

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Severn Trent Water Limited

Scunthorpe Sewage Treatment Plant Scotter Road South Bottesford Scunthorpe DN17 2BU

Variation application number

EPR/ZP3598EY/V002

Permit number

EPR/ZP3598EY

# Scunthorpe Sewage Treatment Plant Permit number EPR/ZP3598EY

## Introductory note

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

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.

Scunthorpe STW is located approximately 4 km to the south west of Scunthorpe. The site treats the sewage of domestic customers, trade waste and accepts waste from smaller, lower capacity sewage treatment works.

Waste is imported by Severn Trent where it will undergo one of three treatment processes:

#### Anaerobic digestion (AD)

Both indigenous Urban Waste Water Treatment Directive (UWWTD) derived sludge (from the waste water treatment works on site) and imported waste can be accepted directly in to an anaerobic co-digestion treatment process. This permit only covers the imported waste, the indigenous UWWTD sludge is controlled by separate regulations. Therefore the quantities and waste types permitted by this permit only apply to imported waste. This biological treatment of this waste is regulated as an installation activity, S5.4 A (1) (b) (i).

Following approval by the operator, liquid/sludge waste is discharged into a mixing/holding tank. Waste is transferred to one of two primary digesters (5,000m3 total capacity) where it undergoes anaerobic treatment typically for 12 days. The biogas produced is captured and transferred to a gas storage bag.

Biogas is combusted in one 2.09MW CHP engine. The CHP engine runs on biogas only. The heat and power produced is either used on site or is exported to the grid.

Two dual fuel boilers are also present on site and an auxiliary flare stack burns biogas which cannot be handled by the engines or boilers.

Following the primary digesters the digestate is stored in one of six tanks where sludge remains for up to 14 days. The purpose of these secondary holding tanks is to ensure the required pathogen kill has been achieved. This secondary holding can be bypassed with the aforementioned pathogen elimination being achieved on the cake pad, after dewatering has taken place. Once the sludge is fully treated, it is sent to two buffer feed tanks before being mixed with a polymer coagulant and dewatered by one belt press and one centrifuge. The supernatant liquor is directed back to the head of the STW for aerobic treatment. The sludge cake is transferred to a cake pad where it is conditioned to achieve pathogen kill.

Any liquid, site drainage or condensate produced is directed to the head of the STW.

#### Aerobic treatment (Waste operation)

Waste can be discharged directly in to the pipeline at the head of the sewage treatment works. The waste will undergo aerobic treatment under the UWWTD. The biological treatment of this waste is not regulated by this permit, only its import. The final effluent released by the STW is regulated under a separate discharge consent.

#### Dewatering (Waste operation)

Digested sludge can be imported for dewatering purposes. It shares the same facilities as the AD treatment process following the digestion of the waste.

Key sensitive receptors include nearby settlements, the closest residential dwellings approximately 600m from the northern boundary of the installation. There are no Air Quality Management Areas (AQMAs) within 2km of the site. Bottesford Beck is situated approximately 0.1km north of the site boundary, flowing into the River Trent approximately 5km west of the site.

As there are human sensitive receptors within 250 m of the sludge cake storage area bioaerosols monitoring is required as part of an improvement condition.

The operator has an EMS to ISO 14001 (Certificate E4230).

The schedules specify the changes made to the permit.

| Status log of the permit for EPR/2  | Status log of the permit for EPR/ZP3598EY |  |  |
|---|---|--|--|
| Description   | Date                                      | Comments   |  |
| Application EPR/ZP3598EY<br>(formerly EAWML 100422)                                     | 27/03/08                                  |  |  |
| Permit determined   | 17/11/08                                  |  |  |
| Received notification of change of<br>company registered office address                 | 29/09/10                                  |  |  |
| Issue of updated permit pages to<br>show change of company<br>registered office address | 14/10/10                                  |  |  |
| Variation application received<br>EPR/ZP3598EY/V002                                     | Duly made<br>30/09/14                     | Application to vary and update the permit to modern conditions.                      |  |
| Additional information received   | 31/07/17                                  | H1 assessment comparing emissions from the new CHP engine with the old engine setup. |  |
| Additional information received   | 14/08/17                                  | Information related to the emissions to air screening for the new CHP engine.        |  |
| Variation determined<br>EPR/ZP3598EY<br>(Billing ref: FP3632WL)                         | 20/12/17                                  | Varied and consolidated permit issued in modern condition format.                    |  |

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

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

#### Permit number

EPR/ZP3598EY

Issued to

Severn Trent Water Limited ("the operator")

whose registered office is

Severn Trent Centre 2 St. John's Street Coventry CV1 2LZ

company registration number 02366686

to operate a regulated facility at

#### Scunthorpe Sewage Treatment Plant Scotter Road South Bottesford Scunthorpe DN17 2BU

to the extent set out in the schedules.

The notice shall take effect from 20/12/2017

#### The number of the consolidated permit is EPR/ZP3598EY.

| Name           | Date       |
|----------------|------------|
| Rebecca Warren | 20/12/2017 |

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 2016

#### Permit number

#### EPR/ZP3598EY

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/ZP3598EY/V002 authorising,

Severn Trent Water Limited ("the operator"),

whose registered office is

Severn Trent Centre 2 St. John's Street Coventry CV1 2LZ

company registration number 02366686

to operate an installation and waste operations at

Scunthorpe Sewage Treatment Plant Scotter Road South Bottesford Scunthorpe DN17 2BU

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

| Name           | Date       |
|----------------|------------|
| Rebecca Warren | 20/12/2017 |

Authorised on behalf of the Environment Agency

# Conditions

#### 1 Management

#### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
  - (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 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, A1 to A11, 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, A1 to A11, 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 tables S2.2, S2.3, S2.4 and S2.5; 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 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

#### 3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

#### 3.3 Odour

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
  - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
  - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in table S3.1 and S3.2;
  - (b) process monitoring specified in table S3.3.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.3 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.

