Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Kimberly-Clark Limited

Flint Paper Mill
Aber Road
Flint
Flintshire
CH6 5EX

Permit number

EPR/BJ9703IM

Flint Paper Mill
Permit number EPR/BJ9703IM

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

Kimberly Clarke Flint site consists of two mills and a distribution centre. Flint mill produces baby wipes from non-woven base sheets and is not under IPPC control. Coleshill mill produces tissue products for Kimberly Clarke Professional sector and falls under IPPC control. The mills and distribution centre share a 96 acre site on the edge of the Aber Park Industrial Estate, located on the outskirts of Flint in Flintshire, North Wales.

Within sight of the River Dee Estuary, the mills are bounded on the North by the A548 and the railway. To the South lies the A55, with the town of Flint to the East and farmlands to the West. The Dee Estuary with its SSSI is 600m from the site boundary. A short row of terrace houses back on to the site boundary on the NNE. However the remaining neighbouring area is covered by industry, with the closest housing estate being 150m away (Old London Road).

The National Grid Reference for the site is SJ 236 735 and for the effluent outfall (which belongs to Coleshill Mill) is SJ 246 741.

Kimberly Clarke Limited produce approximately 36,000 tonnes of toilet tissue per annum at its Flint site, almost all of which is destined for the domestic UK market. The products are manufactured from recycled fibre produced on-site from the recycling of used newsprint, office waste and corrugates.

The recycled paper pulping process at Coleshill Mill involves careful selection of the waste mixture, it is dependent on the finished product requirements, and additional de-inking and bleaching stages. A surfactant is added to the initial pulp to help floatation later in the process, after the various screening stages to remove wood and plastics, metal staples and clips, un-pulped fibre, coarse and adhesive contaminants the product moves on to the next stage.

Fine ink and dirt particles are removed by froth floatation using micro-bubbles of air. The foam is removed from the floatation tank and is collected and de-gassed before appropriate off-site disposal. The de-inked SFS then passes through a series of cleaners and screens to remove fine contaminants, followed by a washing process to remove ash/filler and colloidal material.

The residual inks and adhesive residues are dispersed throughout the slurry by agitation and heating.

The dyes in the SFS are removed by bleaching with a stabilised solution of sodium hydrosulphite at elevated temperatures (~90^{O}C) after a vacuum de-gassing stage.

The filtrate from the thickening and other processes is then clarified to reduce the level of suspended solids.

There is no sewerage connection at the mills. The water from all internal drains within each mill and any external drains with the potential for contamination is recycled through the mill clarifier. Other external drains with non-contaminated run-off is discarded through interceptors to either of the lakes and thence to the Dee Estuary.

Sludge from the clarifier is de-watered in a press ad stored in the crumb store prior to appropriate off-site disposal. Other wastes and rejects from the process are also stored in skips on hardstanding prior to the appropriate off-site disposal. The drainage from the storage areas is recycled after clarification.

The clarified water is mostly recycled within the respective mill with the excess water being sent to the effluent treatment plant at the Coleshill Mill before final discharge to holding tanks prior to release to the Dee Estuary on ebb tide.

The effluent treatment plant is a conventional aerobic activated sludge plant with a sedimentation clarifier. The aeration/digestion stage is a completely mixed tank with surface aeration turbines and submerged invent mixers. The overflow from the aeration tank is de-gassed before the final clarifier. Settled sludge is removed by siphon tube in the rotating bridge clarifier. Sludge is either recirculated or de-watered for appropriate disposal.

The main releases from the paper mills are the discharge of effluent from the effluent treatment plant, the exhaust stacks from the boilers & dryers and the vent stacks. All of these releases have previously been regulated under IPPC Authorisation Number AU6820 and IPPC permit EPR/BK9703IM. An ISO14001 accredited Environmental Management System (EMS) is in place to ensure that there is an ongoing review of the activities at the installation to minimise the environmental impact.

