Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Smurfit Kappa UK Ltd

Snodland Paper Mill
Mill Street
Snodland
Kent
ME6 5AX

Variation application number

EPR/BJ7433IQ/V005

Permit number

EPR/BJ7433IQ

Snodland Paper Mill
Permit number EPR/BJ7433IQ

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, 42 to 47, 52 and 53. The operator is compliant with the exception of BAT 1, 43, 45 and 53. We have set an improvement condition 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.

Brief description of the process

This part of the installation also produces 257,929 tonnes of paper per annum of packaging grade cardboard on single paper machine (PM9), from 300,000 tonnes of recycled fibre. Contaminates in the incoming waste are removed through multiple stage of screening and cleaning producing separate rejects waste streams for disposal and/or recovery.

Water for the process is abstracted from boreholes, Mill Creek and the River Medway. Water and Fibre are recovered and reused within the process through Dissolved Air Flotation before the clarified water is treated and discharged to the River Medway. A significant proportion of treated effluent will be returned to the process water system for re-use.

Effluent Treatment comprises anaerobic digestion, aerobic treatment and settlement. Biogas from the IR Reactor is burnt in gas engines to produce electricity for export to the National Grid. Surplus sludge from the lagoon is consumed at the paper machine. Excess sludge is dewatered and removed by licensed contractor for off-site disposal. Anaerobic sludge is removed by licensed contractor for offsite disposal. There are also some evaporative losses during manufacture.

An on-site combined heat and power (CHP) plant operated by Scottish and Southern Energy Generation Ltd provides heat and power. This is operated under IPPC Permit BJ7506. These two operations form the Smurfit Townsend Hook Paper Mill installation.

The installation is situated on the western bank of the River Medway; it is tidal at this point. Snodland is immediately to the west of the installation on the other side of a railway and main road. The remaining adjacent areas are rural. Holborough to Burham Marshes and Peters Pit Sites of Special Scientific Interest are within 2 km and Peters Pit and components of the North Downs Woodlands candidate Special Areas of Conservation are within 10 km.

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 BJ7433 received (EPR/7433IQ/A001)	28/02/2001	-
Response to request for information	Request dated 15/06/2001	Response dated 29/06/2001
Response to request for information	Request dated 29/11/2001	Response dated 05/06/2002
Permit determined EPR/7433IQ	22/01/2003	Permit originally issued to Smurfit Townsend Hook
Environment Agency Paper and Pulp Review 2011 Variation determined EPR/BJ7433IQ/V002	03/02/2012	Varied and consolidated permit issued in the modern condition format
Environment Agency variation determined EPR/BJ7433IQ/V003	24/07/2013	Environment Agency variation to implement the changes introduced by IED
Variation Application EPR/BJ7433IQ/V004	Duly made 10/10/2014	-
Response to request for information	Request dated 20/11/2014	Response dated 01/12/2014
Additional information	20/11/2014	Commissioning plan for PM9
Additional information	22/11/2014	Joint operating procedures for the operation of the CHP plant
Response to request for information	Request dated 05/12/2014	Response dated 22/12/2014
Additional information received	18/12/2014	Information regarding site boundary
Additional information received	21/01/2015	Revised site plan
Variation determined EPR/BJ7433IQ/V004	05/02/2015	Varied and consolidated permit issued in modern condition format.
Regulation 60 Notice dated 21/11/2014 (Notice requiring information for statutory review of permit)	Response Received 27/03/2015	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.
EPR/BJ7433IQ/V005 (variation and consolidation) determined (Billing Ref: KP3635AV)	31/01/2017	Statutory review of permit - BAT Conclusions published 30 September 2014 Varied and consolidated permit issued

Other Part A installation permits relating to this installation		
Operator	**Permit number**	**Date of issue**
SSE Generation Limited	EPR/BJ7506IM	22/01/2003

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/BJ7433IQ

Issued to

Smurfit Kappa UK Ltd ("the operator")

whose registered office is

Cunard Buildings
Water Street
Pier Head
Liverpool
L3 1SF

company registration number **1017013**

to operate a regulated facility at

Snodland Paper Mill
Mill Street
Snodland
Kent
ME6 5AX

to the extent set out in the schedules.

The notice shall take effect from 31/01/2017

Name	Date
SIMON HEWITT	**31/01/2017**

Authorised on behalf of the Environment Agency

Schedule 1

The following conditions/tables were changed by the consolidated permit EPR/BJ7433IQ/V005 as a result of an Environment Agency initiated variation:

CONDITIONS	
2.1.2	**added**
2.3.4	**amended** to include table S2.3
3.1.3	**added** to cover annual emission limits
3.5.1	**amended**
3.6.1 & 3.6.2	**amended** to address Fire Prevention and remove Condition relating to Pests
4.4.2	**amended**
Schedule 6	**updated**
TABLES	
S1.1	**amended** for clarity on description of activities and addition of further listed activity
S1.2	**amended** to introduce new operating techniques
S1.3	**amended** to reflect current improvement conditions
S2.3	**added** new waste code
S3.3	**added** to introduce annual limits
S3.4	**amended** to update process monitoring
S4.1	**amended** reporting period
S4.2	**amended** performance parameters
S4.3	**amended** performance reporting requirements

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/BJ7433IQ

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BJ7433IQ/V005 authorising,

Smurfit Kappa UK Ltd ("the operator"),

whose registered office is

Cunard Buildings
Water Street
Pier Head
Liverpool
L3 1SF

company registration number **1017013**

to operate part of an installation at

Snodland Paper Mill
Mill Street
Snodland
Kent
ME6 5AX

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

Name	Date
SIMON HEWITT	**31/01/2017**

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

(a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and

(b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.2 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.

1.5 Multiple operator installations

1.5.1 Where the operator notifies the Environment Agency under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator(s) of the installation of the same information.

2 Operations

2.1 Permitted activities

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

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

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit, excluding the area edged in pink on the site plan that represents the extent of the installation covered by that of the other operator of the installation.

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 S2.3; 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, 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.

3.6 Fire prevention

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

3.6.2 The operator shall:

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

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

4 Information

4.1 Records

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

(a) be legible;

(b) be made as soon as reasonably practicable;

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

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

(i) off-site environmental effects; and

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

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

4.2 Reporting

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

4.2.2 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,

(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” or “without delay”, in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity**
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. Manufacture of paper and board from recycled fibre on PM9.	From receipt and storage of raw materials, including waste, treatment of waste paper. Re-pulping waste paper and card. Production of paper and board. Storage and despatch of the board. Recovery of clarified water and fibre via dissolved air flotation.
A2	Section 5.4 Part A(1)(a)(i)	Disposal of non-hazardous waste with a capacity of more than 50 tonnes per day involving biological treatment. Treatment of effluent from papermaking activity. (D8)	Effluent treatment comprising anaerobic digestion and aerobic treatment and settlement prior to discharge to water, including associated storage. Including collection, treatment and dispatch of gas from the anaerobic digestion process to biogas combustion. Import of waste sludge to seed Anerobic Digester Effluent from paper mill and on-site power generation facility only.
	Directly Associated Activity		
A3	Treatment of Water	Treatment of water abstracted from River Medway, Leybourne Stream and Boreholes.	From the treatment of abstracted water to its transfer into the process.
A4	Surface water disposal	Discharge of site drainage via oil interceptor.	Drainage system via emission points identified in table S3.2 of this permit.
A5	Biogas combustion	Combustion of biogas in two combined heat and power (CHP) engines with an aggregated thermal input of 3.3 MWth. R1: Use principally as a fuel to generate energy.	From the receipt of biogas produced at the on-site anaerobic digestion process to combustion via CHP engines with the release of combustion gases via emission point A7 identified in table S3.1 of this permit. Including storage of biogas.
A6	Auxiliary flare operation	Use of an auxiliary flare required only during periods of breakdown or maintenance of CHP engines. D10: Incineration on land.	From the receipt of biogas produced on-site to incineration with the release of combustion gases via emission point A6 identified in table S3.1 of this permit.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application BJ7433IX Response to request for further information	Response to questions 1 and 2.	05/06/2002
Application EPR/BJ7433IQ/V004	Response to questions in application forms C2 and C3 and associated documents. Excluding all techniques associated with the proposed Baling Plant.	10/10/2014
Additional information	Response to the following questions of the Schedule 5 Notice dated 20/11/2014: 1 - 21, Excluding all techniques associated with the proposed Baling Plant.	01/12/2014
Additional information	Response to the following questions of the Schedule 5 Notice dated 05/12/2014: 1, 2.	22/12/2014
Additional information	The commissioning plan for PM9.	20/11/2014
Additional information	The joint operating procedures for the operation of the CHP plant and the management of steam (OP 125-45 dated 01/11/14, Appendix C of the Commissioning Plan).	22/11/2014
Receipt of response to the regulation 60(1) Notice. dated 21/11//2014	Technical standards detailed in response to BAT conclusions 1, 2, 5 to 8, 10, 12 to 18, 42 to 47, 52 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	27/03/2015

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC1	The Operator shall carry out remedial works to defects in the mill drainage system identified through the 2009 survey, as detailed in the Operator's letter dated 30 January 2014.	31/01/2017
IC2	The Operator shall submit a written report on the potential for further heat recovery, to include but not be limited to, the white water, freshwater and hall water/glycol heating systems. The Operator shall submit justified proposals, with timescales for implementation, for approval by the Environment Agency.	31/08/2017
IC3	The Operator shall implement the heat recovery techniques identified in IC2.	01/09/2018
IC4	The Operator shall submit a written report on proposals to cease the landfilling of pulping rejects. The report shall include characterisation of the separate pulping rejects waste streams and review treatment and recovery techniques (including energy recovery) which will move the waste stream (EWC code 03 03 07) up the waste hierarchy. The Operator shall submit justified proposals, with timescales for implementation, for approval by the Environment Agency.	Within 18 months of completion of commissioning

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC5	The Operator shall submit a written commissioning report detailing the performance against the approved commissioning plan for PM9. The report shall include but not be limited to: - Monitoring results from emission point A7 demonstrating compliance with emission limit values specified within Table S3.1 of the permit; - A comparison of the monitoring results from emission point A7 against the predicted emissions specified in the Air Quality assessment provided within the application; - A summary of the environmental performance of the plant as installed against the design parameters set out in the application; - Details of any modifications made during commissioning that change the details included within the application; and - A review of the performance of the facility against compliance with the conditions of this permit, detailing where standards and limits are not being met. Should the report indicate the emissions are having a significant effect a report shall be submitted detailing the measures to reduce emissions and proposed implementation dates. The report shall be used to review the emission limits and monitoring requirements specified in Table S3.1 of this permit.	Within 6 months of the completion of commissioning.
IC6	The Operator shall undertake a review of the optimisation of the performance of the Effluent Treatment Plant. A written report shall be submitted to the Environment Agency, detailing proposals to reduce the emission limits values set in table S3.2 of this permit, to those set out in Table 2.6 of the variation application, taking into account applicable forthcoming BAT-AELs.	Within 24 months of the completion of commissioning.
IC7	The operator shall submit a BAT assessment for the production of heat and power to serve the PM9 installation post SSE contract termination 2018. The report shall include the feasibility of taking heat from the Aylesford Newsprint Installation.	31/12/2016
IC8	The operator shall assess annual emissions from emission point W1 for two consecutive 12 month periods, against the annual limits specified in Table S3.3 of this permit and submit the comparison to the Environment Agency. For each 12 month period, where annual emissions exceed the annual limits specified, the operator shall submit proposals to meet the limits by 01 October 2018.	28/02/2017 31/01/2018
IC9	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 on-site effluent treatment plant to the receiving water body. The investigation shall encompass the following: - Shall follow a minimum of 12 months intensive sampling at a sampling frequency of at least monthly. - The Limits of Detection or Minimum Reporting Value shall be agreed with the Environment Agency prior to commencement. - Shall review upstream water quality, potential sources via raw material inputs and process chemistry. - 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.	01/06/2018

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**
15	**Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 01	paper and cardboard packaging
19	**Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use**
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 01	paper and cardboard
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 01	paper and cardboard

Table S2.3 Permitted waste types and quantities for re-seeding the Anaerobic Treatment Plant	
Maximum quantity	
Waste code	**Description**
03	**Wastes from wood processing and production of panels and furniture, pulp paper and cardboard**
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location Note 1	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A6	Auxiliary flare	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	150 mg/m^3	Hourly average	Monitoring to be undertaken in the event the flare has been operational for more than 10% of a year (876 hours)	BS EN 14792
		Carbon monoxide	50 mg/m^3			BS EN 15058
		Total VOCs	10 mg/m^3			BS EN 12619:2013
A7	Biogas engine flue	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	500 mg/m^3	Hourly average	Annual	BS EN 14792
		Sulphur dioxide	160 mg/m^3			BS EN 14791
		Carbon monoxide	1400 mg/m^3			BS EN 15058
		Total VOCs	1000 mg/m^3			BS EN 12619:2013
A8	Former Mist Extraction	No Parameters Set	No limit set	--	--	Permanent sampling access not required
A9	Low vacuum fans (3 off)	No Parameters Set	No limit set	--	--	Permanent sampling access not required
A10	Wet End Pulper Extraction fan	No Parameters Set	No limit set	--	--	Permanent sampling access not required
A11	Vacuum pump exhaust	No Parameters Set	No limit set	--	--	Permanent sampling access not required
A12	Pre-dryer Hood Exhaust	No Parameters Set	No limit set	--	--	Permanent sampling access not required

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location Note 1	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A13	Dry End Pulper Extraction fan	No Parameters Set	No limit set	--	--	Permanent sampling access not required
A14	After-dryer Hood Exhaust	No Parameters Set	No limit set	--	--	Permanent sampling access not required
A15	Cooling Tower Exhaust	No Parameters Set	No limit set	--	--	Permanent sampling access not required
A16, A17	Biogas pressure relief valves	No Parameters Set	No limit set	--	Record of operating hours	Permanent sampling access not required

Note1: Locations as shown on site plan ‘Mill Layout Emissions’ 831 000 B 012

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location (Note 5)	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W1 on site plan 831 000 B 012 emission to River Medway	Effluent Treatment plant	Flow Rate	0.28m^3 sec	Instantaneous	Continuous	MCERTS self-monitoring of effluent flow scheme
		Maximum Daily Flow	8000 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)	6 (min) 9 (max)	Instantaneous	Continuous	MCERTS Approved instrumentation
		Temperature	30^{o}C	Instantaneous	Continuous	Standard temperature sensor
		Chemical oxygen demand (COD) or Total organic carbon (TOC) note 1	No limit set	24-hour flow proportional sample	Daily note 2	COD: BS ISO 15705 TOC: BS EN 1484
		Biochemical oxygen demand (BOD_5)	40 mg/l	24-hour flow proportional sample	Weekly note 4 (once a week)	BS EN 1899-1
		Total suspended solids (TSS)	60 mg/l	24-hour flow proportional sample	Daily note 2	BS EN 872
		Total suspended solids (TSS)	90 mg/l	Spot sample	Weekly note 4 (once a week)	BS EN 872
		Ammonia as N	No limit set	24-hour flow proportional sample	Weekly note 4 (once a week)	BS EN ISO 11732

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location (Note 5)	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
		Total nitrogen	No limit set	24-hour flow proportional sample	Weekly notes 2,4 (once a week)	BS EN 12260
		Total phosphorus	2 mg/l	24-hour flow proportional sample	Weekly notes 2,4 (once a week)	BS EN ISO 15681- 1 Or BS EN ISO 15681- 2
		Cadmium and its compounds, expressed as cadmium (Total Cd)	1 ug/l	Spot sample	Monthly	BS EN ISO 17294
		Pentachloro-phenol (PCP)	0.5 µg/l	Flow Proportional Composite Sample over 24 Hour Period	Quarterly	BS EN ISO 6468:1997 BS 6068-2.57:1997
		Chloroform	7.5 µg/l	Flow Proportional Composite Sample over 24 Hour Period	Quarterly	As Agreed In Writing with the Environment Agency
		Gamma-Hexachlorocyclo-hexane (y-HCH)	30 ng/l	Flow Proportional Composite Sample over 24 Hour Period	Quarterly	As Agreed In Writing with the Environment Agency
		Hexachlorocyclo-hexane (all Isomers) (HCH)	49 ng/l	Flow Proportional Composite Sample over 24 Hour Period	Quarterly	As Agreed In Writing with the Environment Agency
		Tri-butyl tin (all Isomers) (TBT)	No limit set	Flow Proportional Composite Sample over 24 Hour Period	Quarterly	SCA blue book 142 ISBN 0117523607 BS EN ISO 17353:2005
		Metals Total and Dissolved (Zn, Cu, Cd, Pb, Ni, Hg)	-	Spot sample	twice a year	BS EN ISO 15586 BS EN ISO 17852 for Hg only
		Hazardous Pollutants screen note 3	-	Spot sample	twice a year	GCMS analysis at UKAS accredited laboratory

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location (Note 5)	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W2 on site plan 831 000 B 012 emission to Brookland Lake	Surface water	No parameters set	No limit set	--	--	--
W3 on site plan 831 000 B 012 emission to River Medway	Surface water	No parameters set	No limit set	--	--	--
6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17	Mill drainage	No parameters set	No limit set	--	--	--

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: Chlorpyriphos, 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.

Note 5: Locations as present on site plan 831 000 B 012:

W1: emission to River Medway;
W2: emission to Brookland Lake;
W3: emission to River Medway;
3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13: emissions to the Mill Creek

14, 15, 16, 17, 18, 19, 20, 21, 22*:* emissions to River Medway

Table S3.3 Annual limits		
Substance	Medium	Limit (including unit)
Chemical Oxygen Demand (COD)	Water note 1	1.4 kg/t note 2
Total suspended solids (TSS)	Water note 1	0.2 kg/t note 2
Total nitrogen	Water note 1	0.09 kg/t note 2
Total phosphorus	Water note 1	0.005 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**
Biogas from Digester	Flow	Continuous	In accordance with EU Weights and Measures Regulations	--
Biogas from Digester	Hydrogen sulphide	Continuous	--	Gas monitors calibrated every 6 months to manufacturers requirements
	Methane	Hourly		
Digester and associated tanks	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary
Digester and associated tanks	Integrity checks	Weekly	Visual assessment	--
Abstracted water inlet	Hazardous Pollutants screen note 1	Twice per annum as per discharge monitoring	GCMS analysis at UKAS accredited laboratory	Spot sample
A6, A7	temperature	As relevant to reference emissions monitoring	Traceable to national standards	--
	pressure		Traceable to national standards	--
	oxygen content		Traceable to national standards	--
	water vapour content		Traceable to national standards	Unless Sample Dried
Effluent Plant Sludge and Biomass	Phosphate, Nitrogen, Sludge Volume Index, Microscopy checks of the Biomass	As agreed in writing with the Environment Agency and in accordance with BATc 8	In house analysis	

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 data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air Parameters as required by condition 3.5.1.	A6, A7	Every 12 months	1 January
Emissions to water Parameters as required by condition 3.5.1	W1	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**
Air	Form air 1 or other form as agreed in writing by the Environment Agency	31/01/2017
Water	Form water 1 or other form as agreed in writing by the Environment Agency	31/01/2017
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	31/01/2017

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 (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

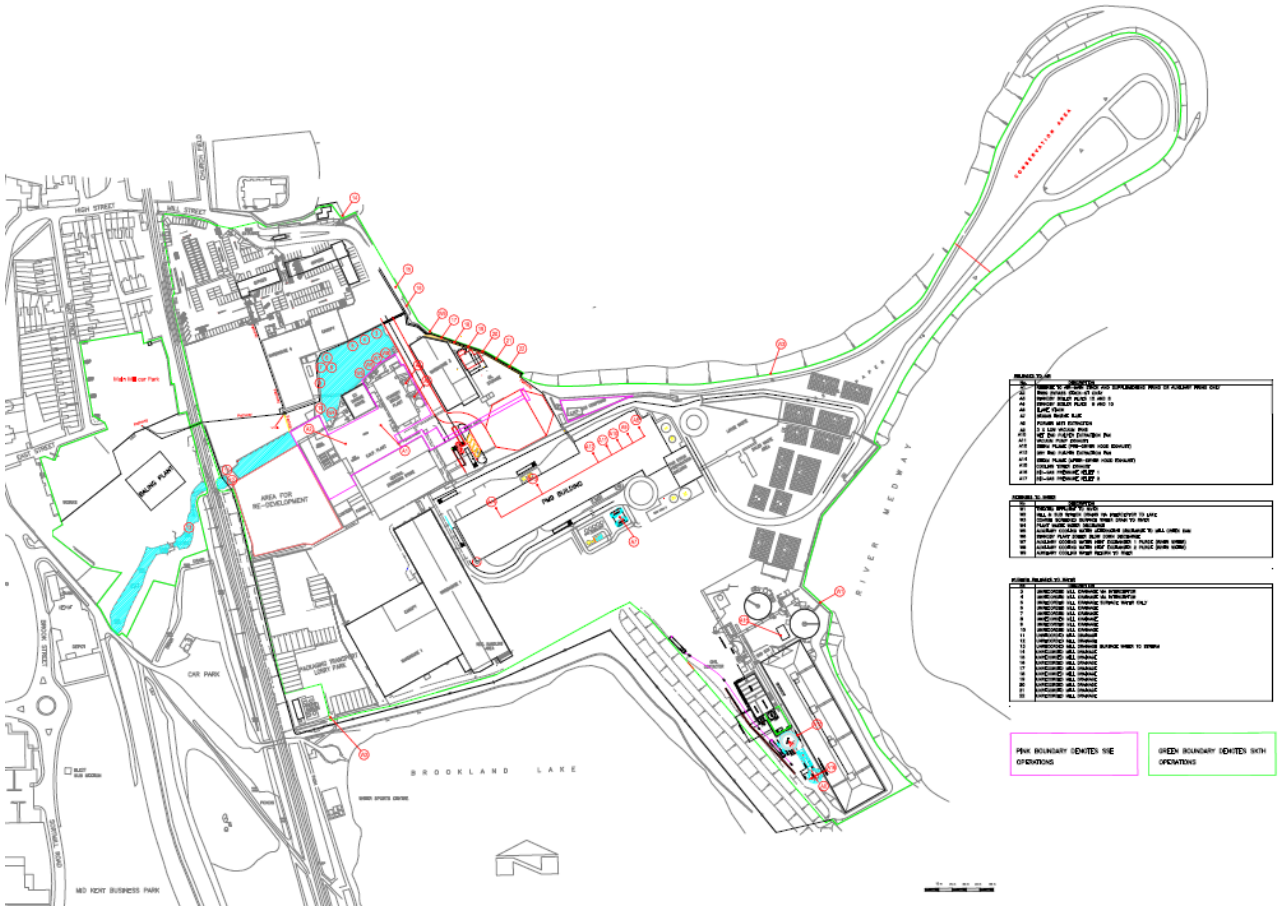
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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



Installation layout (taken from plan ref. 'Mill Layout Emissions' 831 000 B 012 submitted 21/01/2015)

END OF PERMIT