a feed of last resort in IETP in compliance with conditions 2.3.7 and 2.3.8.
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**

Table S2.6 Permitted waste types and quantities for Treatment of Waste in Train A	
Maximum quantity	**Treatment capacity 14,280 m^3/day**
Waste code	**Description**
20 03	**Other municipal wastes**
20 03 99	municipal wastes not otherwise specified including Lagoon water and recycled pit washings

Table S2.7 Permitted waste types and quantities for Treatment of Waste in Train B Cells B1 to B9	
Maximum quantity	**Treatment capacity 9,600 m^3/day**
Waste code	**Description**
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 02	**Wastes from the preparation and processing of meat, fish and other foods of animal origin**
02 02 99	aqueous waste from animal and fish processing including animal rendering.
06	**WASTES FROM INORGANIC CHEMICAL PROCESSES**
06 01	**Wastes from the manufacture, formulation, supply and use (MFSU) of acids**
06 01 01*	sulphuric acid and sulphurous acid
06 01 02*	hydrochloric acid
06 02	**Wastes from the MFSU of bases**
06 02 01*	calcium hydroxide
06 02 04*	waste from inorganic chemical manufacture including bases.
06 03	**Wastes from the MFSU of salts and their solutions and metallic oxides**
06 03 99	wastes not otherwise specified including sump water for electronic component manufacturer.
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 01	**Wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals**
07 01 01*	aqueous washings and mother liquors from organic chemicals processes.
07 01 04*	other organic solvents, washing liquids and mother liquors.
07 01 99	aqueous waste from biodiesel production.
07 02	**Wastes from the MFSU of plastics, synthetic rubber and man-made fibres**
07 02 08*	other still bottoms and reaction residues – washings from a reactor vessel in polyester production.
07 02 99	waste not otherwise specified from the manufacture of thermoplastic polymers including PTA effluent.
07 03	**Wastes from the MFSU of organic dyes and pigments (except 06 11)**
07 03 01*	aqueous washing liquids and mother liquors
07 04	**Wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides**
07 04 01*	aqueous washing liquids and mother liquors
07 05	**Wastes from the MFSU of pharmaceuticals**

Table S2.7 Permitted waste types and quantities for Treatment of Waste in Train B Cells B1 to B9	
Maximum quantity	**Treatment capacity 9,600 m^3/day**
Waste code	**Description**
07 05 01*	aqueous washing liquids and mother liquors from the manufacture and use of pharmaceuticals.
07 06	**Wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics**
07 06 01*	aqueous washing liquids and mother liquors
07 07	**Wastes from the MFSU of fine chemicals and chemical products not otherwise specified**
07 07 01*	aqueous washing liquids and mother liquors from the manufacture and use of fine chemicals and chemical products.
07 07 99	waste not otherwise specified from manufacture of fine chemicals including IBC wash water containing trace vegetable oil, aqueous mixtures of caustic/ethanol and drained effluent from pipelines.
08	**WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS**
08 03	**Wastes from MFSU of printing inks**
08 03 08	aqueous liquid waste containing ink.
08 04	**Wastes from MFSU of adhesives and sealants (including waterproofing products)**
08 04 16	aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15.
15	**WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**
15 01	**Packaging (including separately collected municipal packaging waste)**
15 01 01	aqueous effluent from paper and cardboard packaging, including cardboard Dryer Effluent
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**
16 07	**Wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)**
16 07 09*	wastes containing Dangerous Substances resulting from transport and stock tank cleaning including Condensate from storage tanks, line washings and pipeline condensate containing trace hydrocarbons.
16 07 99	wastes not otherwise specified from transport and stock tank cleaning including Pipeline condensate residues, Line washings and pipeline condensate
16 10	**Aqueous liquid wastes destined for off-site treatment**
16 10 01*	aqueous liquid wastes containing dangerous substances
16 10 02	aqueous liquid waste destined for off site treatment including Dryer effluent and any other than those mentioned in 16 10 01
18	**WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)**
18 02	**Wastes from research, diagnosis, treatment or prevention of disease involving animals**
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**