## 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, A1 to A11, 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, A1 to A11, 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
    - 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, A12 and A13, 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 A11, 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, A12 and A13, 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<br>reference | Activity listed in<br>Schedule 1 of the EP<br>Regulations  | Description of<br>specified activity and<br>WFD Annex I and II<br>operations  | Limits of specified activity and waste types   |
| A1                    | S5.4 A(1) (b) (i)<br>Recovery or a mix of<br>recovery and disposal<br>of non-hazardous<br>waste with a capacity<br>exceeding 75 tonnes<br>per day (or 100 tonnes<br>per day if the only<br>waste treatment<br>activity is anaerobic<br>digestion) involving<br>biological treatment. | R3: Recycling/<br>reclamation of organic<br>substances which are<br>not used as solvents  | From receipt of waste from blending and<br>mixing tanks (A3) through to digestion<br>and recovery of by-products (digestate).<br>Anaerobic digestion of waste in 2 primary<br>digestion tanks followed by burning of<br>biogas produced from the process.<br>Waste types suitable for acceptance are<br>limited to those specified in Tables S2.2,<br>S2.3 and S2.4.                   |
|                       | Directly Associated Ac   | tivity  |  |
| A2                    | Storage of waste   | R13: Storage of waste<br>pending the operations<br>numbered R1 to R12<br>(excluding temporary<br>storage, pending<br>collection, on the site<br>where it is produced) | Storage of non-hazardous imported<br>tankered waste to despatch for blending<br>and mixing.<br>Waste types suitable for acceptance are<br>limited to those specified in Tables S2.2,<br>S2.3 and S2.4.   |
| A3                    | Blending and mixing of<br>imported waste prior to<br>recovery  | R3: Recycling/<br>reclamation of organic<br>substances which are<br>not used as solvents  | From the receipt of non-hazardous waste<br>to despatch for anaerobic digestion (A1)<br>for recovery.<br>Blending and mixing of imported<br>tankered waste with UWWTD derived<br>sludge from within the works in tanks on<br>an impermeable surface with sealed<br>drainage.<br>Waste types suitable for acceptance are<br>limited to those specified in Tables S2.2,<br>S2.3 and S2.4. |
| A4                    | Digestate storage  | R13: Storage of waste<br>pending the operations<br>numbered R1 to R12<br>(excluding temporary<br>storage, pending<br>collection, on the site<br>where it is produced) | Storage of digestate produced at the on-<br>site anaerobic digestion process in 6<br>storage tanks on an impermeable surface<br>with sealed drainage system prior to<br>treatment.   |
| A5                    | Digestate treatment  | R3: Recycling/<br>reclamation of organic<br>substances which are<br>not used as solvents  | Treatment of digestate in 2 tanks on an<br>impermeable surface with sealed<br>drainage system, including screening to<br>remove contraries, centrifugation or<br>pressing and addition of thickening<br>agents (polymers) or drying.   |

| Table S | 1.1 activities                          |   |   |
|---------|---|---|---|
| A6      | Treatment and storage of digestate cake | R3: Recycling/<br>reclamation of organic<br>substances which are<br>not used as solvents  | Storage and treatment of digestate cake<br>on an impermeable surface with sealed<br>drainage system, including mixing with<br>lime, if necessary, to achieve pathogen<br>kill prior to despatch off site. |
|         |   | R13: Storage of waste<br>pending the operations<br>numbered R1 to R12<br>(excluding temporary<br>storage, pending<br>collection, on the site<br>where it is produced)                     |   |
| A7      | Gas treatment and storage               | Treatment and storage<br>of biogas produced from<br>on-site anaerobic   | Storage of biogas produced at the on-site anaerobic digestion process.  |
|         |   | digestion of permitted<br>waste in a gas storage<br>bag.  | Gas cleaning by biological or chemical scrubbing prior to use within the facility if required.  |
| A8      | Steam and electrical power supply       | R1:Use principally as a fuel to generate energy   | From the receipt of biogas produced at<br>the on-site anaerobic digestion process<br>to combustion with the release of<br>combustion gases.   |
|         |   |   | Combustion of biogas produced at the<br>on-site anaerobic digestion process in 1<br>combined heat and power (CHP) engine<br>with an aggregated thermal input not<br>exceeding 2.09 MWth.                  |
|         |   |   | Combustion of biogas in 2 auxiliary dual fuel boilers with an aggregated thermal input not exceeding 1.5 MWth.  |
| A9      | Auxiliary flare operation               | D10: Incineration on land   | From the receipt of biogas produced at<br>the on-site anaerobic digestion process<br>to incineration with the release of<br>combustion gases.   |
|         |   |   | Use of auxiliary flare required only during periods of breakdown or maintenance of the CHP engines and/or auxiliary boilers.  |
| A10     | Raw material storage                    | Storage of raw<br>materials: fuel oil,<br>lubrication oil, water<br>treatment chemicals,<br>glycol, polymer (dry<br>powder), ferrous<br>chloride, ferric sulphate,<br>antifoam, and lime. | From the receipt of raw materials to despatch for use within the facility   |
| A11     | Surface water collection                | Collection of site surface<br>and process<br>water/liquor.  | The collection of site surface and process<br>water/liquor for re-use within the facility<br>or transfer to the head of the sewage<br>treatment works.  |

| Table S1.1         | activities  |   |
|--------------------|---|---|
| Activity reference | Description of activities for waste operations  | Limits of activities  |
| A12                | D13: Blending or mixing prior to<br>submission to any of the operations<br>numbered D1 to D12   | Deposit of imported tankered waste to the head of the<br>sewage treatment works pending aerobic treatment at<br>the sewage treatment works.   |
|                    |   | Waste types suitable for acceptance are limited to those specified in Tables S2.2, S2.3 and S2.4.   |
| A13                | R3: Recycling/reclamation of organic substances which are not used as solvents  | From the receipt of digested sludge to dispatch off site for recovery.  |
|                    | R13: Storage of waste pending the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) | Treatment of digestate on an impermeable surface<br>with sealed drainage system, including screening to<br>remove contraries, maceration, centrifugation, or<br>pressing and addition of thickening agents (polymers)<br>or drying and, if necessary, mixing with lime to<br>achieve pathogen kill. |
|                    |   | Waste types suitable for acceptance are limited to those specified in Table S2.5  |

| Table S1.2 Operating techniques                                       |   |               |
|---|---|---------------|
| Description   | Parts   | Date Received |
| Application<br>EPR/ZP3598EY   | Working Plan  | 09/04/08      |
| (formerly<br>EAWML 100422)  |   |               |
| Application   | Part C3 - Section 3a (technical standards).   | 30/09/14      |
| EPR/ZP3598EY/V002   | Part C3 – Section 3d, Table 6 (information of specific sectors)   |               |
| Further information<br>submitted for application<br>EPR/ZP3598EY/V002 | Severn Trent Water's waste acceptance procedures<br>document ' <i>Standard Procedure, Business Services</i> –<br><i>Tankered Trade Waste (TTW)</i> ', dated Jan 2016 (Ref<br>TWSS004 TTW Approval Process v3) or subsequent<br>variations as agreed in writing with the Environment Agency. | 12/02/16      |

