Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Yorkshire Water Services Limited

Blackburn Meadows WwTW Sludge Conditioning Site
Alsing Road
Sheffield
South Yorkshire
S9 1HF

Variation application number

EPR/CP3897LT/V004

Permit number

EPR/CP3897LT

Blackburn Meadows WwTW
Permit number EPR/CP3897LT

Introductory note

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

Under the Environmental Permitting (England & Wales) Regulations 2010 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

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

The Industrial Emissions Directive (IED) was transposed in England and Wales by the Environmental Permitting (England and Wales) (Amendment) Regulations 2013 on 27 February 2013. This variation implements the changes brought about by the IED for "existing facilities operating newly prescribed activities" and completes the transition of this facility from a waste operation to an IED Installation.

The facility carries out aerobic treatment of sewage sludge (sludge conditioning), phyto conditioning (SPC) of conditioned sludge and soil manufacturing. Green wastes are composted off site before being imported to this site to be mixed with sludges and aerobically treated, the treated sludge can be further matured and/ or phytoconditioned. As the site's capacity is greater than 75 tonnes per day it is now an installation activity due to the changes under IED. It is now listed as:

Section 5.4 A(1)(b) (i) - Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.

The facility is also permitted to operate elements of a bio-energy digestion plant (BED) at their site. This includes a bio-gas holder (storage tank), a combined heat and power plant (CHP), boilers and associated flare stack. This part of the facility remains regulated as waste operations and is not directly associated with the SPC activity under this permit.

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**
Permit application EPR/CP3897LT/A001 (Ref EAWML100695)	Duly made 37/10/2008	
Permit determined EPR/CP3897LT	Issued 13/03/2009	Application for an aerobic treatment facility for sewage sludge and other wastes.
Variation Application EPR/CP3897LT/V002	Duly Made 09/01/2013	Application to extend site boundary and annual throughput.
Variation Application EPR/CP3897LT/V002	Issued 20/03/2013	Application issued
Variation Application EPR/CP3897LT/V003	Duly Made	Variation to add Bio-gas storage, CHP and associated flare.

Status log of the permit		
Description	**Date**	**Comments**
	07/06/2013	
Additional information provided as a response to a schedule 5 notice	Received 15/10/13	Remodelled results provided and revised emission limit for NOx given.
Permit determined EPR/CP3897LT/V003	Issued 25/10/13	Issued
Variation Application EPR/CP3897LT/V004	Duly Made 19/06/2015	Application to vary and update the permit to IED conditions
Variation Application EPR/CP3897LT/V004 (Billing ref: NP3031AQ)	Issued 24/02/2016	Application Issued

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/CP3897LT/V004

Issued to

Yorkshire Water Services Limited ("the operator")

whose registered office is

Western House
Halifax Road
Bradford
West Yorkshire
BD6 2SZ

company registration number 02366682

to operate a regulated facility at

Blackburn Meadows WwTW Sludge Conditioning Site
Alsing Road
Sheffield
South Yorkshire
S9 1HF

to the extent set out in the schedules.

The notice shall take effect from 24/02/2016

Name	Date
Rebecca Warren	**24/02/2016**

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/CP3897LT

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/CP3897LT/V004 authorising,

Yorkshire Water Services Limited ("the operator")

whose registered office is

Western House
Halifax Road
Bradford
West Yorkshire
BD6 2SZ

company registration number 02366682

to operate a regulated facility at

Blackburn Meadows WwTW Sludge Conditioning Site
Alsing Road
Sheffield
South Yorkshire
S9 1HF

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

Name	Date
Rebecca Warren	**24/02/2016**

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

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

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

2.3.4 Waste shall only be accepted if:

(a) it is of a type and quantity listed in schedule 2 table S2.2; and

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

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

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

(b) the composition of the waste;

(c) the handling requirements of the waste;

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

(e) the waste code of the waste.

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

2.4 Improvement programme

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

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

3 Emissions and monitoring

3.1 Emissions to water, air or land

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

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

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

3.2 Emissions of substances not controlled by emission limits

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

3.2.2 The operator shall:

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

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

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

3.3 Odour

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

3.3.2 The operator shall:

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

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

3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any

approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

3.4.2 The operator shall:

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

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

3.5 Monitoring

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

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

(b) process monitoring specified in table S3.3.

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

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

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

3.6 Pests

3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

3.6.2 The operator shall:

(a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;

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

3.7 Fire prevention

3.7.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.

3.7.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;

(b) implement the fire prevention plan, from the date of approval, 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 For the following activities referenced in schedule 1, table S1.1 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 For the following activities referenced in schedule 1, table S1.1 in the event:

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

(i) inform the Environment Agency,

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

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

(b) of a breach of any permit condition the operator must immediately —

(i) inform the Environment Agency, and

(ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;

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

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

4.3.3 For the following activities referenced in schedule 1, table S1.1, the Environment Agency shall be notified without delay following the detection of:

(a) 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;

(b) the breach of a limit specified in the permit; or

(c) any significant adverse environmental effects.

4.3.4 Any information provided under condition 4.3.3 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.5 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.

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

Where the operator is a registered company:

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

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

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

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

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

In any other case:

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

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

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

4.3.7 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.

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

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 For the following activities referenced in schedule 1, table S1.1 (A1 to A6), 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.

4.4.3 For the following activities referenced in schedule 1, table S1.1 (A7 to A9), 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**
A1	S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment	R3: Recycling/ reclamation of organic substances which are not used as solvents R5: Recycling/ reclamation of other inorganic compounds	From receipt of waste through to treatment and recovery of by-products. Treatment consisting only of sludge phyto conditioning (SPC) for recovery. Biological treatment and maturation of wastes under anaerobic conditions shall be prevented, or where that is not practicable, minimised. After conditioning SPC operations can be carried out on conditioned materials on a suitable substrate. Waste types suitable for acceptance are limited to those specified in Table S2.2.
	Directly Associated Activity		
A2	Storage of non-hazardous wastes pending recovery	R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	The maximum quantity of waste accepted at the site shall not exceed 156,000 tonnes per year. Storage of waste on an impermeable surface with a sealed drainage system. The storage of wastes under anaerobic conditions shall be prevented, or where that is not practicable, minimised. Waste types suitable for acceptance are limited to those specified in Table S2.2.

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**
A3	Physical treatment for the purpose of recycling	R3: Recycling/ reclamation of organic substances which are not used as solvents	From the receipt of waste to despatch for re-use on site or despatch off site for recovery. Physical treatment consisting only of blending, mixing, separation, shredding, sorting, thickening, screening and/or compaction of waste on an impermeable surface with a sealed drainage system. Waste types suitable for acceptance are limited to those specified in Table S2.2.
A4	Storage of processed waste	R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	From the receipt of processed waste produced at the facility to despatch for use off-site. Storage of processed waste on an impermeable surface with a sealed drainage system.
A5	Raw material storage	Storage of raw materials	From the receipt of raw materials to despatch for use within the facility.
A6	Surface water collection and storage	Collection of uncontaminated roof and site surface water.	From the collection of uncontaminated roof and site surface water from non operational areas only to re-use within the adjacent sewage treatment works.
Activity reference	**Description of activities for waste operations**	**Limits of activities**	
A7 Storage and treatment of bio-gas	R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) R5: Recycling/reclamation of other inorganic compounds	Specified waste shall be Biogas from sewage sludge anaerobic digester process. Treatment consisting only of drying and cleaning by biological or chemical scrubbing.	
A8 Use of biogas as a fuel	R1: Use principally as a fuel to generate energy	The use of combustible gases produced as a by-product of the anaerobic digestion process as a fuel. The Activity A8 authorised in schedule 1 table S1.1 of this permit shall not be operated concurrently with the sewage sludge incinerator authorised in schedule 1 table 1.1.1 of permit number VP3739PM. Except for the auxiliary flare, the aggregate rated thermal input	

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**
		of all appliances used to burn biogas shall be less than 20 megawatts. Emissions of unburned biogas and the operation of the auxiliary flare shall be minimised. Any significant emissions of unburned biogas (including the operation of the pressure relief valves associated with biogas storage) and the operation of the auxiliary flare shall be recorded. All biogas condensate shall be discharged into a sealed drainage system or re-circulated back into the digester.	
A9 Incineration of biogas	D10: Incineration on land	Use of an auxiliary flare shall be minimised and only used for short periods of breakdown or maintenance and periods of excess bio-gas production.	

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application ERP/CP3897LT	Response to request for further clarification for question 5d types and amounts of waste, 5c site plan and 6e management systems.	12/12/08 & 14/12/08
Application ERP/CP3897LT	Response to request for Bio-aerosol Monitoring received	23/01/09
Application ERP/CP3897LT	Response to request for an Odour Management Plan received	25/02/09
Application ERP/CP3897LT	Response to request for site drainage plans	25/02/09
Application EPR/CP3897LT/V003	Sections 3a, and 3b of the application document in response to section 3a – technical standards, Part C4 of the application form.	07/06/13
Application EPR/CP3897LT/V003	Response to the schedule 5 notice to minimise impact by reducing the NOx emission to 250mg/m3.	15/10/13

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IP1	The Operator shall notify the Agency, in writing, the date of completion of commissioning and start of normal operation of the CHP plant and associated flare as authorised by activities A3, A4 and A5 in schedule 1 table S1.1.	Completed
IP2	The Operator shall submit a written report to the Environment Agency on the commissioning of the facility of the CHP plant and associated flare as authorised by activities A3, A4 and A5 in schedule 1 table S1.1. The	Completed

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	report shall include but is not limited to: • Atmospheric emission monitoring for oxides of nitrogen from emission point A1(monitoring shall have regard of Environment Agency MCERTS guidance M2 monitoring of stack emissions to air). Emission point to be monitored a minimum of three times, • A summary of any changes to operating procedures to minimise combustion gas emissions based on commissioning experience, and • A summary of any changes made to the plant compared with that proposed in the original application; any major problems experienced and how they have been dealt with; and results of the monitoring of emissions to air. Further future improvements with timescales, as appropriate, to minimise permitted activities combustion gas environmental impacts.	
IP3	The Operator shall provide a report, in writing, to the Agency, on the preventative maintenance measures in place for the CHP engines in order to maintain optimum performance (and minimise emissions) and minimise wear and tear of the gas engines. The report shall include but not be limited to, an evaluation of additional measures for engine maintenance (including consideration of Siloxane Removal System) together with proposals for any future implementation.	6 months from the end of commissioning

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	**Specification**
Fuel oil	Sulphur content not exceeding 0.1% by mass.

Table S2.2 Permitted waste types and quantities for aerobic digestion	
Maximum quantity	**Annual throughput shall not exceed 156,000 tonnes**
Waste code	**Description**
01	**Wastes from exploration, mining, quarrying, and physical and chemical treatment of minerals.**
01 01	**wastes from mineral excavation**
01 01 02	wastes from mineral non-metalliferous excavation
0103	**wastes from physical and chemical processing of metalliferous minerals**
01 03 06	tailings other than those mentioned in 01 03 04 and 01 03 05
0104	**wastes from physical and chemical processing of non-metalliferous minerals**
01 04 08	waste gravel and crushed rocks other than those mentioned in 010407
01 04 09	waste sand and clays
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 04 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07
02	**Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 03	plant-tissue waste including husks, cereal dust, waste animal feeds, off-cuts from vegetable and fruit and other vegetation waste
02 01 07	wastes from forestry
02 03	**wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation**
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
03	**Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard**
03 01	**wastes from wood processing and the production of panels and furniture**
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board & veneer other than those mentioned in 03 01 04
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation

Table S2.2 Permitted waste types and quantities for aerobic digestion	
Maximum quantity	**Annual throughput shall not exceed 156,000 tonnes**
Waste code	**Description**
04	**Wastes from the leather, fur and textile industries**
04 02	**wastes from the textile industry**
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
10	**Wastes from thermal processes**
10 09	**wastes from casting of ferrous pieces**
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
12	**Wastes from shaping and physical and mechanical surface treatment of metals and plastics**
12 01	**wastes from shaping and physical and mechanical surface treatment of metals and plastics**
12 01 05	plastics shavings and turnings
17	**Construction and Demolition wastes (including excavated soil from contaminated sites)**
17 05	**aqueous liquid wastes destined for off-site treatment**
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
17 08	**gypsum-based construction material**
17 08 02	gypsum-based construction materials other than those mentioned in 170801
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 05	**wastes from aerobic treatment of solid wastes**
19 05 03	off-specification compost
19 08	**wastes from waste water treatment plants not otherwise specified**
19 08 01	Screenings
19 08 02	waste from desanding
19 08 05	sludges from treatment of urban waste water
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13
19 09	**wastes from the preparation of water intended for human consumption or water for industrial use**
19 09 01	solid waste from primary filtration and screenings
19 09 02	sludges from water clarification
19 09 04	spent activated carbon

Table S2.2 Permitted waste types and quantities for aerobic digestion	
Maximum quantity	**Annual throughput shall not exceed 156,000 tonnes**
Waste code	**Description**
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 01	paper and cardboard
19 12 07	wood other than that mentioned in 19 12 06
19 1 208	Textiles
19 12 09	minerals (for example sand, stones)
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
19 13	**garden and park wastes (including cemetery waste)**
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
19 13 06	sludges from groundwater remediation other than those mentioned in 19 13 05
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 01	paper and cardboard
20 01 11	Textiles
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	Plastics
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
20 03	**other municipal wastes**
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 06	waste from sewage cleaning

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission Point ref & location	**Parameter**	**Source**	**Limit (including units) -these limits do not apply during start up or shut down.**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
A1 (Emission point A1 as shown on site plan ref D5010-2403)	Oxides of nitrogen (NO & NO2 expressed as NO2)	Spark ignition engine (CHP)	250 mg/m3	Hourly Average	Weekly for the first month of operation then monthly or as agreed in writing by the Environment Agency	BS EN14792 Note 1
	Carbon monoxide		1,400 mg/m3	Hourly Average	Annual	BS EN15058 Note 1
	Sulphur dioxide		350 mg/m³	Hourly Average	Annual	Calculated – Notes 1 & 2
A2 (Emission point A2 as shown on site plan ref D5010-2403)	No parameters set	Boiler	No limit set	-	-	-
A3 (Emission point A3 as shown on site plan ref D5010-2403)	No parameters set	Boiler	No limit set	-	-	-
A4 (Emission point A4 as shown on site plan ref D5010-2403)	No parameters set	Auxiliary flare stack	No limit set	-	-	Record of operating hours
Pressure relief valves	No parameters set	Facility pressure relief system	No limit set	-	-	-

Note 1: Certification to the MCERTS performance standards indicates compliance with BS EN 15267-3.

- Reference condition for S I engines are dry air 273k at a pressure of 101.3kPa with an Oxygen content of 5% (dry gas).

Note 2: Calculated from on-line hydrogen sulphide and gas flow monitoring of biogas input into CHP engine.

Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
Emission point as shown on site plan ref D5010-2402	-	Process effluent from bio-scrubber	-	-	-	-
Emission point as shown on site plan ref D5010-2402	-	Site surface water	-	-	-	-

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
CHP Engine	Hours of operation	Not set	Not applicable	
Standby boiler on biogas	Hours of operation	Not set	Not applicable	
Standby boiler on natural gas	Hours of operation	Not set	Not applicable	
Operation of flare	Hours of operation	Not set	Not applicable	

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air Parameters as required by condition 3.6.1.	A1, A2, A3 and A4.	Every 12 months	1 January
Hours of operation Parameters as required by condition 3.6.1	CHP Engine, standby boiler and flare	Every 12 months	1 January

Table S4.2 Annual production/treatment	
Parameter	**Units**
Electricity generated	MWh
Processed waste (conditioned sludge)	tonnes

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	tonnes or m^3
Energy usage	Annually	MWh
Raw material usage	Annually	tonnes or m^3
CHP engine efficiency	Annually	%

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 Agency	24/02/16
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	24/02/16
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	24/02/16
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	24/02/16
Waste returns	E-waste Return Form	--

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.

“bioaerosol threshold limits” means the maximum acceptable bioaerosol concentrations at the nearest sensitive receptor, or at an equivalent distance downwind of the composting operations, which are attributable to the composting operations. The maximum acceptable concentrations are respectively, 1000 and 500 CFU m^{-3} for total bacteria and Aspergillus fumigatus.

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

“compost” means solid particulate material that is the result of composting, which has been sanitised and stabilised, and which confers beneficial effects when added to soil, used as a component of growing media or used in another way in conjunction with plants.

“compostable plastics” means plastics that are certified to meet the standards of EN 13432, EN 14995 or equivalent.

“composting batch” means an identifiable quantity of material that progresses through the composting system and when fully processed has similar characteristics throughout. For composting systems that operate on a continuous or a plug-flow basis, batches will be taken to mean a series of “portions of production”.

“composting” means the biological decomposition of organic materials, under conditions that are predominantly aerobic and that allow the development of thermophilic temperatures as a result of biologically produced heat and that result in compost.

“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.

“emissions to land” includes emissions to groundwater.

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

“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.

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

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

“Industry Standard Protocol” means “A standardised protocol for the monitoring of bioaerosols at open composting facilities” published by the Association for Organics Recycling and developed in conjunction with the Environment Agency.

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

“pests” means Birds, Vermin and Insects.

“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.

“sanitisation stage” means the actively managed and intensive stage of composting lasting for at least five days, characterised by high oxygen demand and temperatures of over 55 °C, during which biological processes, together with conditions in the composting mass, eradicate human and animal pathogens or reduce them to acceptably low levels.

“sealed drainage system” in relation to an impermeable surface, means a drainage system with impermeable components which does not leak and which will ensure that:

(a) no liquid will run off the surface otherwise than via the system;

(b) except where they may be lawfully be discharged to foul sewer, all liquids entering the system are collected in a sealed sump.

“stable, stabilised” means the degree of processing and biodegradation at which the rate of biological activity has slowed to an acceptably low and consistent level and will not significantly increase under favourable, altered conditions.

“stabilisation stage” means the stage of composting following sanitisation, during which biological conditions in the composting mass, give rise to compost that is nominally stable.

“treated wood” means any wood that has been chemically treated (e.g. to enhance or alter the performance of the original wood). Treatments may include penetrating oils, tar oil preservatives, water-borne preservatives, organic-based preservatives, boron and organo-metallic based preservatives, boron and halogenated flame retardants and surface treatments (including paint and venner).

“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.

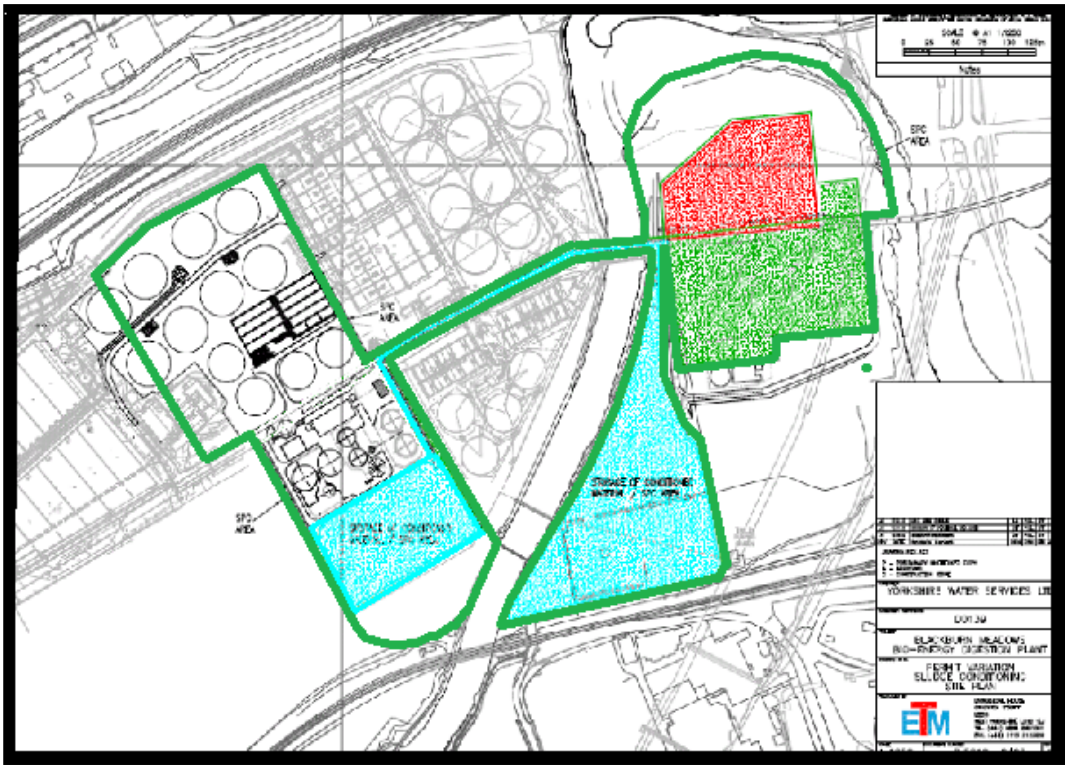
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

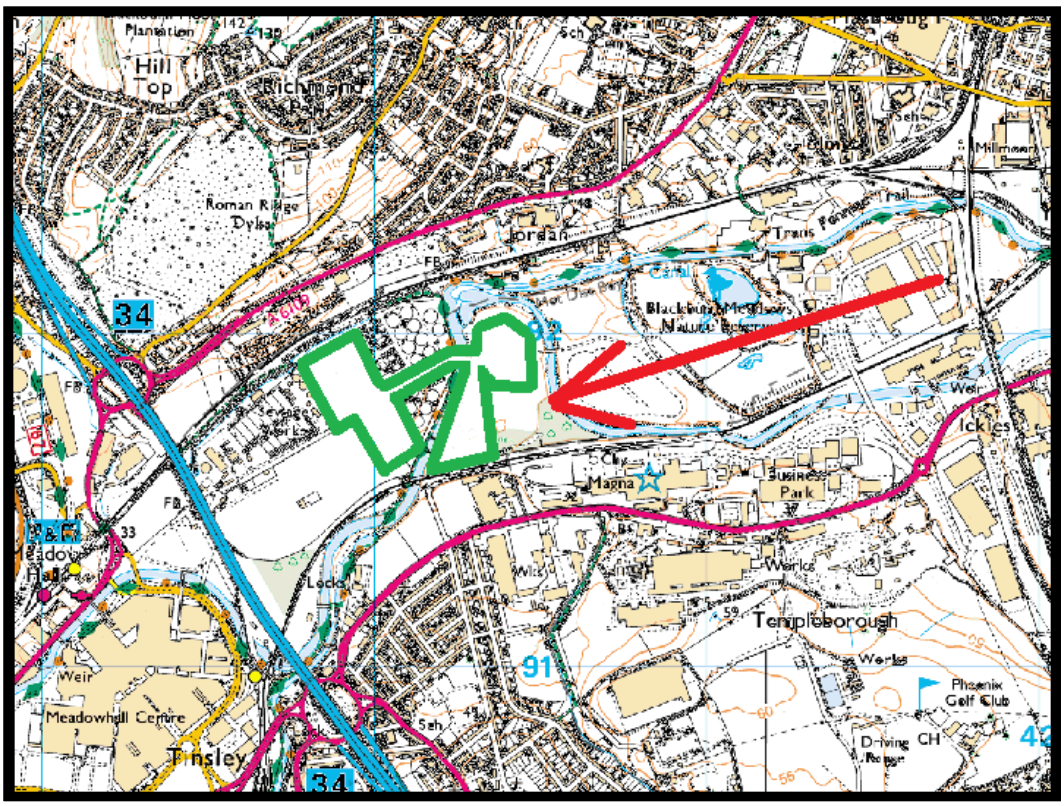
- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration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

Schedule 7

Site Plan



Location Plan



END OF PERMIT

Permit Number: **CP3897LT** **Operator:** **Yorkshire Water**

Facility: **Blackburn Meadows** **Form Number:** **Air1 / 24/02/16**

Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A1	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	250 mg/m^3	1 hour period		BS EN 14792		
A1	Sulphur dioxide	350 mg/m^3	1 hour period		BS EN 14791		
A1	Carbon monoxide	1400 mg/m^3	1 hour period		BS EN 15058		
A4	No parameters set	No limit set	-		Record of monitoring hours		

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed …… Date……..

(Authorised to sign as representative of Operator)

Permit Number:	**CP3897LT**	**Operator:**	**Yorkshire Water**
Facility:	**Blackburn Meadows**	**Form Number:**	**WaterUsage1 / 24/02/16**

Reporting of Water Usage for the year

Water Source	**Usage (m3/year)**	**Specific Usage (m3/unit output)**
Mains water		
Site borehole		
River abstraction		
TOTAL WATER USAGE		

Operator's comments:

Signed …… Date……..

(authorised to sign as representative of Operator)

Permit Number:	**CP3897LT**	**Operator:**	**Yorkshire Water**
Facility:	**Blackburn Meadows**	**Form Number:**	**Energy1 / 24/02/16**

Reporting of Energy Usage for the year

Energy Source	**Energy Usage**		**Specific Usage (MWh/unit output)**
	Quantity	**Primary Energy (MWh)**	
Electricity *	MWh		
Biogas	tonnes or m^3		
Biomethane	tonnes or m^3		
Natural Gas	MWh		
Recovered Fuel Oil	tonnes		
Gas Oil	tonnes		
TOTAL	-		

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:

Signed …… Date……..

(Authorised to sign as representative of Operator)

Permit Number: **CP3897LT** **Operator:** **Yorkshire Water**

Facility: **Blackburn Meadows** **Form Number:** **Performance1 / 24/02/16**

Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY

Parameter	**Units**
Total raw material used	tonnes
CHP engine usage	hours
CHP engine efficiency	%
Emergency flare operation	hours
Electricity exported	MWh
Biomethane exported	tonnes or m^3
Auxiliary boiler usage	hours

Operator's comments:

Signed …… Date……..

(Authorised to sign as representative of Operator)