Table S2.7 Permitted waste types and quantities for Treatment of Waste in Train B Cells B1 to B9	
Maximum quantity	**Treatment capacity 9,600 m^3/day**
Waste code	**Description**
19 01	**Wastes from incineration or pyrolysis of waste**
19 01 99	waste not otherwise specified in the category for waste from incineration or pyrolysis of waste
19 06	**Wastes from anaerobic treatment of waste**
19 06 03	liquor from anaerobic treatment of municipal waste
19 06 99	wastes not otherwise specified including from the anaerobic treatment of waste.
19 07	**Landfill leachate**
19 07 02*	landfill leachate containing hazardous substances
19 07 03	landfill leachate other than those mentioned in 19 07 02
19 08	**Wastes from waste water treatment plants not otherwise specified**
19 08 05	sludges from treatment of urban waste water – municipal mixed liquor
19 08 99	waste from waste water treatment plants not otherwise specified including bund water
19 08 99	wastes not otherwise specified – settled domestic sewage as a feed of last resort in IETP in compliance with conditions 2.3.7 and 2.3.8.
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 03	**Other municipal wastes**
20 03 99	municipal wastes not otherwise specified including lagoon water and recycled pit washings

Table S2.8 Permitted waste types and quantities for Advanced Anaerobic Digestion	
Maximum quantity	N/A
Waste code	**Description**
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 08	**Wastes from waste water treatment plants not otherwise specified**
19 08 05	Sludges from treatment of urban waste water

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method (Note 1)**
A1 [Point 29 North stack on drawing No CC0952 A, submitted as part of the application]	Flare 1 (Emergency Flare)	-	-	-	Note 3	-
A2 [Point 29 North stack on drawing No CC0952 A, submitted as part of the application]	Flare 2 (Emergency Flare)	-	-	-	Note 3	-
Vents from tanks 3, 4, 5, 6, 7, 8, 11, 12 and 13 [as shown on drawing No CC0952A, submitted as part of the application]	Vents from Chemical storage tanks 3, 4, 5, 6, 7, 8, 11, 12, 13	-	-	-	-	-
Vents from balancing tanks 2, 9 and 10 [as shown on drawing No CC0952 A, submitted as part of the application]	Covered wastewater balancing tanks 2, 9 and 10	-	-	-	-	-
Regional Sludge Treatment Centre						
A26 (Jetty sludge storage area) RSTC	Jetty Odour Abatement Unit	-	-	-	-	-
A13 (“Phase I Biofilter” on site plan) RSTC	Central Odour Abatement Unit Stack (Phase I Biofilter)	Hydrogen sulphide	5 ppm v/v (Note 2)	-	Continuous	Continuous emission monitors
A18 (“Phase II Biofilter Stack” on site plan)	Central Odour Abatement Unit Stack (Phase II Biofilter)	Hydrogen sulphide	5 ppm v/v (Note 2)	-	Continuous	Continuous emission monitors
A19, A20, A21 & A22 (Location 8 on Site Plan, Drawing No 61060031-250-000-111-DDG-001)	Biogas Engine 1, 2, 3 & 4 for locations A19, A20,	Oxides of Nitrogen	-	-	-	BS EN 14792 (instrumental method)
		Carbon Monoxide				BS EN 15058

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method (Note 1)**
	A21 & A22 respectively	Total Volatile Organic Compounds (as carbon)				BS EN 12619: 1999
A23 (Location 9 on Site Plan, Drawing No 61060031-250-000-111-DDG-001)	Boiler 1	-	-	-	-	-
A24 (Location 9 on Site Plan, Drawing No 61060031-250-000-111-DDG-001)	Boiler 2	-	-	-	-	-
A25 (Location 10 on Site Plan, Drawing No 61060031-250-000-111-DDG-001)	Emergency Flare	-	-	-	-	-
A27 (as shown on *Bran Sands Site Layout – Existing Emission Points,* submitted 06/09/2019)	Gas upgrading plant emergency flare stack (Note 4)	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	150 mg/m^3	Hourly average	(Note 5)	BS EN 14792
		Carbon monoxide	50 mg/m^3			BS EN 15058
		Total VOCs	10 mg/m^3			BS EN 12619:2013
A28 (as shown on *Bran Sands Site Layout – Existing Emission Points,* submitted 06/09/2019)	Biogas upgrading plant stack - off-gas vent	-	-	-	(Note 6)	-

Note 1 – If the standard quoted in this table is withdrawn and replaced by a new standard, the operator is expected to analyse the material to that new standard. The analytical standard used may be changed by written agreement with the Environment Agency.