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

Status log of the permit		
Description	**Date**	**Comments**
Application EPR/BJ9703IM/A001 received	21/02/01	Application for paper mill.
Response to request for additional information, request dated 29/04/02	21/05/02	
Permit determined EPR/BJ9703IM	27/03/03	Permit issued to Kimberly –Clark Limited
Environment Agency Paper and Pulp Sector Review 2011 Variation determined EPR/BJ9703IM/V002 Permit EPR/BJ9703IM	27/09/11	Varied and consolidated permit issued in modern condition format
Agency variation determined EPR/BJ9703IM/V003	21/03/13	Agency variation to implement the changes introduced by IED
Low risk partial surrender application EPR/BJ9703IM/S004	Duly Made 12/11/14	Application to partially surrender an area of the permit
Application determined EPR/BJ9703IM/S004	25/02/14	Low risk partial surrender issued

Status log of the permit		
Description	**Date**	**Comments**
Regulation 60 Notice dated 19/11/14 (Notice requiring information for statutory review of permit)	Response received 26/03/15	Technical standards detailed in response to the information notice. Information to demonstrate that relevant BAT conclusions are met for the production of paper, pulp and board
Natural Resources Wales Variation Application EPR/ EPR/BJ9703IM/V005 (Variation and Consolidation)	31/03/16	Natural Resources Wales Variation and consolidation following the implementation of the Industrial Emissions Directive

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number
EPR/BJ9703IM

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BJ9703IM/V005 authorising,

Kimberly-Clark Limited ("the operator"),

whose registered office is
1 Tower View
Kings Hill
West Malling
Kent
ME19 4HA

company registration number **00308676**

to operate an installation at
Flint Paper Mill
Coleshill Mill
Aber Road
Flint
CH6 5EX

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

Name	Date
	**31/03/2016**

Eirian Macdonald

Authorised on behalf of Natural Resources Wales

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; and

(b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

(c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

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

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

2.2 The site

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

2.3 Operating techniques

2.3.1 (a) 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 Natural Resources Wales.

(b) If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales 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 Natural Resources Wales.

2.3.2 Waste shall only be accepted if:

(a) it is of a type and quantity listed in schedule 2 table S2.1 and

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

2.3.3 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.

2.3.5 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 Natural Resources Wales.

2.4.2 Except in the case of an improvement which consists only of a submission to Natural Resources Wales, the operator shall notify Natural Resources Wales 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, S3.2 and S3.3.

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

3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil agreed in writing with Natural Resources Wales under IC3, 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 Natural Resources Wales that the activities are giving rise to pollution, submit to Natural Resources Wales 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 Natural Resources Wales.

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 Monitoring

3.3.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:

(a) point source emissions specified in tables S3.1, S3.2 and S3.3;

3.3.2 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.

3.3.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by Natural Resources Wales.

3.3.4 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 Natural Resources Wales.

3.4 Odour

3.4.1 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 Natural Resources Wales, 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.

3.4.2 The operator shall:

(a) if notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to odour, submit to Natural Resources Wales 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 Natural Resources Wales.

3.5 Noise and vibration

3.5.1 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 Natural Resources Wales, 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.

3.5.2 The operator shall:

(a) if notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to noise and vibration, submit to Natural Resources Wales 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 Natural Resources Wales.

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 Natural Resources Wales, 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 Natural Resources Wales.

4.2 Reporting

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

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to Natural Resources Wales by 31 January (or other date agreed in writing by Natural Resources Wales) 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

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by Natural Resources Wales, 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 Natural Resources Wales, 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 Natural Resources Wales using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.3 Notifications

4.3.1 (a) In the event 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 Natural Resources Wales,

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

(i) inform Natural Resources Wales, and

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

(c) in the event 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 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 Where Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.

4.3.4 Natural Resources Wales shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

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

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

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

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

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

In any other case:

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

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

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

4.3.5 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) Natural Resources Wales 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.

4.3.6 Natural Resources Wales shall be given at least 14 days' notice before implementation of any part of the site closure plan.

