32

ASIANTAETH YR AMGYLCHEDD
ENVIRONMENT AGENCY

Permit with introductory note

Pollution Prevention and Control Regulations 2000

North Wales Tissue Ltd
Oakenholt Paper Mill
Oakenholt
Flint
Flintshire
CH6 5PU

Permit number

BJ9681

Asiantaeth yr Amgylchedd Cymru
Ffordd Caer, Bwcle, Sir y Fflint CH7 3AJ

Environment Agency Wales
Chester Road, Buckley, Flintshire CH7 3AJ

Contents

Introductory note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control Regulations 2000 (S.I.2000 No.1973) ("the PPC Regulations") to operate an installation carrying out one or more of the activities listed in Part 1 to Schedule 1 of those Regulations, to the extent authorised by the Permit.

The Permit includes conditions that have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by those conditions are subject to the condition implied by Regulation 12(10) of the PPC Regulations, that the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Brief description of the installation regulated by this permit

The main purpose of the activity at the installation is the manufacture of tissue paper from pure pulp.

Up to 20,000 tonnes of dry, baled pulp can be store in the warehouse before being moved in batches to the stock preparation areas where it is worked with water to produce a dilute stock.

The two paper machines operate on similar principles, differing only on width and throughput, and are designed to provide a combined output of around 48,000 tonnes of tissue per annum. The web (or wet sheet) is formed between continuously moving wire and felt belts that wrap together around a forming cylinder where most of the water is pressed out of the fibre leaving a soft, bulky tissue. Water collected from this stage is passed back to dilute the incoming feed. The resulting sheet passes through the pressing section where a combination of pressing and vacuum remove more water in preparation for the final drying stage. Drying is completed by use of a steam-heated cylinder and two air-heated hoods. The paper is then ready to be wound onto reels for sale or combining to form jumbo rolls.

The main emissions to air from the installation arise from two gas-fired boilers used for steam raising. Both are single fuel boilers fitted with low oxides-of-nitrogen burners and have a combined net rated thermal input of 19.6 MW.

Most of the water used in the paper making process is recycled in the process. Paper machine 1 utilises conventional dissolved air flotation to clarify the internal recycle water, whilst paper machine 2 utilises a disc filter technique. Waste waters from the paper making plant and the boiler house plus some of the surface water run-off from the site flow to the on-site aerated biological effluent treatment plant.

Permit
Pollution Prevention and Control
Regulations 2000

ASIANTAETH YR AMGYLCHEDD
ENVIRONMENT AGENCY

Permit

Permit number
BJ9681

The Environment Agency (the Agency), in exercise of its powers under Regulation 10 of the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973), hereby authorises