Note 2 – No eight-hour average (of ½ hourly averages) shall exceed this limit.

Note 3 – During emergency flare the following detail should be recorded: date of flare, number of occasions in a day the flare took place, duration of the flare on each occasion and accumulated length of time the flare took place.

Note 4 – These limits are based on normal operating conditions and load - temperature 0°C (273K); pressure: 101.3 kPa and oxygen: 3 per cent (dry gas). The measurement uncertainty specified in the Environment Agency guidance, *Monitoring stack emissions: environmental permits* shall apply.

Note 5 - Monitoring to be undertaken 12 months after commissioning of the emergency flare. Following commissioning, monitoring to be undertaken in the event the emergency flare has been operational for more than 10 per cent of a year (876 hours). Record of operating hours to be submitted annually to the Environment Agency.

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method (Note 1)**
Note 6 – Monitoring requirements to be reviewed by the Environment Agency following the completion of improvement condition 20 and 21.						

Table S3.2 Point source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W1 – emission to Dabholme Gut [as shown on drawing No CC0952 A, submitted as part of the application]	Total suspended solids	Effluent Treatment works	400 mg/l	24-hour time proportional composite sample	Daily	Note 1
W1	TSS	Effluent Treatment works	200 mg/l	5-day rolling Average	Daily	Note 1
W1	pH	Effluent Treatment Works	Min 6 Max 10	Hourly average	Continuous	Note 1
W1	Temperature	Effluent Treatment Works	No greater than 37°C	Hourly average	Continuous	Temperature probe
W1	Flow	Effluent Treatment Works	563 l/second	Hourly average	Continuous	SCA estimation of Flow and Load, ISBN 011752364X
W1	Copper	Effluent Treatment Works	0.5 mg/l	24-hour time proportional composite sample	Daily	Note 1
W1	Biological Oxygen Demand	Effluent Treatment Works	90 mg/l	24-hour time proportional composite sample	Daily	Note 1
W1	Biological Oxygen Demand	Effluent Treatment works	30 mg/l	5-day rolling Average	Daily	Note 1
W1	Ammoniacal Nitrogen	Effluent Treatment Works	30 mg/l	24-hour time proportional composite sample	Daily	Note 1
W1	Ammoniacal Nitrogen	Effluent Treatment works	10 mg/l	5-day rolling Average	Daily	Note 1

Table S3.2 Point source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W1	Daily Volume	Effluent Treatment Works	48,600 m^3/ day	24 hours starting 06:00 hrs every day.	Continuous	SCA estimation of Flow and Load, ISBN 011752364X
W1	Mercury and its compounds, expressed as mercury (Total Hg)	Effluent Treatment Works	0.5 µg/l	24-hour time proportional composite sample	Monthly	Note 1
W1	Cadmium and its compounds, expressed as cadmium (Total Cd)	Effluent Treatment Works	5.0 µg/l	24-hour time proportional composite sample	Monthly	Note 1
W1	Visible oil and grease	Effluent Treatment Works	No visible oil or grease	Instantaneous	Daily	Visual check
W1	Chemical Oxygen Demand	Effluent Treatment Works	No limit set	24-hour time proportional composite sample	Daily	Note 1
W1	E.coli. Note 2	Effluent Treatment Works	50,000/100ml	Note 2	Note 2	Note 1
Regional Sludge Treatment Centre						
Location R1 on Site Plan, Drawing No 61060031-250-000-111-DDG-001	-	Site stormwater runoff Note 3	-	-	-	-
Location R2 on Site Plan, Drawing No 61060031-250-000-111-DDG-001	-	Site stormwater runoff Note 3	-	-	-	-
Location R3 on Site Plan, Drawing No 61060031-250-000-111-DDG-001	-	Site stormwater runoff Note 3	-	-	-	-

Note 1 – As per standards found in TGN M18 or otherwise agreed in writing with the Environment Agency.

Note 2 – The analysis of E.coli should only be done following the use of domestic settled sewage in the industrial effluent treatment plant. Monitoring shall be carried out in accordance with condition 2.3.8.

Note 3 – Receiving water: River Tees, via Dabholme Gut and the Bran Sands site stormwater system.