4.4 Interpretation

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

4.4.2 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 and WFD Annex I and II operations**	**Limits of specified activity and waste types**
A1	S6.1 A1 (b)	Producing paper in industrial plant, paper board where the plant has a production capacity of more than 20 tonnes per day. Production takes place at the Coleshill Mill.	From receipt of waste paper and virgin, to despatch of products to distribution warehouse.
A2	S5.4 A(1) (a) (i)	Biological treatment of effluent from the paper making process in an on-site effluent treatment plant.	From transfer of effluent from Coleshill Mill to the effluent treatment plant through to discharge of treated effluent to the Dee Estuary. Effluent shall only be discharged to the Dee Estuary on the ebb tide 30 mins after high tide for a maximum of 2 hours.
	Directly Associated Activity		
A3	Combustion Plant	Provision of steam for use in the process by burning gas (or gas oil) in a boiler.	Combustion of fuel to release of exhaust gases to atmosphere.
A4	Surface water disposal	Discharge of clean uncontaminated site surface water from roofs, paths and roads	From transfer through the drainage system to discharge into the Dee Estuary via Flint mill and the Swinchard Brook.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	The response to question B2.3 given the Application sections 5.0 and 6.0.	22/02/2001
Response to Schedule 4 notice Request dated 29/04/2002	Response to question 4.	22/05/2002
Response to Reg.60 notice	The response and supporting information requested by NRW	26/03/2015

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC 1	If storing Priority Hazardous Substances on site, the Operator must carry out the following assessments with reference to the Environment Agency's guidance "*How to carry out a risk assessment if you're applying for a bespoke permit* that includes discharging hazardous pollutants to surface water", • Phase 1 Part A screening tests for mercury, cadmium, nickel, lead, benzene, polyaromatic hydrocarbons and any other relevant substances. Phase 1 Part B screening tests for mercury, cadmium, polyaromatic hydrocarbons and any other relevant priority hazardous substances. • For any substance which is not screened out by the Phase 1 Part A or Part B screening tests the Operator will also need to carry out Phase 2 modelling, as described in "*How to carry out a risk assessment if you're applying for a bespoke permit that includes discharging hazardous pollutants to surface water*". The Operator must provide Natural Resources Wales with the results of the emissions monitoring, the results from the screening tests and the results from any Phase 2 modelling. The Operator may use the Environment Agency's H1 electronic screening tool to present the emissions data and to carry out the Phase 1 screening tests. Note: With regard to the Phase 1 Part A screening - a full list of relevant substances is provided in the Environment Agency guidance "*How to carry out a risk assessment if you're applying for a bespoke permit that includes discharging hazardous pollutants to surface water*" under the section entitled "*Screening test: priority hazardous pollutants*". The Operator must review the list and carry out the screening for any substances, in addition to those specified in the notice, that may be present in the installations discharges to surface water. With regard to the Phase 1 Part B screening for priority hazardous pollutants, the section entitled "*Screening test: priority hazardous pollutants*" provides a full list of relevant priority hazardous substances and their associated annual significant loads.	30/09/2016
IC 2	The Operator shall submit the written protocol referenced in condition 3.1.3 for the monitoring of soil and groundwater for approval by Natural Resources Wales. The protocol shall demonstrate how the Operator will meet the requirements of Articles 14(1) (b), 14(1) (e) and 16(2) of the IED. *The procedure shall be implemented in accordance with the written approval from Natural Resources Wales.*	30/09/2016
IC 3	The Operator shall submit a report on the baseline conditions of soil and groundwater at the installation. The report shall contain the information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definitive cessation of activities provided for in Article 22(3) of the IED. The report shall contain information, supplementary to that already provided in the application Site Condition Report, needed to meet the information requirements of Article 22(2) of the IED.	31/03/2017

Schedule 2 - Waste types, raw materials and fuels

Table S2.2 Permitted waste types and quantities	
Maximum quantity	**No limit on maximum quantity, subject to appropriate storage.**
Waste code	**Description**
20 01 01	Paper and Cardboard – Municipal Waste
15 01 01	Paper and Cardboard Packaging
19 12 01	Paper and Cardboard – From the Mechanical Treatment of Waste

