

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Billerudkorsnas Beetham Limited

Beetham Paper Mill

Waterhouse Mills

Beetham

Milnthorpe

Cumbria

LA7 7AR

Variation application number

EPR/BJ7603IP/V008

Permit number

EPR/BJ7603IP

Beetham Paper Mill

Permit number EPR/BJ7603IP

Introductory note

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

The following notice gives notice of the variation and consolidation of an environmental permit.

Changes introduced by this variation notice/statutory review

This variation has been issued to update some of the conditions following a statutory review of the permits in the industry sector for the production of pulp, paper and board. The opportunity has also been taken to consolidate the original permit and subsequent variations.

The Industrial Emissions Directive (IED) came into force on 7th January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) conclusions as described in the Commission Implementing Decision. 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. The relevant BAT conclusions that apply from 1 October 2018 are 1, 2, 5 to 8, 10, 12 to 18, 47 to 53. The operator is compliant with the exception of BAT 1, 6, 16 and 53. We have set improvement conditions to track progress against future compliance.

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

Brief description of the process

Waterhouse Mills, Beetham are located one mile south of Milnthorpe. There has been papermaking on the site for over 200 years.

The site manufactures speciality paper, producing grades of paper used in applications such as healthcare packaging, food packaging, decorative laminate papers and coated paper for printing.

The paper manufacturing process on site is of the "non integrated" type, in that there is no wood pulping process or de-inking process at the installation, and the fibrous raw materials used is market wood pulp and broke. Paper is produced on two similar but separate lines, PM1 and PM2, both of which have the capability of producing on-line coated paper.

Process water is abstracted from the River Bela under a separate Environmental Permit. Effluent is discharged to the River Bela following primary settlement and secondary biological treatment via an activated sludge process. The River Bela flows into Morecambe Bay Special Area of Conservation and Site of Special Scientific Interest approximately 2.5 km downstream of the installation.

Steam is raised on site from gas fired boilers and electricity is supplied from the National Grid. The operator also holds a Greenhouse Gas Emissions Permit for the site.

The company is currently registered to BS EN ISO 9001 for Quality Management, BS EN ISO 14001 for Environmental Management and ISO 18001 for Occupational Health & Safety Management.

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
Perit Application BJ7603IP received	09/02/01	Application to operate a Paper Mill
Permit BJ7603IP determined (EPR ref EPR/BJ7603IP)	19/12/01	
Variation EPR/BJ7603IP/V002 determined	02/10/04	Confirmation of site boundary
Variation application received EPR/BJ7603IP/V003	11/03/11	Application made to replace 3 oldest boilers on site with 2 new more efficient boilers.
Variation EPR/BJ7603IP/V003 determined	01/06/11	
Environment Agency Paper and Pulp Sector Review 2011 Variation determined EPR/BJ7603IP/V004	21/12/11	Varied and consolidated permit issued in modern condition format.
Notified of change of company name	15/07/13	Name changed to Billerudkorsnas Beetham Ltd
Variation issued EPR/BJ7603IP/V005	26/07/13	Varied permit issued to Billerudkorsnas Beetham Ltd.
Agency variation determined EPR/BJ7603IP/V006	03/01/14	Environment Agency variation to implement the changes introduced by IED
Variation application determined EPR/BJ7603IP/V007	21/05/14	Application to vary the discharge volume from emission point W3.
Regulation 60 Notice dated 21/11/14 (Notice requiring information for statutory review of permit)	Response Received 30/03/15	Technical standards detailed in response to the information notice. Information to demonstrate that relevant BAT conclusions are met for the production of pulp, paper and board as detailed in document reference L284.
Additional Information received	29/09/15	Response to further information on BAT conclusions 1, 2, 5, 6, 12 and 53
EPR/BJ7603IP/V008 (variation and consolidation) determined (Billing Ref: YP3235AJ)	15/08/16	Statutory review of permit - BAT Conclusions published 30 September 2014 Varied and consolidated permit issued

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

Permit number

EPR/BJ7603IP

Issued to

Billerudkorsnas Beetham Limited (“the operator”)

whose registered office is

Waterhouse Mills

Beetham

Milnthorpe

Cumbria

LA7 7AR

company registration number **00069606**

to operate a regulated facility at

Beetham Paper Mill

Waterhouse Mills

Beetham

Milnthorpe

Cumbria

LA7 7AR

to the extent set out in the schedules.

The notice shall take effect from 15/08/2016

Name	Date
SIMON HEWITT	15/08/2016

Authorised on behalf of the Environment Agency

Schedule 1

The following conditions/tables were changed by the consolidated permit EPR/BJ7603IP/V007 as a result of an Environment Agency initiated variation:

CONDITIONS	
2.3.2	amended to current permit template format
2.3.3 and 4.2.5	deleted to reflect waste is no longer accepted
2.3.4	added to time limit use of outfall W4
2.3.5	added to reference table S2.1
3.1.3	added to reference table S3.3
3.2.2	amended to current permit template format
3.3.2	amended to current permit template format
3.4.2	amended to current permit template format
3.5.1	amended to reference tables S3.3 and S3.4
4.4.2	amended to implement the requirements of the IED
Schedule 6	updated
TABLES	
S1.1	amended for clarity on description of activities
S1.2	amended operating techniques
S1.3	amended to reflect current improvement conditions
S2.1	deleted to reflect waste is no longer accepted
S2.1	added for raw materials
S3.1	amended to clarify emissions to air
S3.2	amended emissions to water
S3.3	added to include annual limits
S3.4	added to include process monitoring
S4.1	amended for reporting
S4.2	amended performance parameters
S4.3	amended reporting forms

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/BJ7603IP

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BJ7603IP/V008 authorising,

Billerudkorsnas Beetham Limited ("the operator"),

whose registered office is

Waterhouse Mills

Beetham

Milnthorpe

Cumbria

LA7 7AR

company registration number **00069606**

to operate an installation at

Beetham Paper Mill

Waterhouse Mills

Beetham

Milnthorpe

Cumbria

LA7 7AR

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

Name	Date
SIMON HEWITT	15/08/2016

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

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

1.2 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 Emission point W4 shall be used as an emergency discharge point only in the event of ‘bulking’ of the activated sludge. The operator shall require permission from the Environment Agency prior to the use of this discharge point and shall agree with the Agency the method of obtaining prior permission. The operator shall provide a written environmental impact assessment of the discharge on:
- (i) The River Bela to the confluence with Morecambe Bay;
 - (ii) The relevant Special Areas of Conservation and Special Protection Areas within a radius of 10 kilometres of the installation.

- 2.3.4 The use of Emission Point W4 shall cease by 30 September 2018.
- 2.3.5 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.3.7 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

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

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, 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 and S3.2 unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

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

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

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

4.2 Reporting

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

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

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

4.3 Notifications

4.3.1 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately—
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.2 Any information provided under condition 4.3.1 (a)(i), 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.

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 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A1	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. Production of speciality grade papers on two paper machines	From receipt of wood pulp of other raw materials, to storage and despatch of products
A2	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 Operation of an activated sludge effluent treatment plant	From collection of effluent and waste waters from process areas and boiler operation to discharge to controlled waters Discharge from point W4 shall only be made in an emergency when the sludge blanket in the final effluent tank reaches 0.4 m or less below the weir and the river flow is a minimum of 100 times that of the discharge from W4. The maximum flow of the primary treated effluent allowed will be 30% of the W3 discharge for a period not exceeding 36 hours. There may be one 6 hour period within the 36 hours where the maximum flow can be 50% of the W3 discharge.
Directly Associated Activity			
A3	Steam Generation and Supply	Provision of steam for use in the process generated by burning gas in combustion units; Boiler 1 – 6.4 MWth Boiler 2 – 6.4 MWth Boiler 3 – 5.7 MWth Boiler 4 – 5.7 MWth (standby)	From combustion of natural gas to release of combustion products. Includes treatment of boiler water Burner maintenance programme to be in place
A4	Treatment of water	Treatment of water abstracted from River Bela for use in permitted installation	From the treatment of abstracted water to its transfer into the process

Table S1.2 Operating techniques		
Description	Parts	Date Received
Original Permit Application	The response to question 2.3 given in Section B2.3	09/02/01
Response to Schedule 4 Part 1 Notice dated 19/4/01	Response to items 4.1 to 4.3	16/05/01
Application to vary permit EPR/BJ7603IP/V003	Response to questions 3a, 4a and 4b in form C3 regarding monitoring Application support document Sections 3, 4, 5, 6 and 7 provided in response to question 2b of form C2	11/03/11
Additional information	Further information document 1.1. Section 3 and Tables 1 and 2 only.	18/03/11
Additional information	Further information document 1.3. Boiler Plant Operation – section 3 only Noise management plan version 3 – all parts	19/04/11
Response to IC3 dated 29/05/12	Operation of Effluent Treatment Plant – All Parts	29/05/12
Submission on use of Emission Point W4 dated 30/01/14	All Parts	30/01/14
Application EPR/BJ7603IP/V007	Application form Part C3 - Section 3 on Operating Techniques, Table 3 Technical Standards Document: Application support for variation to EPR permit – sections 6 Water Saving Techniques and 7 Nutrient Addition.	10/03/14
Receipt of information to the regulation 60(1) Notice. requested by letter dated 21/11/14	Technical standards detailed in response to BAT conclusions 1, 2, 5 to 8, 10, 12 to, 18, 47 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.	30/03/15
Receipt of additional information to the regulation 60(1) Notice.	Technical standards detailed in response to BAT conclusions 1, 2, 5, 6, 12 and 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	29/09/15

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	The operator shall submit, for approval by Environment Agency, a report identifying where techniques BATc 6 (e), (g), (h), (i) are implemented across the installation for each paper machine; and identifying any potential for further insulation of pipework under technique BATc 6 (f).	01/06/17
IC2	<p>The operator shall submit, for approval by 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:</p> <ul style="list-style-type: none"> • Methodology for achieving BAT. • Associated targets / timelines for reaching compliance by 30 September 2018 • Any alterations to the initial plan. <p>The report shall address BATc 6 and 53.</p> <p>The report shall incorporate any agreed improvements from IC1</p> <p>The operator shall submit reports on progress with the approved compliance plan on a six monthly frequency specified by this condition.</p>	<p>Initial Report 01/01/17</p> <p>Progress reports by 01/04/17 01/09/17 01/03/18 01/09/18</p>
IC3	<p>The Operator shall undertake a review of the operation of the effluent treatment plant to verify that BATc 16 techniques (a), is implemented for (a) the current production regime at the Installation, and (b) to help facilitate the removal of emission point W4.</p> <p>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 assessors qualification shall be agreed with the Environment Agency in advance of the assessment being undertaken.</p> <p>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.</p>	01/08/17
IC4	<p>The operator shall review the discharge of cooling water from emission points W1 and W2. The review shall consider;</p> <ul style="list-style-type: none"> - whether there are opportunities to reuse cooling water elsewhere in the installation; - whether there are opportunities to recover latent energy from the temperature of the discharge; - techniques available for reducing the temperature of the discharge from the permitted Emission Limit Values. <p>A report on the scope and findings of the review shall be submitted to the Environment Agency for approval.</p>	01/08/17
IC5	The operator shall submit a report providing evidence that emission point W4 has been decommissioned and the outfall pipe removed	01/12/18

Schedule 2 – Waste types, raw materials and fuels

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

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1, A2, A3, A4 [Point A1 - 4 on site plan in Schedule 7]	Boiler Plant (boilers 1 to 4) fired on natural gas	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	-	-	-	-
		Carbon Monoxide (CO)	-	-	-	-

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 on site plan in schedule 7 emission to River Bela	Cooling Water Paper Machine 1	Temperature	40 °C	Instantaneous	Weekly	Measured at point W1/W2 as shown in schedule 7
W2 on site plan in schedule 7 emission to River Bela	Cooling Water Paper Machine 2	Temperature	40 °C	Instantaneous	Weekly	Measured at point W1/W2 as shown in schedule 7
W3 on site plan in schedule 7 emission to River Bela	Effluent Treatment plant	Maximum Daily Flow	3900 m ³ /day	24 hours	Daily	MCERTS self-monitoring of effluent flow scheme
		Mean Daily Flow	-	24 hours	Daily	MCERTS self-monitoring of effluent flow scheme
		pH (units)	5 (min) 9 (max)	Instantaneous	Continuous	MCERTS Approved instrumentation
		Chemical oxygen demand (COD) or Total organic carbon (TOC) <small>note 1</small>	-	24-hour flow proportional sample	Daily <small>note 2</small>	COD: BS ISO 15705 TOC: BS EN 1484
		Biochemical oxygen demand (BOD ₅)	30 mg/l	24-hour flow proportional sample	Weekly <small>note 4</small> (once a week)	BS EN 1899-1
		Total suspended solids (TSS)	40 mg/l	24-hour flow proportional sample	Daily <small>note 2</small>	BS EN 872
		Total suspended solids (TSS)	60 mg/l	Spot sample	Weekly <small>note 4</small> (once a week)	BS EN 872
		Total nitrogen	no limit	24-hour flow proportional sample	Weekly <small>notes 2,4</small> (once a week)	BS EN 12260

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
		Total phosphorus	1mg/l	24-hour flow proportional sample	Weekly ^{notes 2,4} (once a week)	BS EN ISO 15681- 1
			0.5mg/l	Annual Average	Weekly ^{notes 2,4} (once a week)	Or BS EN ISO 15681- 2
		EDTA	no limit	24-hour flow proportional sample	Once every two months	BS EN ISO 16588
		AOX	no limit	24-hour flow proportional sample	Once every two months	BS EN ISO 9562
		Metals Total and Dissolved (Zn, Cu, Cd, Pb, Ni, Hg)	-	Spot sample	twice a year	BS EN ISO 15586
		Hazardous Pollutants screen ^{note 3}	-	Spot sample	twice a year	GCMS analysis at UKAS accredited laboratory
W4 on site plan in schedule 7 emission to River Bela	Effluent Treatment plant - emergency discharge only of primary treated process effluent	pH	5-9	Instantaneous	Continuous	To standards in M18: Monitoring of discharges to water and sewer, or as otherwise agreed in writing
		Volume	1 % river flow	Instantaneous	Continuous	

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 established and checked regularly.

Note 2: If internal rapid test methods are used, they must be cross referenced by external tests to EN or ISO standards monthly.

Note 3: Hazardous pollutants screen substances are: Chlorpyrifos, Cypermethrin, Endosulphan (A & B), 4-nonylphenols & Nonylphenol ethoxylates, PCP, TBT.

Note 4: Weekly samples should be collected by following a randomised sampling program as far as is practicable.

Table S3.3 Annual limits		
Substance	Medium	Limit (including unit)
Chemical Oxygen Demand (COD)	Water ^{note 1}	0.3 - 5.0 kg/t ^{note 2}
Total suspended solids (TSS)	Water ^{note 1}	0.10 - 1.0kg/t ^{note 2}
Total nitrogen	Water ^{note 1}	0.015 - 0.4kg kg/t ^{note 2}
Total phosphorus	Water ^{note 1}	0.002 - 0.04 kg/t ^{note 2}
Adsorbable organically bound halogens (AOX)	Water ^{note 1}	0.05 kg/t ^{note 2}

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: All annual emission limits that impose BAT-AEL's for direct discharges to water apply from 01 October 2018.

Table S3.4 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Abstracted water inlet	Hazardous Pollutants screen ^{note 1}	Twice per annum as per discharge monitoring	GCMS analysis at UKAS accredited laboratory	Spot sample

Note 1: Hazardous pollutants screen substances are: Chlorpyrifos, 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 data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to water Parameters as required by condition 3.5.1	W1 to W4	Every 6 months	1 January, 1 July

Table S4.2 Performance parameters			
Parameter ^{note 1}	Frequency of assessment	Units	Units
Water inputs to the Mill ^{note 1}	Annually	tonnes	m ³ /t
Water used in manufacturing ^{note 1}	Annually	tonnes	m ³ /t
Other inputs of water/moisture ^{note 1}	Annually	tonnes	m ³ /t
Water outputs ^{note 1}	Annually	tonnes	m ³ /t
Waste/raw material inputs ^{note 1}	Annually	tonnes	
Waste/raw material outputs ^{note 1}	Annually	tonnes	
Net total annual production ^{note 1}	Annually	tonnes	

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
Water	Form water 1 or other form as agreed in writing by the Environment Agency	15/08/2016
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	15/08/2016

Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

Part A

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

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

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

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

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

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

Part B – to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6

Interpretation

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

“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 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

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

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

“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 ($\text{NH}_4^+\text{-N}$), nitrites ($\text{NO}_2^- \text{-N}$) and nitrates ($\text{NO}_3^- \text{-N}$).

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

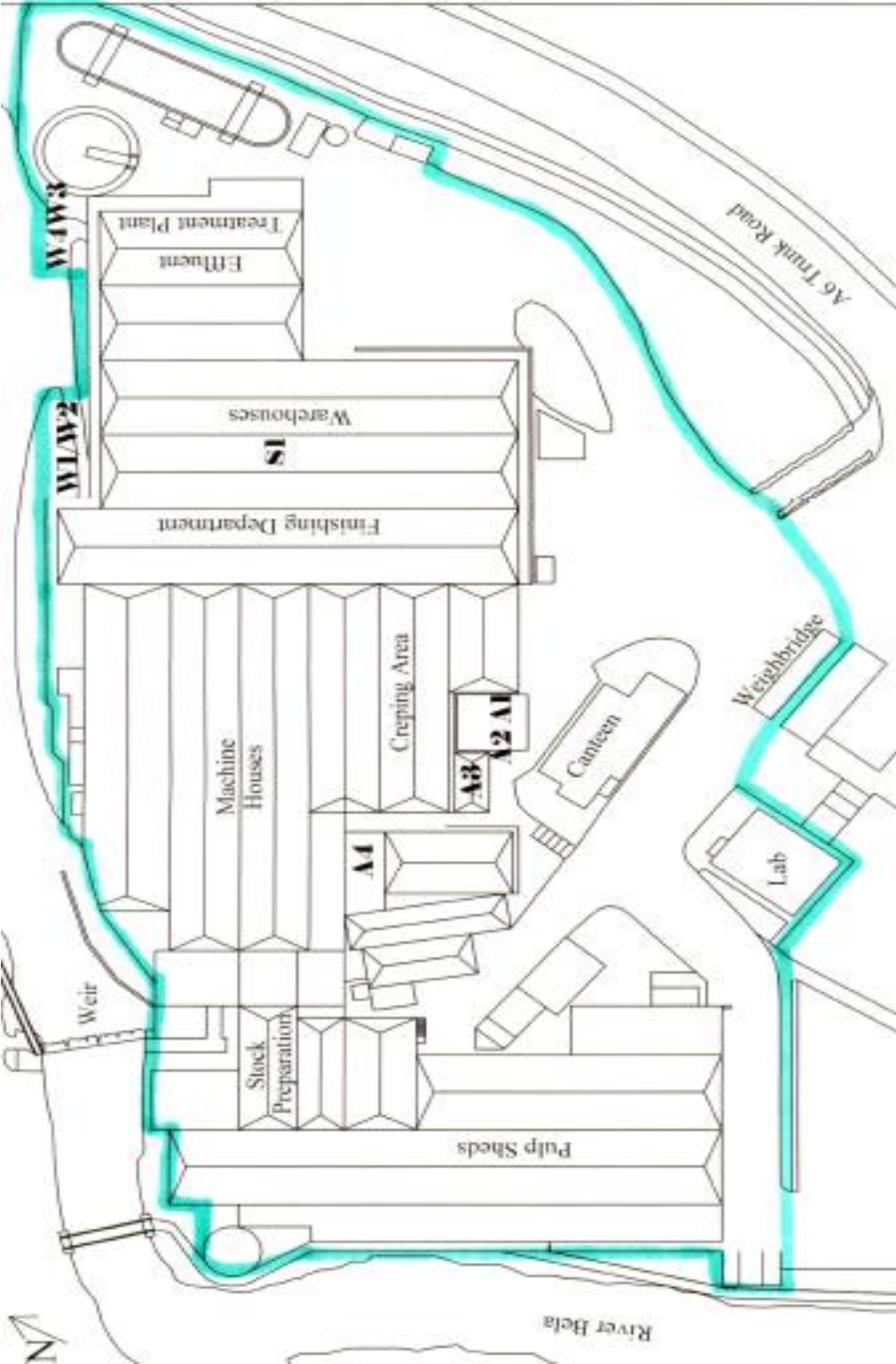
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

Permit number
EPR/BJ7603IP