| Reference | Requirement   | <b>Date</b><br>20/01/18 |
|-----------|---|-------------------------|
| IC1       | The operator shall revise their waste acceptance procedures as<br>referred to in Table S1.2 of this permit and submit it to the<br>Environment Agency for approval. The procedures shall detail 3<br>levels of assessment for determining if a waste is suitable to be<br>accepted into the anaerobic digestion treatment process. The 3<br>levels of assessment shall refer to:  |                         |
|           | • 'Group A wastes' - as listed in Table S2.2 of this permit;  |                         |
|           | • 'Group B wastes' - as listed in Table S2.3 of this permit;  |                         |
|           | • 'Group C wastes' - as listed in Table S2.4 of this permit.  |                         |
|           | The revised procedures shall take in to account the requirements of:  |                         |
|           | <ul> <li>sections 2.1.1 and 2.1.2 of Sector Guidance Note IPPC S5.06         <ul> <li>Guidance for the Treatment of Hazardous and Non-Hazardous Waste; and</li> </ul> </li> </ul>   |                         |
|           | <ul> <li>How to comply with your environmental permit, Additional<br/>Guidance for: Anaerobic Digestion – Reference LIT8737 –<br/>Report Version 1.0, November 2013.</li> </ul>   |                         |
|           | <ul> <li>Framework for Assessing Suitability of Wastes Going to<br/>Anaerobic Digestion, Composting and Biological Treatment –<br/>Framework Guidance note, July 2013.</li> </ul>   |                         |
|           | Once approved the procedures shall be incorporated in to the document ' <i>Standard Procedure, Business Services – Tankered Trade Waste (TTW)</i> ' referred to in Table S1.2 (operating techniques) of this permit.  |                         |
| IC2       | The operator shall submit an odour management plan to the<br>Environment Agency for written approval. The plan shall take into<br>account the appropriate measures for odour control specified in<br>section 2.2.6 of Sector Guidance Note IPPC S5.06 – <i>Guidance for</i><br><i>the Treatment of Hazardous and Non-Hazardous Waste.</i> The plan<br>shall also incorporate all the required detailed information as<br>specified in the Environment Agency's Horizontal Guidance H4 –<br><i>Odour Management.</i><br>The plan must contain dates for implementation of individual | 31/03/18                |
| IC3       | measures.<br>The Operator shall submit a drainage plan to the Environment<br>Agency. The plan shall detail surface water drainage and process<br>water drainage, including imported effluent pipelines (details of the<br>UWWT process are not necessary)   | 31/03/18                |
| IC4       | The Operator shall submit proposals to undertake representative monitoring of ambient air to determine if bioaerosols (total bacteria and Aspergillus Fumigatus) are released from digestate cake treatment and storage areas. The monitoring shall be carried out in accordance with Technical Guidance Note M9 – Environmental monitoring of bioaerosols at regulated facilities.   | 20/06/18                |
|           | The Operator shall carry out the monitoring in accordance with the Environment Agency's written approval.   |                         |

| Table S1.3 Improvement programme requirements |  |  |  |
|---|--|--|--|
| Reference                                     | Requirem   | ent  | Date   |
| IC5   | approval that includes the results, analysis, reporting and interpretation of the monitoring, required by IC4, in accordance |  | 3 months from<br>completion of<br>monitoring as<br>per IC4 |
|   | (a)  | Proposals for appropriate measures to mitigate the impact of bioaerosol emissions including emissions limits and monitoring and dates for implementation of individual measures; |  |
|   | (b)  | Proposals for ongoing monitoring of bioaerosols in ambient air.  |  |

# 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 F        | Permitted waste types and quantities for anaerobic digestion (Group A)   |
|---------------------|--|
| Maximum<br>quantity | Annual throughput of waste at the site (aggregated for all activities) shall not exceed <b>499,500 tonnes</b> .  |
|                     | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)  |
| Exclusions          | Wastes which are not biodegradable shall not be accepted.  |
| Waste<br>code       | Description  |
| 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 01            | sludges from washing and cleaning - food processing waste, food washing waste  |
| 02 01 02            | animal-tissue waste including blood, animal flesh, fish processing waste, fish carcasses, poultry waste  |
| 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 06            | animal faeces, urine and manure including spoiled straw  |
| 02 01 07            | wastes from forestry   |
| 02 01 99            | residues from commercial mushroom cultivation  |
| 02 02               | wastes from the preparation and processing of meat, fish and other foods of animal origin  |
| 02 02 01            | sludges from washing and cleaning, process water, food washing waste   |
| 02 02 02            | animal-tissue waste including blood, animal flesh, fish processing waste, fish carcasses, poultry waste  |
| 02 02 03            | materials unsuitable for consumption or processing   |
| 02 02 04            | sludges from on-site effluent treatment  |
| 02 02 99            | sludges from gelatine production, animal gut contents  |
| 02 03               | wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco<br>preparation and processing; conserve production; yeast and yeast extract<br>production, molasses preparation and fermentation |
| 02 03 01            | sludges from washing, cleaning, peeling, centrifuging and separation   |
| 02 03 04            | materials unsuitable for consumption or processing   |
| 02 03 05            | sludges from on-site effluent treatment  |
| 02 03 99            | sludge from production of edible fats and oils, seasoning residues, molasses residues, residues from production of potato, corn or rice starch only  |

| Table S2.2 F<br>Maximum<br>quantity | Permitted waste types and quantities for anaerobic digestion (Group A) Annual throughput of waste at the site (aggregated for all activities) shall not exceed 499,500 |
|-------------------------------------|--|
|                                     |  |
|                                     | tonnes.  |
|                                     | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)  |
| Exclusions                          | Wastes which are not biodegradable shall not be accepted.  |
| Waste<br>code                       | Description  |
| 02 04                               | wastes from sugar processing   |
| 02 04 03                            | sludges from on-site effluent treatment  |
| 02 04 99                            | other wastes   |
| 02 05                               | wastes from the dairy products industry  |
| 02 05 01                            | materials unsuitable for consumption or processing including solid and liquid dairy products, milk, food processing wastes, yoghurt, whey                              |
| 02 05 02                            | sludges from on-site effluent treatment  |
| 02 06                               | wastes from the baking and confectionery industry  |
| 02 06 01                            | materials unsuitable for consumption or processing including condemned food, food processing wastes, biscuits, chocolate, yeast, bread, bakery wastes                  |
| 02 06 03                            | sludges from on-site effluent treatment  |
| 02 07                               | wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)   |
| 02 07 01                            | wastes from washing, cleaning and mechanical reduction of raw materials including brewing waste, food processing waste, fermentation waste                             |
| 02 07 02                            | wastes from spirits distillation including spent grains, fruit and potato pulp, sludge from distilleries   |
| 02 07 04                            | materials unsuitable for consumption or processing including brewing waste, food processing waste, fermentation waste, beer, alcoholic drinks, fruit juice             |
| 02 07 05                            | sludges from on-site effluent treatment  |
| 02 07 99                            | spent grains, hops and whisky filter sheets/cloths, yeast and yeast-like residues, sludge from production process  |
| 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                            | Untreated waste bark and cork  |
| 03 01 05                            | Untreated sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04  |
| 03 03                               | wastes from pulp, paper and cardboard production and processing  |
| 03 03 02                            | green liquor sludge  |
| 03 03 08                            | paper and cardboard – not allowed if any non-biodegradable coating or preserving<br>substance is present   |
| 03 03 10                            | Fibre rejects, fibre-, filler- and coating-sludges from mechanical separation (de-inked only)  |
| 03 03 11                            | Sludges from on-site effluent treatment other than those mentioned in 03 03 10 (Only allowed if not mixed with, or does not contain, de-inking sludge)                 |

| Table S2.2 F        | Permitted waste types and quantities for anaerobic digestion (Group A)  |
|---------------------|---|
| Maximum<br>quantity | Annual throughput of waste at the site (aggregated for all activities) shall not exceed <b>499,500 tonnes</b> .   |
|                     | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)   |
| Exclusions          | Wastes which are not biodegradable shall not be accepted.   |
| Waste<br>code       | Description   |
| 04                  | Wastes from the leather, fur and textile industries   |
| 04 01               | wastes from the leather and fur industry  |
| 04 01 01            | fleshings and lime split wastes   |
| 04 01 05            | tanning liquor free of chromium   |
| 04 01 07            | sludges not containing chromium   |
| 04 02               | wastes from the textile industry  |
| 04 02 10            | organic matter from natural products, e.g. grease, wax  |
| 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            | paper and cardboard packaging – not allowed if any non-biodegradable coating or preserving substance is present   |
| 15 01 02            | biodegradable plastic packaging – must be independently certified to BS EN 13432  |
| 15 01 03            | Untreated wooden packaging – not allowed if any non-biodegradable coating or preserving substance is present  |
| 15 01 05            | composite packaging – must conform to BS EN 13432 and not allowed if any non-<br>biodegradable coating or preserving substance is present   |
| 16                  | Wastes not otherwise specified in the list  |
| 16 10               | aqueous liquid wastes destined for off-site treatment   |
| 16 10 02            | liquor/leachate from a composting process that accepts waste input types listed in this table, Table S2,2, only   |
| 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 02               | wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)  |
| 19 02 03            | waste types listed in this table, Table S2.2, that have been mixed together only  |
| 19 02 06            | sludge types from waste listed in this table, Table S2.2, that have been heat treated only  |
| 19 02 10            | glycerol not designated as hazardous i.e. excludes EWC code 19 02 08  |
| 19 05               | Wastes from the aerobic treatments of wastes  |
| 19 05 01            | Non-composted fraction of municipal and similar wastes<br>(Acceptable only if derived solely from input types allowed by this table, Table S2.2, and<br>remains segregated from, and uncontaminated by, any other waste type) |
| 19 05 02            | Non-composted fraction of animal and vegetable waste<br>(Acceptable only if derived solely from input types allowed by this table, Table S2.2, and<br>remains segregated from, and uncontaminated by, any other waste type)   |
| 19 05 03            | Off-specification compost (Acceptable only if derived solely from input types allowed by this table, Table S2.2, and remains segregated from, and uncontaminated by, any other waste type)                                    |

| Table S2.2 P        | ermitted waste types and quantities for anaerobic digestion (Group A)  |
|---------------------|--|
| Maximum<br>quantity | Annual throughput of waste at the site (aggregated for all activities) shall not exceed <b>499,500</b> tonnes.   |
|                     | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)  |
| Exclusions          | Wastes which are not biodegradable shall not be accepted.  |
| Waste<br>code       | Description  |
| 19 06               | wastes from anaerobic treatment of waste   |
| 19 06 03            | liquor from anaerobic treatment of municipal waste (from a process that treats wastes which are listed in this table, Table S2.2, only)                          |
| 19 06 04            | digestate from anaerobic treatment of source segregated biodegradable waste (from a process that treats wastes which are listed in this table, Table S2.2, only) |
| 19 06 05            | liquor from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table, Table S2.2, only)               |
| 19 06 06            | digestate from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table, Table S2.2, only)            |
| 19 08               | wastes from waste water treatment plants not otherwise specified   |
| 19 08 01            | screenings   |
| 19 08 02            | sewage grit (waste from de-sanding) only   |
| 19 08 05            | sludges from treatment of urban waste water  |
| 19 08 09            | grease and oil mixture containing edible oils and fats   |
| 19 08 12            | sludges from industrial biological treatment   |
| 19 08 99            | Centrate liquor only   |
| 19 09               | wastes from the preparation of water intended for human consumption or water for industrial use  |
| 19 09 02            | sludges from water clarification   |
| 19 09 03            | sludges from decarbonation   |
| 19 09 06            | solutions and sludges from regeneration of ion exchangers  |
| 19 12               | wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified                                   |
| 19 12 12            | waste types listed in this table, Table S2.2, that have been subjected to mechanical treatment only  |
| 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 – not allowed if any non-biodegradable coating or preserving substance is present. Excludes laminates such as Tetrapaks.                     |
| 20 01 08            | kitchen and canteen waste  |
| 20 01 25            | edible oil and fat   |
| 20 01 38            | untreated wood where no non-biodegradable coating or preserving substance is present   |
| 20 02               | garden and park wastes (including cemetery waste)  |
| 20 02 01            | biodegradable waste  |

| Table S2.2 F        | Table S2.2 Permitted waste types and quantities for anaerobic digestion (Group A)  |  |
|---------------------|--|--|
| Maximum<br>quantity | Annual throughput of waste at the site (aggregated for all activities) shall not exceed <b>499,500 tonnes</b> .          |  |
|                     | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)          |  |
| Exclusions          | Wastes which are not biodegradable shall not be accepted.  |  |
| Waste<br>code       | Description  |  |
| 20 03               | other municipal wastes   |  |
| 20 03 01            | mixed municipal waste - separately collected biowastes   |  |
| 20 03 02            | waste from markets – allowed only if source segregated biodegradable fractions e.g. plant material, fruit and vegetables |  |
| 20 03 04            | septic tank sludge   |  |
| 20 03 06            | waste from sewage cleaning   |  |
| 20 03 99            | cesspool waste and other sewage sludge only  |  |