Schedule 3 (a)– Emissions and monitoring

Emissions until 29/9/2018

Table S3.1 Point source emissions to air – emission

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A6 Coleshill Mill boiler flue - point A6 in Figure 5.2.2.1	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Boiler Plant	No limit set	Half hourly average	Every 6 months (Note 1)	BS EN 14792 or ISO 10849
A7 Coleshill Mill drying hood - point A7 in Figure 5.2.2.1	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	Drying hood	No limit set	Half hourly average	Every 6 months (Note 1)	BS EN 14792 or ISO 10849
	Particulates		No limit set	Minimum 4 hour sample		BS13284-1 and MID
A8 Coleshill Mill H&V fan 1 - point A8 in Figure 5.2.2.1	No parameters set	H&V fan 1	No limit set	-	-	-
A9 Coleshill Mill H&V fan 2 - point A9 in Figure 5.2.2.1	No parameters set	H&V fan 2	No limit set	-	-	-
A10 Coleshill Mill H&V fan 3 - point A10 in Figure 5.2.2.1	No parameters set	H&V fan 3	No limit set	-	-	-
A11 Coleshill Mill H&V fan 4 - point A11 in Figure 5.2.2.1	No parameters set	H&V fan 4	No limit set	-	-	-
A12 Coleshill Mill H&V fan 5 - point A12 in Figure 5.2.2.1	No parameters set	H&V fan 5	No limit set	-	-	-
A13 Coleshill Mill H&V fan 6 - point A13 in Figure 5.2.2.1	No parameters set	H&V fan 6	No limit set	-	-	-
A14 Coleshill Mill de-ink vacuum exhaust - point A14 in Figure 5.2.2.1	No parameters set	De-ink vacuum exhaust	No limit set	-	-	-

Table S3.1 Point source emissions to air – emission						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A15 Coleshill Mill dust extraction - point A15 in Figure 5.2.2.1	Particulates	Dust extraction flue	No limit set	Minimum 4 hour sample	Every 6 months	BS13284-1 and MID
A16 Coleshill Mill stock preparation extract duct - point A16 in Figure 5.2.2.1	No parameters set	Stock preparation extract duct	No limit set	-	-	-
A17 Coleshill Mill roof mounted air extract units (x8) - point A17 in Figure 5.2.2.1	No parameters set	Coleshill Mill roof mounted air extract units	No limit set	-	-	-
A18 Coleshill mist extract	No Parameters set	Coleshill mist extract	No limit set	-	-	-
Note 1: Monitoring to be undertaken when burning gas as the fuel.						

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W1 point of discharge from Flint Mill Lake to Swinchard Brook	No parameters set	Uncontaminated site surface water	No limit set	-	-	-
W2 point of discharge to the Dee Estuary (at Grid Ref: SJ 246 741) from Effluent treatment plant	Biological Oxygen Demand		35 mg/l	Tidal flow proportional sample	Weekly (Note 1)	BS EN 1899-1 (1998)
	Ammonia (Note 4)		4 mg/l	Tidal flow proportional sample	At every discharge to the Dee Estuary	BS EN 11732:2005
	Chemical Oxygen Demand		No limit set	Spot Sample (Note 4)	Daily (Note 1)	BS 6068-2.34:1998
	Suspended solids (Note 4)		80 mg/l	Tidal flow proportional sample	At every discharge to the Dee Estuary	BS EN 872:2005
	pH		5 - 9	Instantaneous	Continuous (Note 2)	BS EN 06068-2.50:1995