Table S3.3 Annual limits		
Substance	**Medium**	**Limit (including limit)**
Mercury	Water (Dabholme Gut)	2.45 kg/year
Cadmium	Water (Dabholme Gut)	12.25 kg/year

Table S3.4 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
Flare by-pass	Number of occasions used	Continuous	Not applicable	The Environment Agency shall be notified on each occasion the by-pass is operated.

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air (Table S3.1) Parameters as required by condition 3.5.1.	A1, A2, A13, A18, A19, A20, A21, A22, A25 and A27	Every 12 months	01-04-13
Emissions to water (Table S3.2) Parameters as required by condition 3.5.1	W1	Every Month	01-04-13
Oxides of Nitrogen, te	Total for Installation	Every 3 months	01-04-13
Sulphur Dioxide, te	Total for Installation	Every 3 months	01-04-13
Carbon Monoxide, te	Total for Installation	Every 3 months	01-04-13
Utilisations, hrs	Biogas Engines, Boilers	Every 3 months	01-04-13

Table S4.2 Annual production/treatment		
Parameter	**Frequency of assessment**	**Units**
Total quantity of waste treated by the installation	Annually	tonnes

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	tonnes or m^3
Energy usage	Annually	MWh
Waste disposal and/or recovery	Annually	tonnes
Effluent discharged	Annually	m^3
Use of Settled Sewage in IETP	Frequency appropriate to UWWTD	tonnes
UWWTD Compliance Reporting (BOD, COD, Ammonia etc.)	In accordance with the requirement of UWWTD	
E.coli	The analysis of E.coli should only be done following the use of domestic settled sewage in the industrial effluent treatment plant. Sampling should be done in accordance with condition 2.3.8.	

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Form air 1 or other form as agreed in writing by the Environment Agency	30-Jan-20
Water	Form water usage 1 or other form as agreed in writing by the Environment Agency	01-Feb-13
General performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	01-Feb-13
Effluent to the IETP	Form as agreed in writing by the Environment Agency	01-Feb-13
Effluent to the UWWTP	Sewer1 or other form as agreed in writing by the Environment Agency	01-Feb-13
Energy	E1 or other form as agreed in writing by the Environment Agency	01-Feb-13
Waste Return	R1 or other form as agreed in writing by the Environment Agency	01-Feb-13
Emergency Flare	Flare1 or other form as agreed in writing by the Environment Agency	01-Feb-13
Settled Sewage	Sewage1 or other form as agreed in writing by the Environment Agency	01-Feb-13
UWWTD Compliance Reporting (BOD, COD, Ammonia etc.)	UWWTD1 or other form as agreed in writing by the Environment Agency	01-Feb-13
Presumptive E.coli	BWD1 or other form as agreed in writing by the Environment Agency	01-Feb-13

Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

Part A

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

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

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

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

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

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

Part B – to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

*“*Alternative Operating Mode*”* means the IETP operates following loss of effluent feed from the PTA Plant within the following timeframe:

- The IETP shall commence Alternative Operating Mode from the start of the 8th day following the loss of effluent feed from the PTA plant.
- The Alternative Operating Mode shall cease at the end of the 21st day following the resumption of effluent feed from the PTA plant.

“anaerobic digestion” means a process of controlled decomposition of biodegradable materials under managed conditions where free oxygen is absent, at temperatures suitable for naturally occurring mesophilic or thermophilic anaerobes and facultative anaerobe bacteria species, which convert the inputs to a methane-rich biogas and whole digestate.

“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.

“BAT” means best available techniques means the most effective and advanced stage of development of activities and their methods of operation which indicates the practical suitability of particular techniques to prevent and where that is not practicable to reduce emissions and the impact on the environment as a whole. For these purposes: “available techniques” means “those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the operator”; “best” means “in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole” and “techniques” “includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.” . In addition, Schedule 2 of the PPC Regulations has effect in relation to the determination of BAT.

“building” means a construction that has the objective of providing sheltering cover and minimising emissions of noise, particulate matter, odour and litter.

“digestate” means material resulting from an anaerobic digestion process.

“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.

“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.

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

“Flush-Out Phase” means the period from the date effluent feed is resumed from the PTA plant for the next 21 days.

“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).