| Table S2.3 P        | ermitted waste types and quantities for anaerobic digestion (Group B)  |
|---------------------|--|
| Maximum<br>Quantity | Annual throughput of waste at the site (aggregated for all activities) shall not exceed <b>499,500 tonnes</b> .  |
|                     | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)  |
| Exclusions          | Wastes which are not biodegradable shall not be accepted.  |
| Waste<br>code       | Description  |
| 02                  | Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing   |
| 02 03               | wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco<br>preparation and processing; conserve production; yeast and yeast extract production,<br>molasses preparation and fermentation |
| 02 03 02            | wastes from preserving agents  |
| 02 05               | wastes from the dairy products industry  |
| 02 05 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances that will inhibit biological treatment e.g. EA emergency spillage containment                                       |
| 02 06               | wastes from the baking and confectionery industry  |
| 02 06 02            | wastes from preserving agents  |
| 02 06 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment e.g. Interceptor waste   |
| 02 07               | wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)   |
| 02 07 03            | wastes from chemical treatment   |
| 03                  | Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard  |
| 03 03               | wastes from pulp, paper and cardboard production and processing  |
| 03 03 05            | de-inking sludges from paper recycling   |
| 03 03 07            | mechanically separated rejects from pulping of waste paper and cardboard   |
| 03 03 99            | wastes not otherwise specified – Washwaters not containing substances at levels that will inhibit biological treatment e.g. from plant cleaning  |
| 04                  | Wastes from the leather, fur and textile industries  |
| 04 01               | wastes from the leather and fur industry   |
| 04 01 09            | wastes from dressing and finishing   |
| 04 01 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment e.g. Interceptor waste   |
| 04 02               | wastes from the textile industry   |
| 04 02 17            | dyestuffs and pigments other than those mentioned in 04 02 16  |
| 04 02 20            | sludges from on-site effluent treatment other than those mentioned in 04 02 19   |
| 04 02 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment  |
| 06                  | Wastes from inorganic chemical processes   |
| 06 05               | sludges from on-site effluent treatment  |
| 06 05 03            | sludges from on-site effluent treatment other than those mentioned in 06 05 02   |

| <b>T</b>            |  |
|---------------------|--|
|                     | ermitted waste types and quantities for anaerobic digestion (Group B)  |
| Maximum<br>Quantity | Annual throughput of waste at the site (aggregated for all activities) shall not exceed <b>499,500</b><br>tonnes.  |
| <b>,</b>            | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe  |
|                     | Sewage Treatment Plant)  |
| Exclusions          | Wastes which are not biodegradable shall not be accepted.  |
| Waste<br>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 12            | sludges from on-site effluent treatment other than those mentioned in 07 01 11   |
| 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 07            | aqueous sludges containing ink   |
| 08 03 08            | aqueous liquid waste containing ink  |
| 08 03 15            | ink sludges other than those mentioned in 08 03 14   |
| 16                  | Wastes not otherwise specified in the list   |
| 16 01               | end-of-life vehicles from different means of transport (including off-road machinery)<br>and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except<br>13, 14, 16 06 and 16 08) |
| 16 01 15            | antifreeze fluids other than those mentioned in 16 01 14   |
| 16 03               | off-specification batches and unused products  |
| 16 03 06            | organic wastes other than those mentioned in 16 03 05  |
| 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 06               | wastes from anaerobic treatment of waste   |
| 19 06 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment  |
| 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 14            | sludges from other treatment of industrial waste water other than those mentioned in 19 08 13  |
| 20                  | Municipal wastes (household waste and similar commercial, industrial and institutiona wastes) including separately collected fractions   |
| 20 01               | separately collected fractions (except 15 01)  |
| 20 01 30            | detergents other than those mentioned in 20 01 29  |

| Table S2.4 P        | ermitted waste types and quantities for anaerobic digestion (Group C)   |
|---------------------|---|
| Maximum<br>Quantity | Annual throughput of waste at the site (aggregated for all activities) shall not exceed <b>499,500 tonnes</b> .   |
| -                   | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)   |
| Exclusions          | Wastes which are not biodegradable shall not be accepted.   |
| Waste<br>code       | Description   |
| 01                  | Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals   |
| 01 05               | drilling muds and other drilling wastes   |
| 01 05 04            | freshwater drilling muds and wastes   |
| 01 05 07            | barite-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06  |
| 01 05 08            | chloride-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06  |
| 01 05 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment   |
| 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 01            | sludges from washing and cleaning   |
| 02 01 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment   |
| 02 02               | wastes from the preparation and processing of meat, fish and other foods of animal origin   |
| 02 02 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment   |
| 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 03            | wastes from solvent extraction  |
| 02 03 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment   |
| 02 05               | wastes from the dairy products industry   |
| 02 05 01            | materials unsuitable for consumption or processing  |
| 02 06               | wastes from the baking and confectionery industry   |
| 02 06 01            | materials unsuitable for consumption or processing  |
| 02 07               | wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)  |
| 02 07 01            | wastes from washing, cleaning and mechanical reduction of raw materials   |
| 02 07 02            | wastes from spirits distillation  |
| 02 07 04            | materials unsuitable for consumption or processing  |
| 02 07 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment   |
|                     |   |

| Table S2.4 P        | ermitted waste types and quantities for anaerobic digestion (Group C)   |
|---------------------|---|
| Maximum<br>Quantity | Annual throughput of waste at the site (aggregated for all activities) shall not exceed <b>499,500</b> tonnes.                                    |
|                     | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)                                   |
| Exclusions          | Wastes which are not biodegradable shall not be accepted.   |
| Waste<br>code       | Description   |
| 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 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment |
| 03 03               | wastes from pulp, paper and cardboard production and processing   |
| 03 03 08            | wastes from sorting of paper and cardboard destined for recycling   |
| 03 03 11            | sludges from on-site effluent treatment other than those mentioned in 03 03 10  |
| 04                  | Wastes from the leather, fur and textile industries   |
| 04 02               | wastes from the textile industry  |
| 04 02 09            | wastes from composite materials (impregnated textile, elastomer, plastomer)   |
| 04 02 15            | wastes from finishing other than those mentioned in 04 02 14  |
| 05                  | Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal  |
| 05 01               | wastes from petroleum refining  |
| 05 01 10            | sludges from on-site effluent treatment other than those mentioned in 05 01 09  |
| 05 07               | wastes from natural gas purification and transportation   |
| 05 07 02            | wastes containing sulphur   |
| 06                  | Wastes from inorganic chemical processes  |
| 06 01               | wastes from the manufacture, formulation, supply and use (MFSU) of acids  |
| 06 01 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment |
| 06 02               | wastes from the MFSU of bases   |
| 06 02 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment |
| 06 03               | wastes from the MFSU of salts and their solutions and metallic oxides   |
| 06 03 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment |
| 06 06               | wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurisation processes  |
| 06 06 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment |
| 06 10               | wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture  |
| 06 10 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment |
|                     |   |

| Maximum<br>Quantity | Annual throughput of waste at the site (aggregated for all activities) shall not exceed <b>499,500</b> tonnes.   |
|---------------------|--|
| Quantity            | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)  |
| Exclusions          | Wastes which are not biodegradable shall not be accepted.  |
| Waste<br>code       | Description  |
| 06 13               | wastes from inorganic chemical processes not otherwise specified   |
| 06 13 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment                                    |
| 07                  | Wastes from organic chemical processes   |
| 07 01               | wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals   |
| 07 01 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment                                    |
| 07 02               | wastes from the MFSU of plastics, synthetic rubber and man-made fibres   |
| 07 02 12            | sludges from on-site effluent treatment other than those mentioned in 07 02 11   |
| 07 02 15            | wastes from additives other than those mentioned in 07 02 14   |
| 07 02 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment                                    |
| 07 03               | wastes from the MFSU of organic dyes and pigments (except 06 11)   |
| 07 03 12            | sludges from on-site effluent treatment other than those mentioned in 07 03 11   |
| 07 03 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment                                    |
| 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 12            | sludges from on-site effluent treatment other than those mentioned in 07 04 11   |
| 07 04 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment                                    |
| 07 05               | wastes from the MFSU of pharmaceuticals  |
| 07 05 12            | sludges from on-site effluent treatment other than those mentioned in 07 05 11   |
| 07 05 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment e.g. Materials unsuitable for sale |
| 07 06               | wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics   |
| 07 06 12            | sludges from on-site effluent treatment other than those mentioned in 07 06 11   |
| 07 06 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment e.g. Materials unsuitable for sale |
| 07 07               | wastes from the MFSU of fine chemicals and chemical products not otherwise specified   |
| 07 07 12            | sludges from on-site effluent treatment other than those mentioned in 07 07 11   |
| 07 07 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment                                    |
|                     |  |

| <b>T</b> 1 1 00 4 5 |  |
|---------------------|--|
|                     | Permitted waste types and quantities for anaerobic digestion (Group C)   |
| Maximum<br>Quantity | Annual throughput of waste at the site (aggregated for all activities) shall not exceed <b>499,500 tonnes</b> .  |
|                     | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)  |
| Exclusions          | Wastes which are not biodegradable shall not be accepted.  |
| Waste<br>code       | Description  |
| 08                  | Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints varnishes and vitreous enamels), adhesives, sealants and printing inks   |
| 08 01               | wastes from MFSU and removal of paint and varnish  |
| 08 01 12            | waste paint and varnish other than those mentioned in 08 01 11   |
| 08 01 14            | sludges from paint or varnish other than those mentioned in 08 01 13   |
| 08 01 16            | aqueous sludges containing paint or varnish other than those mentioned in 08 01 15   |
| 08 01 18            | wastes from paint or varnish removal other than those mentioned in 08 01 17  |
| 08 01 20            | aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19   |
| 08 01 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment  |
| 08 03               | wastes from MFSU of printing inks  |
| 08 03 13            | waste ink other than those mentioned in 08 03 12   |
| 08 04               | wastes from MFSU of adhesives and sealants (including water proofing products)   |
| 08 04 14            | aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13  |
| 08 04 16            | aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15   |
| 10                  | Wastes from thermal processes  |
| 10 02               | wastes from the iron and steel industry  |
| 10 02 12            | wastes from cooling-water treatment other than those mentioned in 10 02 11   |
| 10 02 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment  |
| 10 13               | wastes from manufacture of cement, lime and plaster and articles and products made from them   |
| 10 13 99            | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment  |
| 11                  | Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy   |
| 11 01               | wastes from chemical surface treatment and coating of metals and other materials (fo<br>example galvanic processes, zinc coating processes, pickling processes, etching,<br>phosphating, alkaline degreasing, anodising) |
| 11 01 12            | aqueous rinsing liquids other than those mentioned in 11 01 11   |
| 16                  | Wastes not otherwise specified in the list   |
| 16 05               | gases in pressure containers and discarded chemicals   |
| 16 05 09            | discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08   |
| 16 07               | wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)  |
| 16 07 99            | wastes not otherwise specified – Washwaters not containing substances at levels that will inhibit biological treatment   |
|                     |  |

| Table S2 4 P  | ermitted waste types and quantities for anaerobic digestion (Group C)   |
|---------------|---|
| Maximum       | Annual throughput of waste at the site (aggregated for all activities) shall not exceed 499,500   |
| Quantity      | tonnes.   |
|               | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)   |
| Exclusions    | Wastes which are not biodegradable shall not be accepted.   |
| Waste<br>code | Description   |
| 16 10         | aqueous liquid wastes destined for off-site treatment   |
| 16 10 02      | aqueous liquid wastes other than those mentioned in 16 10 01  |
| 16 10 04      | aqueous concentrates other than those mentioned in 16 10 03   |
| 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      | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment                       |
| 19 02         | wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)  |
| 19 02 03      | premixed wastes composed only of non-hazardous wastes   |
| 19 02 06      | sludges from physico/chemical treatment other than those mentioned in 19 02 05  |
| 19 02 10      | combustible wastes other than those mentioned in 19 02 08 and 19 02 09  |
| 19 02 99      | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment                       |
| 19 05         | wastes from aerobic treatment of solid wastes   |
| 19 05 01      | non-composted fraction of municipal and similar wastes  |
| 19 05 02      | non-composted fraction of animal and vegetable waste  |
| 19 05 03      | off-specification compost   |
| 19 06         | wastes from anaerobic treatment of waste  |
| 19 06 03      | liquor from anaerobic treatment of municipal waste  |
| 19 06 04      | digestate from anaerobic treatment of municipal waste   |
| 19 06 05      | liquor from anaerobic treatment of animal and vegetable waste   |
| 19 06 06      | digestate from anaerobic treatment of animal and vegetable waste  |
| 19 08         | wastes from waste water treatment plants not otherwise specified  |
| 19 08 99      | wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment                       |
| 19 12         | wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified  |
| 19 12 12      | other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11   |
| 19 13         | wastes from soil and groundwater remediation  |
| 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   |
| 19 13 08      | aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those mentioned in 19 13 07  |
|               |   |

| Table S2.4 F        | Table S2.4 Permitted waste types and quantities for anaerobic digestion (Group C)   |  |
|---------------------|---|--|
| Maximum<br>Quantity | Annual throughput of waste at the site (aggregated for all activities) shall not exceed <b>499,500 tonnes</b> .   |  |
|                     | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)   |  |
| Exclusions          | Wastes which are not biodegradable shall not be accepted.   |  |
| Waste<br>code       | Description   |  |
| 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 99            | other fractions not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment  |  |
| 20 03               | other municipal wastes  |  |
| 20 03 02            | waste from markets  |  |
| 20 03 03            | street-cleaning residues – Aqueous fraction not containing substances at levels that will inhibit biological treatment                                      |  |
| 20 03 99            | municipal wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment |  |

| Table S2.5 F        | Table S2.5 Permitted waste types and quantities for dewatering of digested sludge   |  |
|---------------------|---|--|
| Maximum<br>Quantity | Annual throughput of waste at the site (aggregated for all activities) shall not exceed <b>499,500 tonnes</b> .   |  |
|                     | (These quantities do not include indigenous UWWTD derived sludge from within Scunthorpe Sewage Treatment Plant)   |  |
| Exclusions          | Wastes which are not biodegradable shall not be accepted.   |  |
| Waste<br>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   |  |
| 19 06               | wastes from anaerobic treatment of waste  |  |
| 19 06 06            | digestate from anaerobic treatment of animal and vegetable waste  |  |
| 19 09               | wastes from the preparation of water intended for human consumption or water for industrial use   |  |
| 19 09 02            | sludges from water clarification  |  |
|                     |   |  |

# Schedule 3 – Emissions and monitoring

| Emission<br>point ref. &<br>location  | Source  | Parameter   | Limit<br>(including<br>unit) | Reference<br>period | Monitoring<br>frequency   | Monitoring<br>standard or<br>method |
|---|---|---|------------------------------|---------------------|---|-------------------------------------|
| A1 CHP<br>as shown on<br>site plan in<br>Schedule 7   | engine  | Oxides of<br>Nitrogen<br>(NO and NO <sub>2</sub><br>expressed as<br>NO <sub>2</sub> ) | 500 mg/m <sup>3</sup>        | Hourly<br>average   | Annual  | BS EN 14792                         |
|   |   | Sulphur dioxide   | 350 mg/m <sup>3</sup>        |                     |   | BS EN 14791                         |
|   |   | Carbon<br>monoxide  | 1400 mg/m <sup>3</sup>       |                     |   | BS EN 15058                         |
|   |   | Total VOCs  | 1000 mg/m <sup>3</sup>       |                     |   | BS EN<br>12619:2013                 |
| A2<br>as shown on<br>site plan in<br>Schedule 7   | Auxiliary<br>boiler                               | No parameter<br>set   |                              |                     |   |                                     |
| A3<br>as shown on<br>site plan in<br>Schedule 7   | Auxiliary<br>boiler                               | No parameter<br>set   |                              |                     |   |                                     |
| A4 Auxiliary<br>as shown on<br>site plan in<br>Schedule 7 (low level<br>burner)<br>[note 2] | flare<br>stack<br>(low level<br>burner)           | Oxides of<br>Nitrogen<br>(NO and NO <sub>2</sub><br>expressed as<br>NO <sub>2</sub> ) | 150 mg/m <sup>3</sup>        | Hourly<br>average   | [note 3]  | BS EN 14792                         |
|   | Carbon<br>monoxide                                | 50 mg/m <sup>3</sup>  |                              |                     | BS EN 15058   |                                     |
|   |   | Total VOCs  | 10 mg/m <sup>3</sup>         |                     |   | BS EN<br>12619:2013                 |
| A5<br>as shown on<br>site plan in<br>Schedule 7   | Vent -<br>Oil/Fuel<br>Storage<br>tank             | No parameter<br>set   |                              |                     |   |                                     |
| Pressure<br>relief valves   | Digesters<br>and<br>digestate<br>storage<br>tanks | No parameter<br>set   |                              |                     | Record of<br>operating hours<br>or as otherwise<br>agreed in<br>writing with the<br>Environment<br>Agency |                                     |

kPa and oxygen: 3 per cent (dry gas). The measurement uncertainty specified in LFTGN05 v2 2010 shall apply.

Note 3 – Monitoring to be undertaken in the event the auxiliary 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 S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site-           emission limits and monitoring requirements |                         |   |                          |                     |                         |                                     |
|---|-------------------------|---|--------------------------|---------------------|-------------------------|-------------------------------------|
| Emission<br>point ref. &<br>location  | Parameter               | Source  | Limit<br>(incl.<br>Unit) | Reference<br>period | Monitoring<br>frequency | Monitoring<br>standard or<br>method |
| T1 on site<br>plan in<br>schedule 7<br>emission to<br>head of<br>Scunthorpe<br>Sewage<br>Treatment<br>Works   | No<br>parameters<br>set | Biogas filter<br>condensate,<br>boiler blowdown<br>and<br>uncontaminated<br>surface water | No limit<br>set          |                     |                         |                                     |

| Table S3.3 Process monitoring requirements   |                      |                         |   |  |
|--|----------------------|-------------------------|---|--|
| Emission point<br>reference or<br>source or<br>description of<br>point of<br>measurement | Parameter            | Monitoring<br>frequency | Monitoring<br>standard or<br>method   | Other specifications   |
| Biogas from<br>Digesters   | Flow                 | Continuous              | In accordance<br>with EU weights<br>and measures<br>Regulations or as<br>otherwise agreed<br>in writing with the<br>Environment<br>Agency |  |
|  | Methane              | Continuous              | None specified  | Gas monitors to be<br>calibrated in accordance<br>with manufacturer's<br>recommendations |
|  | Hydrogen<br>sulphide | Continuous              | None specified  |  |
| Waste reception<br>building; Digesters<br>and storage<br>tank(s)                         | Odour                | Daily                   | Olfactory<br>monitoring   | Odour detection at the site boundary   |
| Digester and storage tank  | Integrity<br>checks  | Weekly                  | Visual<br>assessment  |  |

# 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<br>point/reference | Reporting period | Period begins |
| Emissions to air<br>Parameters as required by<br>condition 3.5.1. | A1 and A4                                 | Every 12 months  | 1 January     |

| Table S4.2 Annual production/treatment |                          |  |
|--|--------------------------|--|
| Parameter                              | Units                    |  |
| Electricity generated                  | MWh                      |  |
| Whole digestate                        | tonnes                   |  |
| Liquid digestate                       | tonnes or m <sup>3</sup> |  |
| Solid digestate                        | tonnes                   |  |

| Table S4.3 Performance parameters |                         |                          |  |
|-----------------------------------|-------------------------|--------------------------|--|
| Parameter                         | Frequency of assessment | Units                    |  |
| Water usage                       | Annually                | tonnes or m <sup>3</sup> |  |
| Energy usage                      | Annually                | MWh                      |  |
| Raw material usage                | Annually                | tonnes or m <sup>3</sup> |  |
| Auxiliary flare operation         | Annually                | hours                    |  |
| CHP engine usage                  | Annually                | hours                    |  |
| CHP engine efficiency             | Annually                | %                        |  |
| Auxiliary boiler usage            | Annually                | hours                    |  |

| Table S4.4 Reporting forms   |  |              |  |
|------------------------------|--|--------------|--|
| Media/parameter              | Reporting format   | Date of form |  |
| Air                          | Form Air1 or other form as agreed in writing by the Environment Agency         | 20/12/17     |  |
| Water usage                  | Form WaterUsage1 or other form as agreed in writing by the Environment Agency  | 20/12/17     |  |
| Energy usage                 | Form Energy1 or other form as agreed in writing by the Environment Agency      | 20/12/17     |  |
| Other performance indicators | Form Performance1 or other form as agreed in writing by the Environment Agency | 20/12/17     |  |
| 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  |  |  |

| (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 followir                                       | ng detection of a breach of a limit |                     |
| Parameter Notification period  |                                     | 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,<br>limit or prevent any pollution of the environment<br>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.

"ADQP" means Anaerobic Digestion Quality Protocol

"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 methanerich biogas and whole digestate.

"animal waste" means any waste consisting of animal matter that has not been processed into food for human consumption.

"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.

"bioaerosols threshold limits" means the maximum acceptable bioaerosol concentrations at the nearest sensitive receptor, or at an equivalent distance downwind of the biowaste treatment operations, which are attributable to the biowaste treatment operations. The maximum acceptable concentrations are respectively 1000 and 500 CFU m<sup>-3</sup> 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.

"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.

"emissions to land" includes emissions to groundwater.

"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.

"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.

"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:

- no liquids will run off the surface otherwise than via the system
- all liquids entering the system are collected in a sealed sump, except where liquids may be lawfully discharged to foul sewer.

"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.

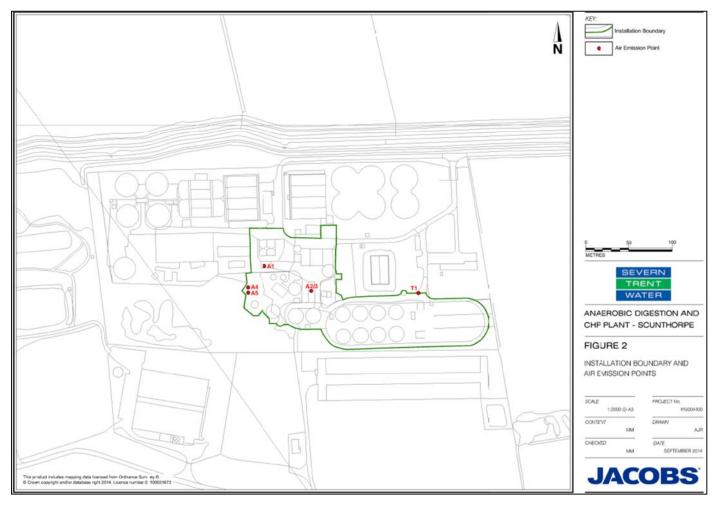
"year" means calendar year ending 31 December.

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 fuels, 3% or 5% for 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



END OF PERMIT

**Operator:** Severn Trent Water Limited

Facility:

Scunthorpe Sewage Treatment Plant Form Number: Air1/20/12/17

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

| Emission<br>Point | Substance /<br>Parameter  | Emission<br>Limit<br>Value | Reference Period | Result [1] | Test<br>Method [2]  | Sample<br>Date and Times [3] | Uncertainty<br>[4] |
|-------------------|---|----------------------------|------------------|------------|---------------------|------------------------------|--------------------|
| A1                | Oxides of nitrogen (NO<br>and NO <sub>2</sub> expressed as<br>NO <sub>2</sub> ) | 500 mg/m <sup>3</sup>      | 1 hour period    |            | BS EN 14792         |                              |                    |
|                   | Sulphur dioxide   | 350 mg/m <sup>3</sup>      | 1 hour period    |            | BS EN 14791         |                              |                    |
|                   | Carbon monoxide   | 1400<br>mg/m <sup>3</sup>  | 1 hour period    |            | BS EN 15058         |                              |                    |
|                   | Total VOCs  | 1000<br>mg/m <sup>3</sup>  | 1 hour period    |            | BS EN<br>12619:2013 |                              |                    |
| A4                | Oxides of nitrogen (NO<br>and NO <sub>2</sub> expressed as<br>NO <sub>2</sub> ) | 150 mg/m <sup>3</sup>      | 1 hour period    |            | BS EN 14792         |                              |                    |
|                   | Carbon monoxide   | 50 mg/m <sup>3</sup>       | 1 hour period    |            | BS EN 15058         |                              |                    |
|                   | Total VOCs  | 10 mg/m <sup>3</sup>       | 1 hour period    |            | BS EN<br>12619:2013 |                              |                    |

[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.

Permit number EPR/ZP3598EY/V002 [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)

**Operator:** Severn Trent Water Limited

Facility: Scunthorpe Sewage Treatment Plant Form Number: WaterUsage1/20/12/17

Reporting of Water Usage for the year

| Water Source      | Usage (m3/year) | Specific Usage (m3/unit output) |
|-------------------|-----------------|---------------------------------|
| Mains water       |                 |                                 |
| TOTAL WATER USAGE |                 |                                 |

| Operator's comments: |  |  |  |
|----------------------|--|--|--|
|                      |  |  |  |
|                      |  |  |  |
|                      |  |  |  |
|                      |  |  |  |

Signed .....

Date.....

(authorised to sign as representative of Operator)

**Operator:** Severn Trent Water Limited

Facility:

Scunthorpe Sewage Treatment Plant Form Number: Energy1/20/12/17

#### 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 <sup>3</sup> |                      |                                  |  |
| Biomethane         | tonnes or m <sup>3</sup> |                      |                                  |  |
| 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 EPR/ZP3598EY/V002

**Operator:** Severn Trent Water Limited

Facility: So

Scunthorpe Sewage Treatment Plant Form Number: Performance1/20/12/17

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     | %      |
| Auxiliary flare operation | hours  |
| Electricity exported      | MWh    |
| Auxiliary boiler usage    | hours  |

| Operator's comments: |      |
|----------------------|------|
|                      |      |
|                      |      |
| Signed               | Date |

(Authorised to sign as representative of Operator)