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
	Priority Hazardous Substances (Note 3)		No limit set	Tidal flow proportional sample	Annually (Note 1)	GC/MS analysis to be carried out by UKAS accredited laboratory
	Temperature		Maximum Temp 30°C	Instantaneous	Continuous (Note 2)	Standard temperature sensor
	AO_x		No limit set	Tidal flow proportional sample	Quarterly (Note 1)	As agreed in writing with the NRW.
	Total Nitrogen		No limit set	Tidal flow proportional sample	Weekly (Note 1)	BS EN ISO 11905-1:1998, BS 6068-2.62:1998
	Total Phosphorous		No limit set	Tidal flow proportional sample	Weekly (Note 1)	BS EN ISO 15681-1:2004, BS6068-2.86:2003
	Pentachlorophenol (PCP) and its compounds		4 ug/l	Tidal flow proportional sample	Quarterly (Note 1)	BS EN 12673:1999
	Flow Rate		500 l/second	Instantaneous	Continuous (Note 2)	MCERTS self-monitoring of effluent flow scheme
	Maximum Tidal volume		2500 m^3/tide	From 30 mins after high tide for a maximum of 2 hours	Continuous (Note 2)	MCERTS Self-Monitoring of effluent flow scheme
	Maximum Daily Volume		5000 m^3/day	24 hours	Continuous (Note2)	MCERTS Self-Monitoring of effluent flow scheme
	Metals – Zn, Cu, As, Pb, Ni, Total and dissolved		No limit	Tidal flow proportional sample	Once a year	Method in accordance with M18 guidance note.

Note 1: Monitoring shall be undertaken when discharging on the ebb tide to the Dee Estuary.

Note 2: Monitoring shall be undertaken during every discharge on the ebb tide to the Dee Estuary.

Note 3: Water Framework Directive Priority Hazardous Substances detailed in Schedule 6 – Interpretation.

Note 4: Where in-house analysis is used for compliance assessment purposes for the following substances, a duplicate sample shall be sent for external analysis (UKAS/ ISO17025) at a six monthly frequency: Suspended Solids, Chemical Oxygen Demand (COD) and Ammonia.

Schedule 3 (b)– Emissions and monitoring

Emissions from 30/09/2018

Table S3.1 Point source emissions to air – emission						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A6 Coleshill Mill boiler flue - point A6 in Figure 5.1.2.1	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Boiler Plant	No limit set	Half hourly average	Every 6 months (Note 1)	Monitoring methods used shall be in accordance with Environment Agency document "*Technical Guidance Note M2 Monitoring of stack emissions to air".*
A7 Coleshill Mill drying hood - point A7 in Figure 5.2.2.1	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Drying hood	No limit set	Half hourly average	Every 6 months (Note 1)	
	Particulates		No limit set	Minimum 4 hour sample		
A8 Coleshill Mill H&V fan 1 - point A8 in Figure 5.2.2.1	No parameters set	H&V fan 1	No limit set	-	-	-
A9 Coleshill Mill H&V fan 2 - point A9 in Figure 5.2.2.1	No parameters set	H&V fan 2	No limit set	-	-	-
A10 Coleshill Mill H&V fan 3 - point A10 in Figure 5.2.2.1	No parameters set	H&V fan 3	No limit set	-	-	-
A11 Coleshill Mill H&V fan 4 - point A11 in Figure 5.2.2.1	No parameters set	H&V fan 4	No limit set	-	-	-
A12 Coleshill Mill H&V fan 5 - point A12 in Figure 5.1.2.1	No parameters set	H&V fan 5	No limit set	-	-	-
A13 Coleshill Mill H&V fan 6 - point A13 in Figure 5.2.2.1	No parameters set	H&V fan 6	No limit set	-	-	-
A14 Coleshill Mill de-ink vacuum exhaust - point A14 in Figure 5.2.2.1	No parameters set	De-ink vacuum exhaust	No limit set	-	-	-

Table S3.1 Point source emissions to air – emission						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A15 Coleshill Mill dust extraction - point A15 in Figure 5.2.2.1	Particulates	Dust extraction flue	No limit set	Minimum 4 hour sample	Every 6 months	Monitoring methods used shall be in accordance with Environment Agency document "*Technical Guidance Note M2 Monitoring of stack emissions to air".*
A16 Coleshill Mill stock preparation extract duct - point A16 in Figure 5.2.2.1	No parameters set	Stock preparation extract duct	No limit set	-	-	-
A17 Coleshill Mill roof mounted air extract units (x8) - point A17 in Figure 5.2.2.1	No parameters set	Coleshill Mill roof mounted air extract units	No limit set	-	-	-
A18 Coleshill mist extract	No Parameters set	Coleshill mist extract	No limit set	-	-	-
Note 1: Monitoring to be undertaken when burning gas as the fuel.						