“IETP” means Industrial Effluent Treatment Plant

“impermeable surface” means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface.

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

“Metastable Phase” means the period from the start of the 8th day following loss of effluent feed from the PTA Plant to the date effluent feed is resumed from the PTA plant

“PTA” means Purified Terephthalic Acid

“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.

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes (England)Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

“year” means calendar year ending 31 December.

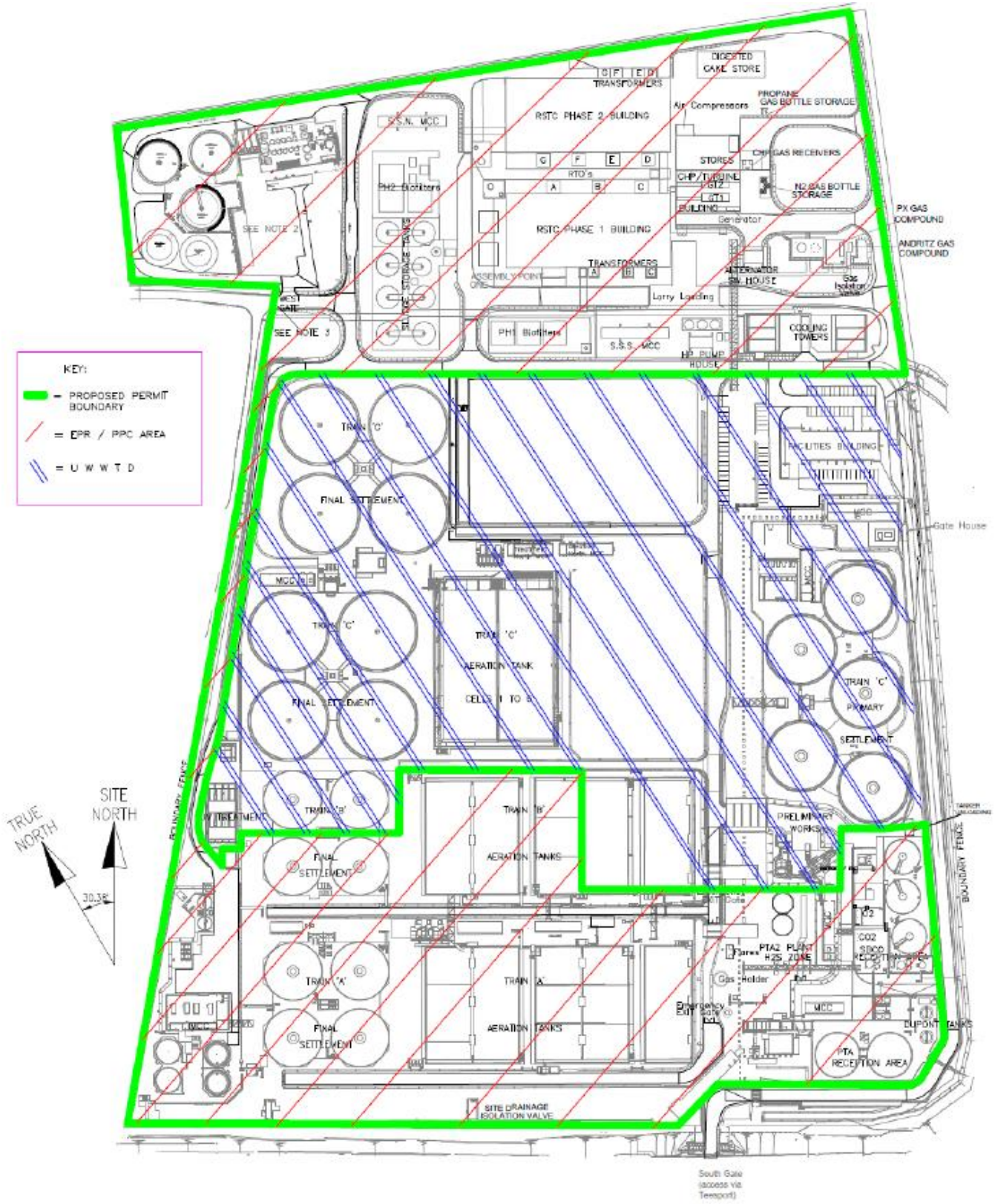
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT