

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Portals De La Rue Limited

Overton Paper Mill Overton Basingstoke Hampshire RG25 3JG

#### Variation application number

EPR/YP3536JE/V002

#### Permit number

EPR/YP3536JE

# Overton Paper Mill Permit number EPR/YP3536JE

# Introductory note

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

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

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

#### Changes introduced by this variation notice

The BAT conclusions for production of pulp, paper and board were published on 30 September 2014 in the Official Journal of the European Union (L284) following a European Union wide review of BAT, implementing decision 2014/687/EU of 26 September 2014. A variation was issued on 13 July 2016 to address compliance with the relevant BAT conclusions, with improvement conditions to track progress against future compliance by 30 September 2018. In carrying out the improvement conditions, the operator has established that the installation will not meet the new IED BAT Associated Emission Levels (AELs) in BAT conclusion 50, Table 21 for chemical oxygen demand (COD), total nitrogen and total phosphorus emission levels for the direct waste water discharge to receiving waters.

This variation permits a time-limited delay to 30 September 2020 in meeting those BAT-AELs through the introduction of temporary BAT-AELs (Table S3.3 of this permit), with associated emission limits values (Table S3.2 of this permit) and improvement conditions (IC8 and IC9 in this permit, plus IC10 and IC11 to address continuing improvements). These will allow the installation to continue a programme of activities (including water use minimisation, recycling/recirculation, fibre recovery and minimisation/replacement of chemical additives) with the collective aim of delivering the BREF requirements. A brief explanation of the derogation is included in the Annex to the conditions of the permit.

#### Brief description of the process

The installation includes storage and warehousing of raw materials; textile wastes, bleaching agents, sizes, coating inks, security features and treatment chemicals. Raw materials are stored in locations as close to the point of use as practicable. Materials recycled from within the papermaking process (broke) are also reprocessed as a raw material.

The basic raw material, mainly cotton wastes, is treated with sodium hydroxide and hydrogen peroxide. It is mechanically cut and fibrillated. Pigments, sizes and other materials are also made up into aqueous solutions or dispersions for use in the papermaking process and effluent treatment.

Paper is produced on any of four machines and at this stage security features may be introduced. Paper is dried, treated with surface sizing agents, re-dried and calendered before being wound onto reels. Finishing includes coating, foiling, cutting, trimming, quality inspection, counting, packing and storage.

Power and heat are provided by 1x 20.2MWth gas-fired Combined Heat & Power (CHP) plus 1x 21.45MWth Waste heat boiler (supplementary Fired) and 2 x 13MWth standby boilers. Natural gas is used as the main fuel with gas oil as backup.

The effluent treatment plant utilises settlement and biological action to remove solid material and active components. Dewatered sludge is beneficially used when applied to land (land-spread) or composted. Spare capacity is available to hold effluent requiring further treatment or effluent resulting from an emergency.

Emissions from the significant release points are to atmosphere derived from the combustion plant onsite and to controlled waters from the discharge of treated wastewater. Filters are present to remove particulate from textile wastes within Stock Preparation.

Management systems are registered to ISO 9001, ISO 14001 and OHSAS 18001.

The installation is in close proximity to a Site of Special Scientific Interest (SSSI), discharging into the River Test. No European sites are present in the area of Overton or the site.

The schedules specify the changes made to the permit.

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

| Status log of the permit  |                       |  |
|---|-----------------------|--|
| Description   | Date                  | Comments   |
| Application BJ7310IZ<br>(EPR/BJ7310IZ/A001)   | Duly made<br>26/02/01 | Application for paper mill.  |
| Additional Information Request  | 30/05/01              | Responses dated 24/07/01, 14/08/01, 27/09/01 and 23/10/02.   |
| Additional Information  | 23/10/02              | Changes to release points and new coater.<br>Removal of landfill from scope.   |
| Permit determined BJ7310IZ (EPR/BJ7310IZ)   | 24/01/03              | Permit issued.   |
| Application for variation WP3136UV (EPR/BJ3101IZ/V002)  | Duly Made<br>01/11/07 |  |
| Variation determined WP3136UV (EPR/BJ3101IZ/V002)   | 03/03/08              |  |
| Environment Agency Paper and<br>Pulp Sector Review 2011.<br>Variation determined<br>EPR/BJ7310IZ/V003<br>Permit EPR/BJ310IZ | 01/12/11              | Varied and consolidated permit issued in modern condition format.  |
| Agency variation determined EPR/BJ7310IZ/V004   | 05/08/13              | Agency variation to implement the changes introduced by IED.   |
| Regulation 60 Notice dated 21/11/14   | Response<br>Received  | Technical standards detailed in response to the information notice.  |
| (Notice requiring information for statutory review of permit)   | 31/03/15              | Information to demonstrate that relevant BAT conclusions are met for the production of pulp, paper and board as detailed in document reference L284. |
| EPR/BJ7310IZ/V005<br>(variation and consolidation)<br>determined  | 13/07/16              | Statutory review of permit - BAT Conclusions published 30 September 2014   |
| (Billing Ref: QP3635AJ)   |                       | Varied and consolidated permit issued  |

| Status log of the permit   |                                  |   |
|--|----------------------------------|---|
| Description  | Date                             | Comments  |
| Application EPR/YP3536JE/T001 (full transfer of permit EPR/BJ7310IZ)     | Duly made 02/03/18               | Application to transfer the permit in full to Portals De La Rue Limited.                                    |
| Transfer determined EPR/YP3536JE   | 09/03/18                         | Full transfer of permit complete.   |
| Application EPR/YP3536JE/V002 (variation and consolidation)              | Duly made<br>19/04/18            | Application for a time-limited derogation from BAT-AELs for emissions to water of COD, Total P and Total N. |
| Additional information received  | 17/07/18<br>19/07/18<br>03/08/18 | Response to Schedule 5 questions BAT Review & Derogation Application Support v7 CBA Tool_v7                 |
| Additional information received  | 31/07/18                         | Spreadsheet of effluent data.   |
| Draft decision   | 28/01/19                         | Varied and consolidated permit. Consultation 01/02/19 to 01/03/19.  |
| Final decision Variation determined EPR/YP3536JE (Billing Ref: BP3237JC) | 12/03/19                         | Varied and consolidated permit issued.  |

End of introductory note

## Notice of variation and consolidation

# The Environmental Permitting (England and Wales) Regulations 2016

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

#### Permit number

EPR/YP3536JE

#### Issued to

Portals De La Rue Limited ("the operator")

whose registered office is

Overton Mill Station Road Overton Basingstoke Hampshire

**RG25 3JG** 

company registration number 11001841

to operate a regulated facility at

Overton Paper Mill Overton Basingstoke Hampshire RG25 3JG

to the extent set out in the schedules.

The notice shall take effect from 12/03/2019

| Name        | Date       |
|-------------|------------|
| Philip Lamb | 12/03/2019 |

Authorised on behalf of the Environment Agency

#### Schedule 1

Only conditions in the following table have been varied by the consolidated permit EPR/YP3536JE as a result of the application made by the operator.

| TABLES              |  |  |  |
|---------------------|--|--|--|
| S1.1                | amended to reflect some administrative updates   |  |  |
| S1.2                | amended to introduce new operating techniques  |  |  |
| S1.3                | amended to reflect new improvement conditions and completed improvement conditions                               |  |  |
| S3.2                | <b>amended</b> to introduce emission limit values for total phosphorus and a reduction to the maximum daily flow |  |  |
| S3.3                | amended to include a time-limited derogation from the BAT-AELs   |  |  |
| S4.2 and S4.3       | amended to include monitoring and reporting of energy usage  |  |  |
|                     | ANNEX  |  |  |
| Annex to conditions | added to explain the derogation under the IED  |  |  |

## Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

## **Permit**

## The Environmental Permitting (England and Wales) Regulations 2016

#### **Permit number**

#### EPR/YP3536JE

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/YP3536JE/V002 authorising,

Portals De La Rue Limited ("the operator"),

whose registered office is

Overton Mill Station Road Overton Basingstoke Hampshire RG25 3JG

company registration number 11001841

to operate an installation at

Overton Paper Mill Overton Basingstoke Hampshire RG25 3JG

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

| Name        | Date       |
|-------------|------------|
| Philip Lamb | 12/03/2019 |

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:
  - in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

## 1.2 Energy efficiency

- 1.2.1 The operator shall:
  - (a) take appropriate measures to ensure that energy is used efficiently in the activities;
  - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) take any further appropriate measures identified by a review.

#### 1.3 Efficient use of raw materials

- 1.3.1 The operator shall:
  - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
  - (b) maintain records of raw materials and water used in the activities;
  - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
  - (d) take any further appropriate measures identified by a review.

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

- 1.4.1 The operator shall take appropriate measures to ensure that:
  - (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities;
  - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
  - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

# 2 Operations

#### 2.1 Permitted activities

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

#### 2.2 The site

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

# 2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
  - (a) it is of a type and quantity listed in schedule 2 table S2.2 and
  - (b) it conforms to the description in the documentation supplied by the producer and holder.

- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
  - (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

#### 2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

# 3 Emissions and monitoring

#### 3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Total annual emissions from the emission point(s) set out in schedule 3 tables S3.1 and S3.2 of a substance listed in schedule 3 table S3.3 shall not exceed the relevant limit in table S3.3.
- 3.1.4 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

# 3.2 Emissions of substances not controlled by emission limits

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

#### 3.3 Odour

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

#### 3.4 Noise and vibration

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

# 3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in tables S3.1 and S3.2;
  - (b) annual limits specified in table S3.3;
  - (c) process monitoring specified in table S3.4.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 unless otherwise agreed in writing by the Environment Agency.

## 4 Information

#### 4.1 Records

- 4.1.1 All records required to be made by this permit shall:
  - (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and
    - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

## 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
  - (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
  - (b) the performance parameters set out in schedule 4 table S4.2 using the forms specified in table S4.3 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 S4.3; 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, if during that quarter the total amount accepted exceeds 100 tonnes of non-hazardous waste or 10 tonnes of hazardous waste.

#### 4.3 Notifications

#### 4.3.1 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
  - (i) inform the Environment Agency,
  - take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately—
  - (i) inform the Environment Agency, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

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

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.4 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.
- 4.3.5 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

- 4.3.6 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
  - (a) a decision by the Secretary of State not to re-certify the agreement;
  - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
  - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

# 4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately" in which case it may be provided by telephone.

# Schedule 1 – Operations

| Table S1.1         | Table S1.1 activities                               |   |   |
|--------------------|---|---|---|
| Activity reference | Activity listed in Schedule 1 of the EP Regulations | Description of specified activity and WFD Annex I and II operations   | Limits of specified activity  |
| AR1                | Section 6.1 Part A(1)(a)                            | Producing, in industrial plant, pulp from timber or other fibrous materials.  | From receipt of waste textiles and other raw materials to storage of pulp for use on paper machines.  |
|                    |   | Pulping of non-wood fibrous raw material.   |   |
| AR2                | Section 6.1 Part A(1)(b)                            | Producing, in industrial plant, paper and board where the plant has a production capacity of more than 20 tonnes per day.   | From pulp and other raw material, to storage and despatch of the paper, including reprocessing of waste papers.                                 |
|                    |   | Production of speciality (security) papers on up to four Paper Machines.  |   |
| AR3                | Section 1.1 Part A(1)(a)                            | Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more.  | Burning (natural gas) in specified appliances to exhaust of combustion gases and supply of Heat and Power for use at the Paper Mill.            |
|                    |   | One gas fired CHP comprising a 20.2 MWth Gas Turbine plus   |   |
|                    |   | a 21.45 MWth Heat Recovery Steam Generator (supplementary Fired)  | Includes fuel storage, and demineralised water plant.   |
|                    |   | Two x 13 MWth standby boilers.  |   |
| AR4                | Section 5.4 Part A(1)(a)(i)                         | Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment. | From receipt of effluent from paper mill and on-site power generation to discharge after point M1 indicated via red line on plan in Schedule 7. |
|                    |   | Operation of primary and secondary effluent treatment including an activated sludge plant.  | Effluent treatment excludes settling beds and lagoons located after line M1 in Schedule 7.  |
|                    | Directly Associated Activity                        |   |   |
| AR5                | Treatment of abstracted water                       |   | From the treatment of abstracted water to its transfer into the process.  |

| Description  | Parts   | Date Received         |
|--|---|-----------------------|
| Application  | The response to questions 2.3 given in section 2.3 of the application (Excluding reference to the onsite landfill (Page 54)   | 19/02/01              |
| Response to Schedule 4<br>Part1 Notice   | Response to questions 7,8,9,10,13,14,17,21 and 22   | 24/07/01              |
| Response to Schedule 4<br>Part1 Notice   | Response to questions 11,12,18 and 23   | 02/10/01              |
| Additional information   | Paragraph 6, section 2, Section 4   | 23/10/02              |
| Receipt of additional information to the regulation 60(1) Notice. requested by letter dated 21/11/14 | Technical standards detailed in response to BAT conclusions 1, 2, 3, 5 to 8, 10, 12 to 18, 47, 48, 50 to 53 of the notice provided under Regulation 60 of Environmental Permitting Regulations.  Best available techniques as described in BAT conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for production of pulp, paper and board | 31//03/15             |
| Application<br>EPR/YP3536JE/V002   | Document 'Response to Derogation Application enquiry of 14 March 2018' – response to question 3, detailing the programme of activities.  Appendix 4 – BAT 5, 47 and 48 gap analysis (actions)  Appendix 6 – Process and plant upgrade and raw material consumption reduction programme  | Duly made<br>19/04/18 |
| Response to Schedule 5<br>Notice   | BAT Review and Derogation Application Support (version 7, July 2018) - section 5.2.2 Option A and section 8 Derogation Justification  | 19/07/18              |
| Annex to conditions in variation EPR/YP3536JE/V002   | Operating techniques for BAT Conclusion 50  | -                     |

| Table S1.3 Improvement programme requirements |   |           |
|---|---|-----------|
| Reference                                     | Requirement   | Date      |
| IC1   | The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the 'Narrative' BAT where BAT is currently not achieved, but will be achieved before 30 September 2018. The report shall include, but not be limited to, the following: | Completed |
|   | Methodology for achieving BAT.  |           |
|   | <ol> <li>Associated targets / timelines for reaching compliance by 30<br/>September 2018</li> </ol>   |           |
|   | 3) Any alterations to the initial plan – for progress reports   |           |
|   | The report shall address the following:   |           |
|   | BATc 2 (b), (c), (d)  |           |
|   | BATc 5 (b), (d), (e) and BATc 47 (c)  |           |
|   | The operator shall submit reports on progress with the approved compliance plan on a six monthly frequency specified by this condition  |           |

| Reference | Reference Requirement  |                |  |
|-----------|--|----------------|--|
| IC 2      | The operator shall undertake an assessment of the techniques and technologies available for maximising water recycling on production runs involving synthetic fibres and security features.  | Date Completed |  |
|           | The assessment shall include techniques for both reduction and removal of the synthetic fibres and security features from the effluent streams.  |                |  |
|           | A report on the assessment and the feasibility of adopting techniques and technologies shall be submitted to the Environment Agency for approval.  |                |  |
| IC3       | The operator shall review the opportunities for applying the techniques listed under   | Completed      |  |
|           | BATc 6 (g), (h), (i) and BATc 53 (g), (h), (l), (m) at the installation by September 2018, in order to strengthen evidence of compliance with BAT 6 and BAT 53.  |                |  |
|           | The review shall include, but not necessarily be limited to:   |                |  |
|           | - details of the number of assets at the installation the techniques apply to;   |                |  |
|           | - the number of assets that are considered to currently meet the BAT criteria;   |                |  |
|           | - details of the predicted/planned replacement timescales of the assets;   |                |  |
|           | - associated return on investment for upgrading or replacement with plant that meets the BAT criteria;   |                |  |
|           | - any further justification for following the asset replacement programme specified in the Regulation 60 response.   |                |  |
|           | A comprehensive report on the findings of the review, and details of the installations ESOS audit, including management commitment to implementing findings of the Audit, shall be submitted to the Environment Agency for approval.   |                |  |
| IC 4      | The Operator shall undertake a review of the operation of the effluent treatment plant to verify that BATc 16 techniques (a), (b) and (c) are implemented for the current production regime at the Installation.   | Completed      |  |
|           | The assessment of compliance with BATc 16 shall be undertaken by persons or organisations with suitable experience in the techniques detailed in BATc 16. Details of the assessor's qualification shall be agreed with the Environment Agency in advance of the assessment being undertaken. |                |  |
|           | The operator shall submit a report on the findings of the review and timescales to implement any remedial actions to achieve compliance with BATc 16.  |                |  |

| Reference | ence Requirement Date   |           |  |
|-----------|---|-----------|--|
| IC5       | The Operator shall submit a methodology, for agreement in writing with the Environment Agency, for removing the COD load associated with activity A1 in table S1.1 of this permit (i.e. yearly plant pulp), from the calculation of compliance with BAT AELs for COD specified in Table S3.3 of this permit.  The methodology shall: - provide confirmation that fibres pulped fall out of the scope of BAT conclusions under Directive 2010/75/EU of the European Parliament and   | 30/09/19  |  |
|           | of the Council on industrial emissions for production of pulp, paper and board; - identify how COD load from pulping can be isolated from COD loads associated with other permitted activities; - detail sampling and flow monitoring locations, standards, frequencies,  |           |  |
|           | methods (including uncertainties), to support calculation of BAT AEL's excluding load from activity A1 Table S1.1; - include proposals for the periodic validation of the methodology; - shall be supported by schematics of the pulping plant, and other relevant data.  |           |  |
| IC6       | The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the BAT conclusion AELs where BAT is currently not achieved, but will be achieved before 30 September 2018.  The report shall include, but not be limited to, the following:  1) Current performance against the BATc AEL.  2) Methodology for reaching the AELs.  3) Associated targets / timelines for reaching compliance by 30 September 2018.  4) Any alterations to the initial plan.  The report shall address the following BATc: 50 Table 21.  | Completed |  |
| IC 7      | The operator shall submit reports on progress with the approved compliance plan on a six monthly frequency specified by this condition.  The Operator shall investigate and submit for approval a report that reviews emissions of Dangerous Substances specified in Table S3.2 of this permit (i.e. Mercury, Cadmium, Pentachlorophenol, Tin) from the onsite effluent treatment plant to the receiving water body. The investigation shall encompass the following:   | 30/09/19  |  |
|           | <ul> <li>Shall follow a minimum of 12 months intensive sampling at a sampling frequency of at least monthly, from the newly agreed monitoring location.</li> <li>The Limits of Detection or Minimum Reporting Value shall be agreed with the Environment Agency prior to commencement.</li> <li>Shall review upstream water quality, potential sources via raw material inputs and process chemistry.</li> <li>The output from the sampling programme shall be input into the Environment Agency H1 software screening tool in accordance with its methodology. The output of that screening exercise shall be submitted to the Environment Agency for further assessment.</li> </ul> |           |  |

| Reference | Requirement   | Date  |
|-----------|---|---|
| IC8       | BAT Conclusion 48  The operator shall undertake a review of the measures necessary to comply with BAT 48c during the planned changes under the water and fibre recovery projects proposed to meet the BAT-AELs, which will affect   | Summary report<br>by 01/06/19                               |
|           | the flow and composition of effluent for treatment.  The review shall include, but not be limited to:  • consideration of extant proposals for automation of the effluent treatment plant (ETP);  |   |
|           | <ul> <li>the nutrient dosing regime;</li> <li>site responsibilities and lines of communication between process and ETP operations;</li> </ul>   |   |
|           | <ul> <li>proposals of measures to support compliance with BAT 48c; and</li> <li>procedures for the maintenance of records of process adjustments relevant to the ETP (to contribute to the review required under IC10 in this table).</li> </ul>  |   |
|           | A summary report on the scope of the review, its conclusions and proposed measures to address the points raised in this Improvement Condition, including timescales for implementation, shall be submitted to the Environment Agency for approval.                                      |   |
| IC9       | BAT Conclusion 50, Table 21  The operator shall submit, for approval by the Environment Agency, reports setting out progress to achieving the BAT Conclusion AELs where a derogation has been applied for and granted. The reports shall include, but not be limited to, the following: | Progress reports<br>by:<br>01/06/19<br>01/12/19<br>01/06/20 |
|           | <ol> <li>Current performance against the BAT Conclusion AEL (including all<br/>effluent treatment plant monitoring data from the last three years to<br/>date).</li> </ol>  |   |
|           | <ol> <li>Methodology for reaching the AELs.</li> <li>Associated targets/timelines for reaching compliance by 30/09/20 for emissions from the effluent treatment plant.</li> </ol>   |   |
|           | 4) Any alterations to the initial plan (including whether tertiary treatment will be installed).  |   |

| Reference | Requirement  | Date   |
|-----------|--|--|
| IC10      | The operator shall review the performance of the effluent treatment plant against the conditions of this permit and verify that they have control over their effluent quality following the improvements at the installation under IC8 and IC9 in this table.  | Within 12<br>months of the<br>achievement of<br>the BAT-AELs<br>and no later<br>than<br>30/09/2021 |
|           | The review shall include an assessment of compliance with BAT conclusions 15, 16 and 48c by persons or organisations with suitable experience in the techniques detailed in these BAT Conclusions. Details of the assessor's qualification shall be agreed with the Environment Agency in advance of the assessment being undertaken.  |  |
|           | The operator shall submit a report on the findings of the review, with details of procedures developed during the improvements for achieving and demonstrating satisfactory process control and timescales to implement any remedial actions to maintain compliance with BAT conclusions 15, 16 and 48c.   |  |
|           | The operator shall implement the actions as approved in writing and from the date approved by the Environment Agency.  |  |
| IC11      | The operator shall undertake a review of phosphorous emissions from the effluent treatment plant (ETP) against the standards set in Table S3.2 of this permit, following completion of improvements to achieve the BAT-AELs and the reduction of phosphorous to residual levels (from dosing at the ETP).  | 31/12/2021   |
|           | The operator shall identify available measures for further reduction of phosphorous emissions to the River Test (both in terms of effluent quality and volume reduction) and complete an appraisal of the options. This work shall include discussions with the Environment Agency to understand what improvements are necessary to contribute towards long-term water quality targets for the River Test. |  |
|           | A report on the review and the options appraisal shall be submitted to the Environment Agency, along with ETP monitoring data from the last three years to date.   |  |

# Schedule 2 – Waste types, raw materials and fuels

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

| Table S2.2 Permitted waste types and quantities for production of paper and board |   |  |  |  |
|---|---|--|--|--|
| Maximum quantity -  |   |  |  |  |
| Waste code  | Description   |  |  |  |
| 04  | Waste from the Leather, Fur and Textiles Industries |  |  |  |
| 04 02   | Waste from Textiles Industry                        |  |  |  |
| 04 02 22  | Wastes from processed textile fibres                |  |  |  |

# Schedule 3 – Emissions and monitoring

| Emission point ref. & location                  | Source                               | Parameter   | Limit<br>(including   | Reference period                               | Monitoring frequency | Monitoring standard or |
|---|--------------------------------------|---|-----------------------|--|----------------------|------------------------|
|   |                                      |   | unit)                 |  |                      | method                 |
| A1 Point V9(a)<br>on drawing no.<br>16550 rev H | Exhaust from<br>Maxecon<br>Boiler #1 | Oxides of<br>Nitrogen<br>(NO and<br>NO2<br>expressed<br>as NO2) | 250 mg/m <sup>3</sup> | Averaged<br>over a<br>minimum 4<br>hour period | Annual               | BS EN<br>14792         |
|   |                                      | Carbon<br>Monoxide<br>(CO)                                      | 50 mg/m <sup>3</sup>  |  |                      | BS EN<br>15058         |
| A2 Point V9(b) on drawing no.                   | Exhaust from Maxecon                 | Oxides of<br>Nitrogen   | 250 mg/m <sup>3</sup> | Averaged over a                                | Annual               | BS EN<br>14792         |
| 16550 rev H                                     | Boiler #2                            | (NO and<br>NO2<br>expressed<br>as NO2)                          |                       | minimum 4<br>hour period                       |                      |                        |
|   |                                      | Carbon<br>Monoxide<br>(CO)                                      | 50 mg/m <sup>3</sup>  |  |                      | BS EN<br>15058         |
| A3 Point V10 on drawing no.                     | Exhaust from Gas Turbine /           | Oxides of<br>Nitrogen   | 250 mg/m <sup>3</sup> | Averaged over a                                | Annual               | BS EN<br>14792         |
| 16550 rev H                                     | HRSG                                 | (NO and<br>NO2<br>expressed<br>as NO2)                          |                       | minimum 4<br>hour period                       |                      |                        |
|   |                                      | Carbon<br>Monoxide<br>(CO)                                      | No Limit              | -  | Continuous           | ISO 12039              |

| Emission point ref. & location   | Source   | Parameter               | Limit<br>(including<br>unit) | Reference period | Monitoring frequency | Monitoring standard or method |
|--|--|-------------------------|------------------------------|------------------|----------------------|-------------------------------|
| A4 Point V1 on<br>drawing no.<br>16550 rev H   | Extraction<br>from<br>cotton/comber,<br>stock and<br>blend chest on<br>PM2   | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A5, A17, A27<br>and A34 Points<br>V2, V16, V26<br>and V33 on<br>drawing no.<br>16550 rev H | Extraction<br>from spooner<br>air float dryer<br>on PM2, PM1,<br>PM6 and PM3 | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A6, A16 and A33<br>Points V3, V15<br>and V32 on<br>drawing no.<br>16550 rev H              | Extraction<br>from size bath<br>on PM2, PM1<br>and PM3                       | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A7 Point V4 on<br>drawing no.<br>16550 rev H   | Extraction<br>from cylinder<br>dryer on PM2                                  | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A8 Point V5 on<br>drawing no.<br>16550 rev H   | Extraction<br>from Bivis<br>conveyor   | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A9 Point V6 on<br>drawing no.<br>16550 rev H   | Extraction<br>from rag<br>house boiler                                       | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A10 Point V7 on<br>drawing no.<br>16550 rev H  | 2 off high<br>pressure gas<br>vents  | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A11 Point V8 on<br>drawing no.<br>16550 rev H  | 2 off high<br>pressure gas<br>safety valves                                  | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A12 Point V11<br>on drawing no.<br>16550 rev H   | 2 off breather<br>ducts GT lube<br>oil sump                                  | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A14 Point V13<br>on drawing no.<br>16550 rev H   | Extraction<br>from PVOH<br>and gelatine<br>tanks in<br>gelatine plant        | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A20, A21 and<br>A32 points V19,<br>V20 and V31 on<br>drawing no.<br>16550 rev H            | Extractions<br>from cylinders<br>PM3, PM1 and<br>PM8                         | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |

| Emission point ref. & location  | Source   | Parameter               | Limit<br>(including<br>unit) | Reference period | Monitoring frequency | Monitoring standard or method |
|---|--|-------------------------|------------------------------|------------------|----------------------|-------------------------------|
| A18 Point V17<br>on drawing no.<br>16550 rev H                                  | Extractions<br>from Vits air<br>float dryer on<br>PM8              | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A22 Point V21on<br>drawing no.<br>16550 rev H                                   | Extraction<br>from size<br>press on PM8                            | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A23 Point V22<br>on drawing no.<br>16550 rev H                                  | Extraction<br>from Spa air<br>dryer on PM9                         | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A24 to A26<br>Points V23 to<br>V25 on drawing<br>no. 16550 rev H                | Extraction<br>from screens<br>1, 2 and 3                           | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A28 Point V27<br>on drawing no.<br>16550 rev H                                  | Extractions<br>from cylinder<br>and size area<br>on PM7            | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A29 Point V28<br>on drawing no.<br>16550 rev H                                  | Extractions<br>from Spa air<br>dryer on PM7                        | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A30 and A31<br>Points V29 and<br>V30 on drawing<br>no. 16550 rev H              | Extraction<br>from Helico<br>high<br>consistency<br>pulpers        | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A35, A36 and<br>A40 Points V34,<br>V35 and V39 on<br>drawing no.<br>16550 rev H | Fume<br>extraction duct<br>from coater<br>SA1, SA2 and<br>SA3      | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A37 and A38<br>Points V36 and<br>V37 on drawing<br>no. 16550 rev H              | Exhaust from<br>standby diesel<br>generators (15<br>kW and 65 kw)  | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A39 Point V38<br>on drawing no.<br>16550 rev H                                  | Exhaust from<br>standby diesel<br>sprinkler pump<br>(120 hp)       | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |
| A40 Point V3 on<br>drawing no.<br>16550 rev H                                   | Fume<br>extraction duct<br>from surface<br>applications<br>kitchen | No<br>Parameters<br>Set | No limit set                 | -                | -                    | -                             |

| Emission point ref. & location     | Source                            | Parameter                                     | Limit<br>(incl.<br>unit)       | Reference<br>Period              | Monitoring frequency                 | Monitoring<br>standard or<br>method                      |
|------------------------------------|-----------------------------------|---|--------------------------------|----------------------------------|--------------------------------------|--|
| W1 "Final Effluent Discharge       | Effluent<br>Treatment<br>plant    | Flow Rate                                     | 0.2<br>m³/sec                  | Instantaneous                    | Continuous                           | MCERTS self-<br>monitoring of<br>effluent flow<br>scheme |
| on site                            |                                   | Maximum Daily<br>Flow                         | 12,500<br>m <sup>3</sup> /day  | 24 hours                         | Daily                                | MCERTS self-<br>monitoring of                            |
| plan in<br>schedule<br>7           |                                   |   | 7,000<br>m³/day<br>note 7      |                                  |                                      | effluent flow<br>scheme                                  |
| Emission<br>to River<br>Test       |                                   | Mean Daily Flow                               | -                              | 24 hours                         | Daily                                | MCERTS self-<br>monitoring of<br>effluent flow<br>scheme |
| Monitored before the               |                                   | pH (units)                                    | 6 (min)<br>9 (max)             | Instantaneous                    | Continuous                           | MCERTS<br>Approved<br>instrumentation                    |
| red line<br>identified<br>as M1 on | red line<br>identified            | Chemical oxygen demand (COD) or               | -                              | 24-hour flow proportional        | Daily note 2                         | COD: BS ISO<br>15705                                     |
| the plan in schedule 7             | Total organic carbon (TOC) note 1 |   | sample                         |                                  | TOC: BS EN<br>1484                   |  |
|                                    |                                   | Biochemical oxygen demand (BOD <sub>5</sub> ) | 20 mg/l                        | 24-hour flow proportional sample | Weekly note 4<br>(once a<br>week)    | BS EN 1899-1   |
|                                    |                                   | Total suspended solids (TSS)                  | 20 mg/l                        | 24-hour flow proportional sample | Daily note 2                         | BS EN 872  |
|                                    |                                   | Total suspended solids (TSS)                  | 25 mg/l                        | Spot sample                      | Weekly note 4<br>(once a<br>week)    | BS EN 872  |
|                                    |                                   | Ammonia as N                                  | 2 mg/l                         | 24-hour flow proportional sample | Weekly note 4<br>(once a<br>week)    | BS EN ISO<br>11732                                       |
|                                    |                                   | Total nitrogen                                | no limit                       | 24-hour flow proportional sample | Weekly notes<br>2,4 (once a<br>week) | BS EN 12260  |
|                                    | Total phosphorus (annual mean     | 0.5 mg/l<br>note 6                            | 24-hour flow proportional      | Weekly notes<br>2,4 (once a      | BS EN ISO<br>15681- 1                |  |
|                                    |                                   | value)  | 0.25<br>mg/l <sup>note 7</sup> | sample                           | week)                                | Or BS EN ISO<br>15681- 2                                 |
|                                    | Total phosphorus                  | 1 mg/l  |                                |                                  | 13001-2                              |  |
|                                    |                                   | (maximum)                                     | 0.5 mg/l<br>note 7             |                                  |                                      |  |
|                                    |                                   | Orthophosphate                                | no limit                       | 24-hour flow proportional sample | Weekly notes<br>2,4 (once a<br>week) |  |

| Emission point ref. & location | Source | Parameter   | Limit<br>(incl.<br>unit) | Reference<br>Period              | Monitoring frequency  | Monitoring standard or method                           |
|--------------------------------|--------|---|--------------------------|----------------------------------|-----------------------|---|
|                                |        | AOX   | -                        | 24-hour flow proportional sample | Once every two months | BS EN ISO<br>9562                                       |
|                                |        | Mercury and its<br>compounds,<br>expressed as<br>mercury (Total Hg) | no limit                 | Spot sample                      | Monthly <sup>5</sup>  | BS EN ISO<br>17852 or<br>BS EN ISO<br>12846             |
|                                |        | Cadmium and its compounds, expressed as cadmium (Total Cd)          |                          |                                  |                       | BS EN ISO<br>17294                                      |
|                                |        | Pentachlorophenol<br>(PCP)  |                          |                                  |                       | BS EN ISO<br>6468:1997<br>BS 6068-<br>2.57:1997         |
|                                |        | Organic Tin (as Tin)  |                          |                                  |                       | BS EN ISO<br>17852:2005                                 |
|                                |        | Metals Total and<br>Dissolved ( Zn, Cu,<br>Cd, Pb, Ni, Hg)          | -                        | Spot sample                      | twice a year          | BS EN ISO<br>15586<br>BS EN ISO<br>17852 for Hg<br>only |
|                                |        | Hazardous<br>Pollutants screen                                      | -                        | Spot sample                      | twice a year          | GCMS analys<br>at UKAS<br>accredited<br>laboratory      |

- Note 1: If TOC is already monitored as a key process parameter, there is no need to measure COD, however the correlation between the two parameters must be established and checked regularly.
- Note 2: If in-house rapid test methods are used, they must be cross referenced by external tests to EN or ISO standards on a monthly basis.
- Note 3: Hazardous pollutants screen substances are: Chlorpyriphos, Cypermethrin, Endosulphan (A & B), 4-nonylphenols & Nonylphenol ethoxylates, PCP, TBT.
- Note 4: Weekly samples shall be collected by following a randomised sampling program as far as is practicable.
- Note 5: The monitoring frequency shall be reviewed on completion of IC7 in table S1.3 of this permit.
- Note 6: Applies as a trigger limit, requiring notification under condition 4.3.2 of any single sample exceeding the limit, as well as a target limit as an annual mean. The corresponding compliance limit is 1 mg/l total phosphorus (maximum).
- Note 7: Applies from 01/10/2020 and will be subject to further review under IC11 in table S1.3 of this permit.

| Table S3.3 Annual                           | limits        |   |   |
|---|---------------|---|---|
| Substance                                   | Medium note 1 | Limit (including unit)<br>applicable from<br>01/10/2018 | Limit (including unit)<br>applicable from<br>01/10/2020 |
| Chemical Oxygen<br>Demand (COD)             | Water         | 6 kg/t <sup>note 2</sup>                                | 0.3 – 5 kg/t <sup>note 2</sup>                          |
| Total suspended solids (TSS)                |               | 0.10 – 1 kg/t   | 0.10 – 1 kg/t   |
| Total nitrogen                              |               | 1.5 kg/t  | 0.015 – 0.4 kg/t  |
| Total phosphorus                            |               | 0.1 kg/t  | 0.002 – 0.04 kg/t                                       |
| Adsorbable organically bound halogens (AOX) |               | 0.05 kg/t   | 0.05 kg/t   |

Note 1: For integrated or multi product mills where the BAT AEL range has been calculated according to a mixing rule based on their share of the discharge, based on information supplied by the Operator, the Operator must notify the Environment Agency if the product/ raw material mix changes by more than 10% in any direction.

Note 2: The annual limits shall be calculated in accordance with the outcome of IC5 in table S1.3 of this permit.

| Table S3.4 Process monito   | oring requirements                       |  |   |                      |
|---|--|--|---|----------------------|
| Emission point reference or source or description of point of measurement | Parameter                                | Monitoring frequency                                 | Monitoring standard or method                           | Other specifications |
| Abstracted water inlet  | Hazardous<br>Pollutants screen<br>note 1 | Twice per<br>annum as per<br>discharge<br>monitoring | GCMS<br>analysis at<br>UKAS<br>accredited<br>laboratory | Spot sample          |
| A1, A2, A3  | temperature                              | As relevant to                                       |   |                      |
|   | pressure                                 | reference<br>emissions                               |   |                      |
|   | oxygen content                           | monitoring   | BS EN<br>15267-3  |                      |
|   | water vapour content                     |  |   | Unless Sample Dried  |

Note 1: Hazardous pollutants screen substances are: Chlorpyriphos, Cypermethrin, Endosulphan (A & B), 4-nonylphenols & Nonylphenol ethoxylates, PCP, TBT.

# 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                                   | ı data                                 |   |                   |
|--|--|---|-------------------|
| Parameter  | Emission or monitoring point/reference | Reporting period  | Period begins     |
| Emissions to air<br>Parameters as required by condition<br>3.5.1.    | A1, A2, A3                             | Every 12 months   | 1 January         |
| Emissions to water Parameters as required by condition 3.5.1         | W1                                     | Every 6 months  | 1 January, 1 July |
| Emissions to water Total Phosphorous, Total Nitrogen, Orthophosphate | W1                                     | Monthly (or as otherwise agreed in writing with the Environment Agency) | 1 January         |

| Table S4.2 Performance para           | meters                  |        |       |
|---------------------------------------|-------------------------|--------|-------|
| Parameter note 1                      | Frequency of assessment | Units  | Units |
| Water inputs to the Mill note 1       | Annually                | tonnes | m³/t  |
| Water used in manufacturing           | Annually                | tonnes | m³/t  |
| Other inputs of water/moisture note 1 | Annually                | tonnes | m³/t  |
| Water outputs note 1                  | Annually                | tonnes | m³/t  |
| Waste/raw material inputs note        | Annually                | tonnes |       |
| Waste/raw material outputs            | Annually                | tonnes |       |
| Net total annual production note 1    | Annually                | tonnes |       |
| Energy usage                          | Annually                | MWh    |       |

Note 1: All to be monitored and reported in accordance with associated guidance note issued with the permit.

| Table S4.3 Reporting forms   |   |              |  |  |  |
|------------------------------|---|--------------|--|--|--|
| Media/parameter              | Reporting format  | Date of form |  |  |  |
| Air                          | Form air 1 or other form as agreed in writing by the Environment Agency         | 13/07/16     |  |  |  |
| Water                        | Form water 1 or other form as agreed in writing by the Environment Agency       | 13/07/16     |  |  |  |
| Water (Nutrients)            | Form water 2 or other form as agreed in writing by the Environment Agency       | 13/07/16     |  |  |  |
| Other performance indicators | Form performance 1 or other form as agreed in writing by the Environment Agency | 13/07/16     |  |  |  |
| Energy usage                 | Form energy 1 or other form as agreed in writing by the Environment Agency      | 12/03/19     |  |  |  |

# 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                                   |   |
|  |   |
|  | any malfunction, breakdown or failure of equipment or techniques, ince not controlled by an emission limit which has caused, is 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 t                              | the breach of a limit   |
| To be notified within 24 hours of                                | detection unless otherwise specified below  |
| Emission point reference/ source                                 |   |
| Parameter(s)   |   |
| Limit  |   |
| Measured value and uncertainty                                   |   |
| Date and time of monitoring                                      |   |
| Measures taken, or intended to be taken, to stop the emission    |   |

| Parameter  | Notification period                    |
|--|--|
|  |  |
|  |  |
|  |  |
|  | <u>'</u>                               |
| (c) Notification requirements for the detection of any sign  | unificant 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  | s practicable                          |
| Any more accurate information on the matters for   | s practicable                          |
| Any more accurate information on the matters for notification under Part A.  Measures taken, or intended to be taken, to prevent   | s practicable                          |
| Any more accurate information on the matters for notification under Part A.  | s practicable                          |
| Any more accurate information on the matters for notification under Part A.  Measures taken, or intended to be taken, to prevent a recurrence of the incident  Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission  The dates of any unauthorised emissions from the                                      | practicable                            |
| Any more accurate information on the matters for notification under Part A.  Measures taken, or intended to be taken, to prevent a recurrence of the incident  Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission  The dates of any unauthorised emissions from the                                      | practicable                            |
| Any more accurate information on the matters for notification under Part A.  Measures taken, or intended to be taken, to prevent a recurrence of the incident  Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission  The dates of any unauthorised emissions from the facility in the preceding 24 months. | s practicable                          |
| Any more accurate information on the matters for notification under Part A.  Measures taken, or intended to be taken, to prevent a recurrence of the incident  Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission  The dates of any unauthorised emissions from the                                      | s practicable                          |
| notification under Part A.  Measures taken, or intended to be taken, to prevent a recurrence of the incident  Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission  The dates of any unauthorised emissions from the facility in the preceding 24 months.  | s practicable                          |

<sup>\*</sup> authorised to sign on behalf of the operator

# Schedule 6

# Interpretation

"accident" means an accident that may result in pollution.

"ADt" means Air Dried Tonnes (of pulp) expressed as 90% dryness. ADt for paper should be reported at "normal" or average moisture content for the production over the course of any one year, noted but not corrected.

"AOX" is adsorbable organic halides measured according to the EN ISO:9562 standard method for waste waters.

"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.

"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 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.

"emissions of substances not controlled by emission limits" means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission or background concentration limit.

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

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

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

Metals monitoring as follows: Zn (Zinc), Cu (Copper), Cd (Cadmium), Pb (Lead), Ni (Nickel), Hg (Mercury).

#### Net production is as follows:

- i) For paper mills: the unpacked, saleable production after the last slitter winder, i.e. before converting.
- (ii) For off-line coaters: production after coating.
- (iii) For tissue mills: saleable tonnes after the tissue machine before any rewinding processes and excluding any core.
- (iv) For market pulp mills: tonnage after packing (pulp at 90 % dryness, i.e. 'air dry' AD).
- (v) For integrated pulp mills: net pulp production refers to the tonnage after packing (pulp at 90 % dryness, i.e. AD) plus the pulp transferred to the paper mill (pulp calculated at 90 % dryness, i.e. air dry). For the net paper production of the integrated mill refer to (i)

"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.

Total nitrogen (Tot-N). Total nitrogen (Tot-N) given as N, The sum of organic nitrogen, free ammonia and ammonium ( $NH_4$ +-N), nitrites ( $NO_2$ --N) and nitrates ( $NO_3$ --N).

Total phosphorus (Tot-P). Total phosphorus (Tot-P) given as P, includes dissolved phosphorus plus any insoluble phosphorus carried over into the effluent in the form of precipitates or within microbes.

"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

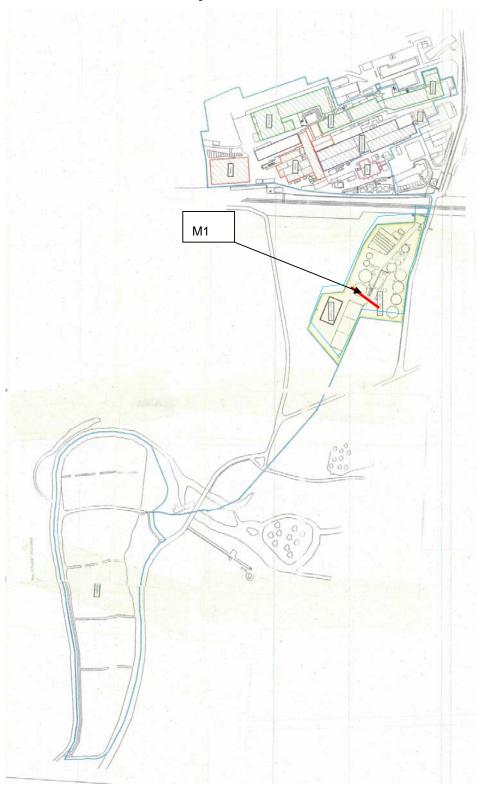
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 15% dry for Gas Turbines, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

"year" means calendar year ending 31 December.

# Schedule 7 – Site plan



END OF PERMIT

# Annex to conditions – Derogation under Industrial Emissions Directive

Derogation under Article 15(4) of Industrial Emissions Directive

DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

#### **Operating Techniques**

We have considered the operator's proposed techniques and its comparison against other relevant techniques as described in the BAT Conclusions in the Commission Implementing Decision 2014/687/EU for the Paper and Pulp sector, published 30 September 2014 (the BREF). Our full reasoning is given in our decision document that accompanies the permit determination.

The operator requested a time limited derogation until 30 September 2020 from BAT Conclusion 50, Table 21 of BAT-associated emission levels (AELs) for the direct waste water discharge to receiving waters from a non-integrated speciality paper mill (COD, total nitrogen and total phosphorus) on the basis of technical characteristics.

The operator's application considered four options for meeting the BAT-AELs. They propose to implement a programme of activities under 'Option A' (including water use minimisation, recycling/recirculation, fibre recovery and minimisation/replacement of chemical additives) prior to reviewing the need for tertiary treatment on the effluent treatment plant (ETP), with the collective aim of delivering the BREF requirements. All other options were rejected on the grounds of cost and environmental impact.

The Environment Agency has reviewed the application and concluded:

- That the application is based on the technical characteristics of the installation and is therefore within the scope of derogations allowed under Article 15(4) of the Industrial Emissions Directive.
- The operator has provided a credible argument that the increased costs linked to the technical characteristics are disproportionate for achieving the BAT-AELs by 30 September 2018 compared to the environmental benefits. The costs associated with tankering effluent off-site mean that compliance with the BAT-AELs is disproportionate compared to the environmental benefit achieved. The outcome of the cost benefit analysis (CBA) supports the choice of Option A for the proposed time-limited derogation.
- Allowing the proposed derogation would not cause any significant pollution or prevent a high level of
  protection of the environment as a whole to be achieved. The operator's proposal (Option A) will
  mean that improvements to the River Test will still be realised along with significant reductions in
  water and raw material usage. It is important that both the pollutant concentration and the discharge
  flow are addressed in order to achieve compliance with annual load based limits, as well as other
  BAT relevant to the site. The BAT-AELs will be achieved, albeit at a later date than required by the
  BREF, with no significant impact on the environment.
- The proposed derogation (Option A), identified as the preferred option from the options appraisal, is based on a detailed work programme, with a number of work streams aimed at delivering compliance for the site as a whole. The appropriate techniques are being implemented, with improvement work already underway, but this will require a time-limited derogation of two years.

The Environment Agency is therefore minded to allow this derogation request subject to the following conditions:

- 1. Improvement conditions for periodic updates on progress with improvements.
- 2. Improvement conditions to review the effluent quality following the site's improvements upstream of the ETP and require the consideration of tertiary treatment.
- 3. All work to comply with the applicable BAT-AELs for the site is completed by 30 September 2020. The BAT-AELs will not be applicable until this deadline but temporary limits will apply:
  - COD 6.0 kg/t
  - Total nitrogen 1.5 kg/t
  - Total phosphorus 0.1 kg/t
- 4. All existing permit emission limit values (as concentrations in mg/l) will remain in force and new emission limit values (ELVs) will be introduced for total phosphorus.