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W1 point of discharge from Flint Mill Lake to Swinchard Brook	No parameters set	Uncontaminated site surface water	No limit set	-	-	-
W2 point of discharge to the Dee Estuary (at Grid Ref: SJ 246 741) from Effluent treatment plant	Biological Oxygen Demand		35 mg/l	Tidal flow proportional sample	Weekly (Note 1)	BS EN 1899-1 (1998)
	Ammonia (Note 4)		4 mg/l	Tidal flow proportional sample	At every discharge to the Dee Estuary	BS EN 11732:2005
	Chemical Oxygen Demand		No limit set	Spot Sample (Note 4)	Daily (Note 1)	BS 6068-2.34:1998

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
	Suspended solids (Note 4)		80 mg/l	Tidal flow proportional sample	At every discharge to the Dee Estuary	BS EN 872:2005
	Pentachlorophenol (PCP) and its compounds		4 ug/l	Tidal flow proportional sample	Quarterly (Note 1)	BS EN 12673:1999
	pH		5 - 9	Instantaneous	Continuous (Note 2)	BS EN 06068-2.50:1995
	Priority Hazardous Substances (Note 3)		No limit set	Tidal flow proportional sample	Annually (Note 1)	GC/MS analysis to be carried out by UKAS accredited laboratory
	Temperature		Maximum Temperature 30°C	Instantaneous	Continuous (Note 2)	Standard temperature sensor
	AO_x		No limit set	Tidal flow proportional sample	Once every 2 months (Note 1)	BS EN ISO 9562:2004 or as otherwise agreed in writing with NRW.
	Total Nitrogen		No limit set	Tidal flow proportional sample	Weekly (Note 1)	BS EN ISO 11905-1:1998, BS 6068-2.62:1998
	Total Phosphorous		No limit set	Tidal flow proportional sample	Weekly (Note 1)	BS EN ISO 15681-1:2004, BS6068-2.86:2003
	Flow		500 l/second	Instantaneous	Continuous (Note 2)	MCERTS self-monitoring of effluent flow scheme
	Maximum Tidal volume		2500 m^3/day	From 30 mins after high tide for a maximum of 2 hours	Continuous (Note 2)	MCERTS Self-Monitoring of effluent flow scheme
	Maximum Daily Volume		5000 m^3/tide	24 hours	Continuous (Note 2)	MCERTS Self-Monitoring of effluent flow scheme
	Metals – Zn, Cu, As, Pb, Ni, Total and dissolved		No limit	Tidal flow proportional sample	Once a year	Method in accordance with M18 guidance note.

Note 1: Monitoring shall be undertaken when discharging on the ebb tide to the Dee Estuary.

Note 2: Monitoring shall be undertaken during every discharge on the ebb tide to the Dee Estuary.

Note 3: Water Framework Directive Priority Hazardous Substances detailed in Schedule 6 – Interpretation.

Note 4: Where in-house analysis is used for compliance assessment purposes for the following substances, a duplicate sample shall be sent for external analysis (UKAS/ ISO17025) at a six monthly frequency: Suspended Solids, Chemical Oxygen Demand (COD) and Ammonia.

Table S3.3 Annual limits		
Substance	**Medium**	**Limit (including unit)**
Chemical Oxygen Demand (COD)	Water	4.0 kg/t
Total Suspended Solids (TSS)	Water	0.4 kg/t
Total Nitrogen	Water	0.15 kg/t
Total Phosphorus	Water	0.015 kg/t
Adsorbable organically bound halogens (AO_X)	Water	0.05 kg/t

Schedule 4 (a) – Reporting

Reporting until 29/9/2018

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 3.3.1	A6, A7 and A15	Every 6 months	From date of variation issue
Emissions to water Parameters as required by condition 3.3.1	W2	Every 12 months where monitoring frequency is annual and every 3 months for monitoring frequency less than annual.	From date of variation issue

Table S4.2 Performance parameters

Parameter	Frequency of assessment	Units
Total Energy Used	Annually	MWh
Water usage	Annually	Tonnes
Chemical Oxygen Demand	Annually	kg/t
Total Suspended Solids	Annually	kg/t
Total Nitrogen	Annually	kg/t
Total Phosphorus	Annually	kg/t
Adsorbable organically bound halides (AOX)	Annually	kg/t

Table S4.3 Reporting forms

Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by Natural Resources Wales	26/09/2011
Water	Form water 1 or other form as agreed in writing by the Natural Resources Wales	26/09/2011
Energy Usage	Form energy 1 or other form as agreed in writing by the Natural Resources Wales	01/01/2016
Other performance indicators	Form performance 1 or other form as agreed in writing by Natural Resources Wales	26/09/2011
Waste subject to condition 4.2.5	Spreadsheet provided by Natural Resources Wales, to be e-mailed to waste.returns@cyfoethnaturiolcymru.gov.uk	N/A
Resource efficiency	Form Performance 2 or other form as agreed in writing by Natural Resources Wales	01/01/2016

Schedule 4 (b) – Reporting

Reporting from 30/09/2018

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 and A15	Every 6 months	From date of variation issue
Emissions to water Parameters as required by condition 3.5.1	W2	Every 12 months where monitoring frequency is annual and every 3 months for monitoring frequency less than annual.	From date of variation issue

Table S4.2 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Total Energy Used	Annually	MWh
Water usage	Annually	Tonnes
Chemical Oxygen Demand	Annually	kg/t
Total Suspended Solids	Annually	kg/t
Total Nitrogen	Annually	kg/t
Total Phosphorus	Annually	kg/t
Adsorbable organically bound halides (AOX)	Annually	kg/t

Table S4.3 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Form air 1 or other form as agreed in writing by Natural Resources Wales	30/09/2018
Energy Usage	Form energy 1 or other form as agreed in writing by Natural Resources Wales	30/09/2018
Water	Form water 1 or other form as agreed in writing by Natural Resources Wales	30/09/2018
Other performance indicators	Form Performance 1 or other form as agreed in writing by Natural Resources Wales	26/09/2011
Waste subject to condition 4.2.5	Spreadsheet provided by Natural Resources Wales, to be e-mailed to waste.returns@cyfoethnaturiolcymru.gov.uk	N/A
Resource efficiency	Form Performance 2 or other form as agreed in writing by Natural Resources Wales	30/09/2018

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 activity that gives rise to an incident or accident which significantly affects or may significantly affect the environment	
To be notified Immediately	
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 permit condition	
To be notified immediately	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

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

(c) In the event 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:	
To be notified immediately	
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.

"AOX" means Adsorbable organic halides measured according to the EN ISO:9562 standard method for waste waters

""Annex I" means Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"Annex II" means Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"*annually*" means once every year.

"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.

"background concentration" means such concentration of that substance as is present in:

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

"disposal" means any of the operations provided for in Annex IIA to Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 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 or background concentration limit**.**.

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

"hazardous property" has the meaning given in Schedule 3 of the Hazardous Waste (England and Wales) Regulations 2005 No.894 and the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138).

*"*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*.*

"Pests" *means Birds, Vermin and Insects.*

"quarter" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

"WFD" means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste

Water Framework Directive Priority Hazardous Substances are Anthracene, Brominated diphenyl ether, Cadmium, C10-13 Chloroalkanes, Endosulphan, Hexachlorobenzene, Hexachlorobutadiene, Hexachloro-cyclohexane, Mercury and its compounds, Nonylphenol (4-Nonylphenol), Pentachlorobenzene, Polycyclic aromatic Hydrocarbons (PAHs), Tributyltin compounds (Tributyltin-cation)

waste code" means the six digit code referable to a type of waste in accordance with the list of wastes established by Commission Decision 2000/532/EC as amended from time to time (the 'List of Wastes Decision') and in relation to hazardous waste, includes the asterisk.

"year" means calendar year ending 31 December.

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

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

(a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or

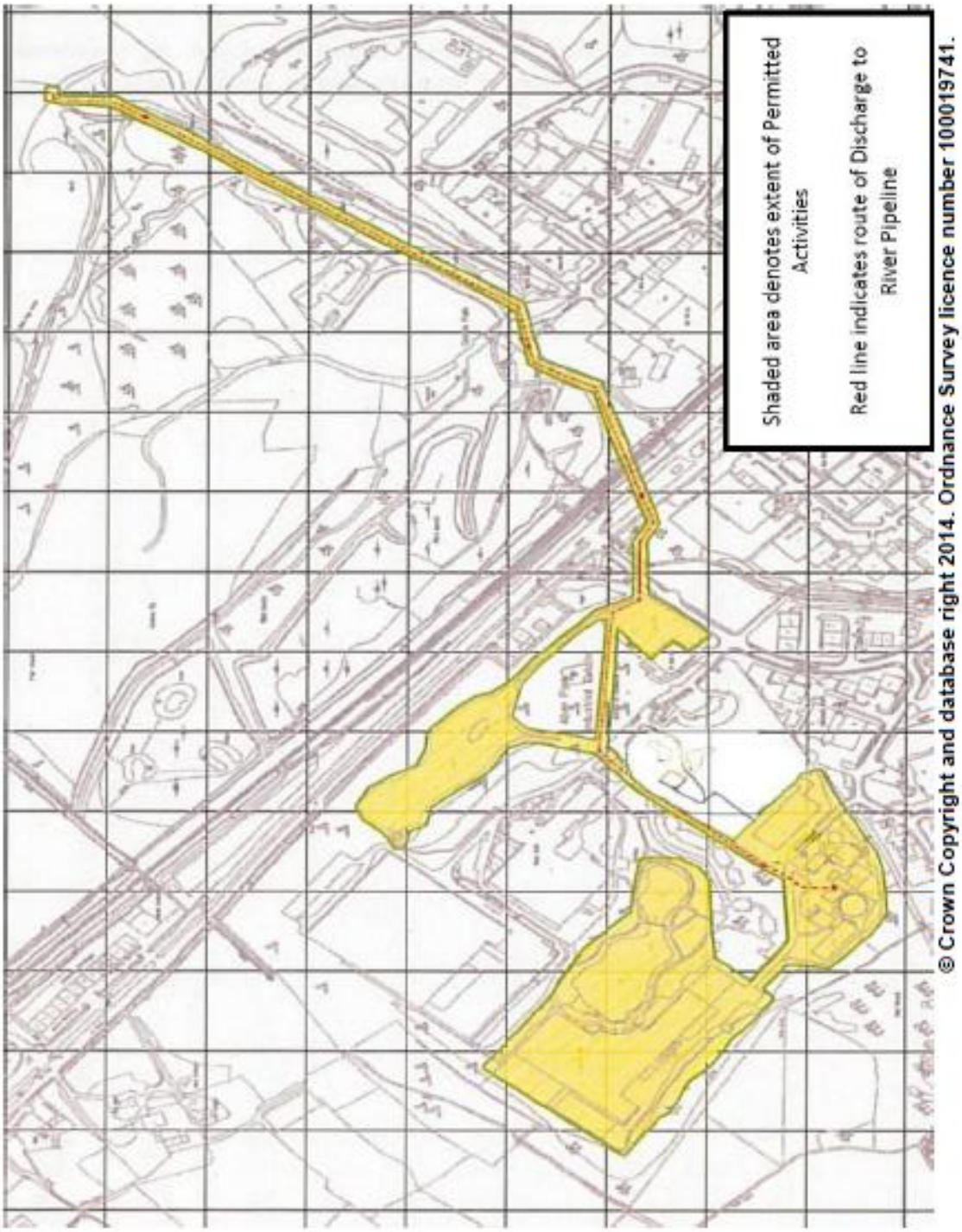
(b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

Net production is

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

Calculation for the conversion of mg/l to kg/t can be found in Annex I of the BRef Notes

Schedule 7 - Site plan



END OF PERMIT