North Wales Tissue Limited ("the Operator"),

whose Registered Office is
253 Grays Inn Road
London
WC1X 8QT

Company registration number **3677156**

to operate an Installation at

Oakenholt Paper Mill
Oakenholt
Flint
Flintshire
CH6 5PU

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

Signed

C. G. Hardman

Mr C G Hardman

Authorised to sign on behalf of the Environment Agency

Date

30 August 2002

Conditions

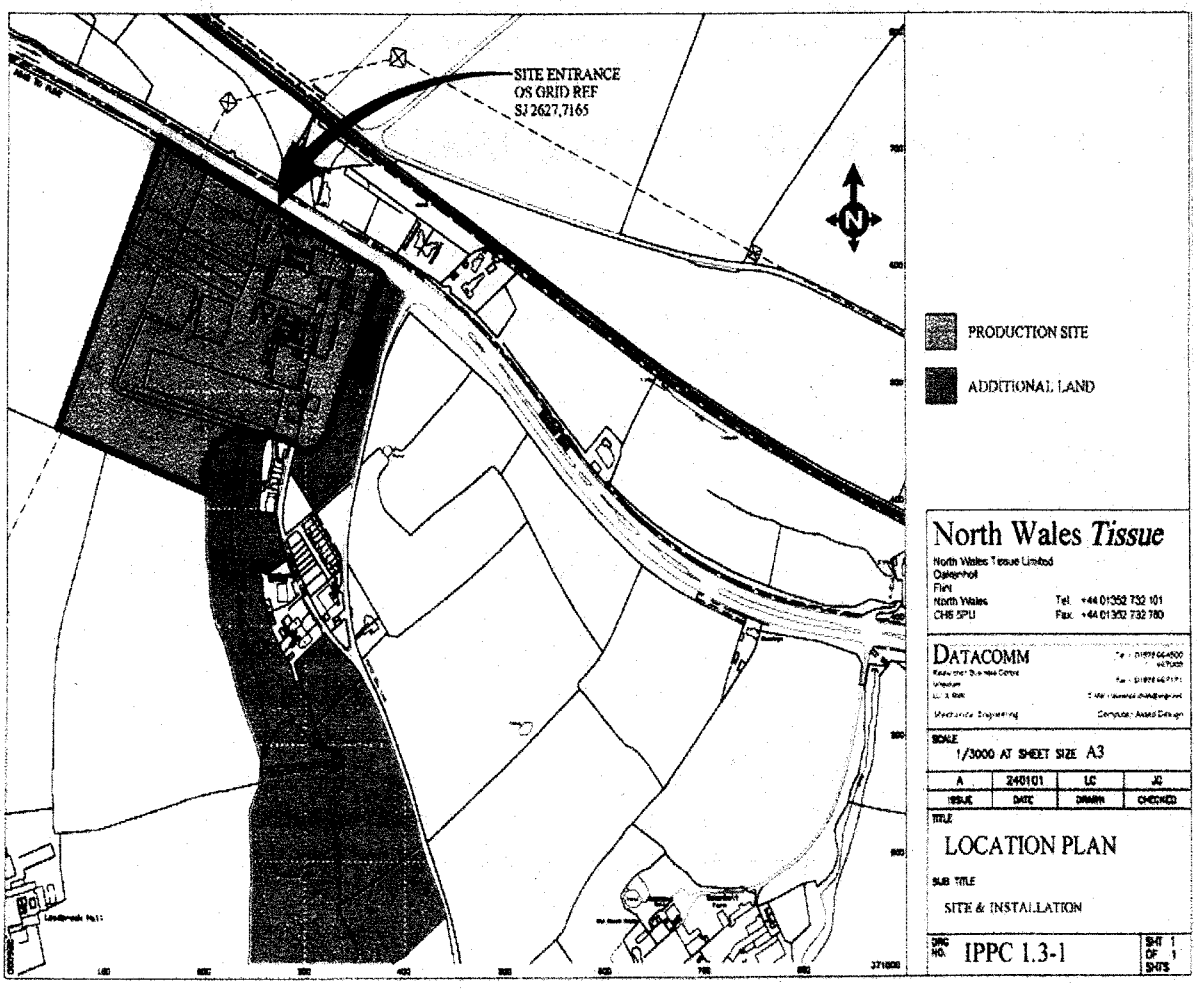
1 The permitted installation

1.1.1 The Operator is authorised to carry out the activities and/or the associated activities specified in Table 1.1.1.

Table 1.1.1

Activity under Schedule 1 of the Regulations / Associated Activity	Description of specified activity	Schedule 1 Activity Reference (if applicable)	Limits of specified activity
Producing paper at a production capacity of more than 20 tonnes per day.	Producing tissue paper from virgin pulp on two paper machines	6.1 A(1) (b)	Receipt of raw materials to production of the finished product
Warehousing	Storage of raw materials	Directly Associated Activity	Within the boundary of the installation
Steam generation	Boilerhouse activities	Directly Associated Activity	Within the boundary of the installation
Effluent Treatment	Primary and secondary treatment of effluents from the installation	Directly Associated Activity	Receipt, balancing and treatment of all process waters, including biological treatment, post settlement and sludge removal
Discharges to controlled waters	Discharge of process water and site drainage from the installation	Directly Associated Activity	From Effluent Treatment Plant and oil interceptor to point of entry to controlled waters

1.1.2 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the area shown edged in *green* on the plan below:



1.1.3 There are no pre-operation conditions

2 Operational Matters

2.1 Management techniques and control

2.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be managed and controlled as described in the documentation specified in Table 2.1.1, or as otherwise agreed in writing by the Agency.

Table 2.1.1 : Management and control

Description	Parts	Date Received
Application	The response to question 2.1 given in pages 1 - 7 of section 2.1of the application {excluding the list of names given on page 4 of this section}	28/02/01
Response to Schedule 4 Part 1 Notice	Response to questions 1 & 2	06/09/01
Supplementary Information	Section 2.1 pages 6 – 8	01/03/02

2.1.2 All plant, equipment and technical means used in operating the Permitted Installation shall be maintained in good operating condition.

2.1.3 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.

2.1.4 A copy of this Permit and those parts of the application referred to in this Permit shall be available, at all times, for reference by all staff carrying out work subject to the requirements of the Permit.

2.1.5 All staff shall be fully conversant with those aspects of the Permit conditions, which are relevant to their duties and shall be provided with appropriate training and written operating instructions to enable them to carry out their duties.

2.2 Raw materials (including water)

2.2.1 The Operator shall, subject to the conditions of this Permit, use raw materials (including water) as described in the documentation specified in Table 2.2.1, or as otherwise agreed in writing by the Agency.

Table 2.2.1 : Raw materials (including water)

Description	Parts	Date Received
Application	The response to question 2.2 given in section 2.2 of the application	28/02/01
Response to Schedule 4 Part 1 Notice	Response to questions 5 & 6	06/09/01
Supplementary Information	Section 2.2 pages 8 – 10	01/03/02
Supplementary Information	Section 2.2.3 (pages 2 – 3)	29/07/02

2.3 Operating Techniques

2.3.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 2.3.1, or as otherwise agreed in writing by the Agency.

Table 2.3.1: Operating techniques

Description	Parts	Date Received
Application	The response to questions 2.3 given in section 2.3 of the application	28/02/01
Response to Schedule 4 Part 1 Notice	Response to questions 4 & 9	06/09/01
Supplementary Information	Section 2.3 pages 11 – 18	01/03/02
Supplementary Information	Section 2.3.8 (on pages 3 – 5 and drawing IPPC 2.3-3)	29/07/02

2.4 Groundwater protection

2.4.1 The Permitted Installation shall, subject to the conditions of this Permit, be controlled as described in the documentation specified in Table 2.4.1, or as otherwise agreed in writing by the Agency.

Table 2.4.1: Groundwater protection

Description	Parts	Date Received
Application	The response to questions 2.4 given in section 2.4	28/02/01

2.5 Waste handling and storage

2.5.1 The Operator shall, subject to the conditions of this Permit, handle and store waste as described in the documentation specified in Table 2.5.1, or as otherwise agreed in writing by the Agency.

Table 2.5.1: Waste handling and storage

Description	Parts	Date Received
Application	The response to question 2.5. given in section 2.5 of the application	28/02/01
Supplementary Information	Section 2.5 pages 18 – 19	01/03/02
Supplementary Information	Section 2.5.2 pages 5-6 and drawing IPPC 2.3-4	30/07/02

2.5.2 The operator shall carry out an annual survey of the integrity of all bunded areas and impermeable surfacing where oil and other substances with the potential to contaminate the subsurface area are loaded, transported or stored.

2.5.3 Waste materials specified in Table 2.5.2 shall only be stored on the site in the location and manner specified in that Table.

Table 2.5.2: Waste stored on site

Description of Waste	Location of Storage on Site Plan IPPC 2.3-4	Manner of Storage	Storage Conditions
Liquid sludge from the final effluent settling stage	Position 3	Bulk storage tank	Bunded storage area with impermeable base
Waste lubricating oil	Position 7	Drums	Drums to be clearly marked and held in a bunded storage area with impermeable base.
Cardboard, coreboard and paper	Position 5	Waste Skip	Kept under cover and to be disposed of as soon as practicable
Metal waste	Position 6	Waste Skip	Kept under cover and to be disposed of as soon as practicable
Mixed solid waste	Position 4	Waste Skip	Kept under cover and to be disposed of as soon as practicable

2.6 Waste recovery and disposal

2.6.1 The Operator shall, subject to the conditions of this Permit, recover and dispose of waste as described in the documentation specified in Table 2.6.1, or as otherwise agreed in writing by the Agency.

Table 2.6.1: Waste recovery and disposal

Description	Parts	Date Received
Application	The response to question 2.6 given in section 2.6 of the application, except the reference in section 2.6.2.2 to possibly sending waste oil to landfill.	28/02/01
Supplementary Information	Section 2.6.2, Page 6	30/07/02

2.7 Energy Efficiency

2.7.1 The Operator shall, subject to the conditions of this Permit, use energy as described in the documentation specified in Table 2.7.1, or as otherwise agreed in writing by the Agency.

Table 2.7 1: Energy efficiency

Description	Parts	Date Received
Application	The response to question 2.7 given in section 2.7 of the application	28/02/01

2.7.2 The Operator shall prepare an energy efficiency plan by 1 April 2003 and shall update this plan annually thereafter.

2.8 Accident prevention and control

2.8.1 The Operator shall, subject to the conditions of this Permit, prevent and limit the consequences of accidents as described in the documentation specified in Table 2.8.1, or as otherwise agreed in writing by the Agency.

Table 2.8.1 : Accident prevention and control

Description	Parts	Date Received
Application	The response to question 2.8 given in section 2.8 of the application	28/02/01
Response to Schedule 4 Part 1 Notice	Response to Question 8	06/09/01
Supplementary Information	Section 2.8 page 19	01/03/02

2.9 Noise and vibration

2.9.1 The Operator shall, subject to the conditions of this Permit, control noise and vibration as described in the documentation specified in Table 2.9.1, or as otherwise agreed in writing by the Agency.

Table 2.9.1 : Noise and vibration

Description	Parts	Date Received
Application	The response to question 2.9 given in section 2.9 of the application	28/02/01
Response to Schedule 4 Part 1 Notice	Response to Question 8	06/09/01
Supplementary Information	Section 2.9 pages 19 - 20	01/03/02

2.10 Monitoring

2.10.1 The Operator shall, subject to the conditions of this Permit, carry out, evaluate and assess monitoring as described in the documentation specified in Table 2.10.1, or as otherwise agreed in writing by the Agency.

Table 2.10.1 : Monitoring

Description	Parts	Date Received
Application	The response to question 2.10 given in section 2.10 of the application, except for the use of 15% residual oxygen as a standardised baseline for presenting results.	28/02/01
Supplementary Information	Section 2.10 pages 20 - 22	01/03/02

2.10.2 Where requested in writing by the Agency, the Operator shall provide at least 14 days advance notice of undertaking monitoring / spot sampling.

2.10.3 There shall be provided:

a safe and permanent means of access to enable sampling / monitoring to be carried out in relation to the emission points specified in Schedule 2, unless otherwise specified in that Schedule; and

b safe means of access to other sampling/monitoring points when required by the Agency.

2.10.4 At least once each year, the operator shall take a composite sample, representative of the discharge from emission point W1 over at least one week's normal production, and shall analyse the sample for those substances prescribed for discharge to water as listed on the Reporting Form (W4) referred to in Schedule 3.

2.11 Decommissioning

2.11.1 The Operator shall, subject to the conditions of this Permit, make provision for decommissioning the installation as described in the documentation specified in Table 2.11.1, or as otherwise agreed in writing by the Agency.

Table 2.11.1 : Decommissioning

Description	Parts	Date Received
Application	The response to question 2.11 given in section 2.11 of the application	28/02/01

2.12 Multi-operator installations

2.12.1 This is not a multi-operator installation

3 Records

3.1.1 A record (a "Specified Record") shall be made of:-

a any malfunction, breakdown or failure of plant, equipment or techniques (including down time and any short term and long term remedial measures) that may have, has had or might have had an effect on the environmental performance of the Permitted Installation. These records shall be kept in a log maintained for that purpose;

b all monitoring and sampling taken or carried out in accordance with the conditions of this permit and any assessment or evaluation made on the basis of such data;

c for all waste received at or produced from the Permitted Installation:-

i its composition, or as appropriate, description;

ii the best estimate of the quantity produced;

iii its disposal routes; and

iv the best estimate of the quantity sent for recovery.

3.1.2 There shall be made available for inspection by the Agency at any reasonable time:

a Specified Records;

b any other records made by the Operator in relation to the operation of the Permitted Installation ("Other Records").

3.1.3 A copy of any Specified or Other Records shall be supplied to the Agency on demand and without charge.

3.1.4 Specified Records and Other Records shall:-

a be legible;

b be made as soon as reasonably practicable; and

c indicate any amendments which have been made and shall include the original record wherever possible.

3.1.5 Specified Records and Other Records shall be retained for a minimum period of 4 years from the date when the records were made.

3.1.6 A record shall be made at the Permitted Installation of any complaints concerning the Installation's effect or alleged effect on the environment. The record shall give the date of complaint, time of complaint, a summary of any investigation and the results of such investigation. Such records shall be made in a log kept for this purpose.

4 Reporting

4.1.1 All reports and notifications required by this Permit, or by Regulation 16 of the PPC Regulations, shall be sent to the Environment Agency at the address notified in writing to the Operator by the Agency.

4.1.2 The Operator shall report the parameters listed in Table S2 to Schedule 2 as follows:

a in respects of the emission points specified;

b for the reporting periods specified in Table S2 to Schedule 2 and using the forms specified in Table S3 to Schedule 3;

c giving the information from such results and assessments as may be required by the forms specified in those Tables; and

d sending the report to the Agency within 28 days of the end of the reporting period.

4.1.3 The Operator shall, within 36 months of the issue of this Permit, submit a report on potential environmental improvements to the Permitted Installation. For each of the subject areas identified in Section 2 of the appropriate technical guidance, the report shall assess the costs and benefits of alternative techniques that may provide environmental improvement. This shall include, but not be limited to, those techniques listed in guidance. The methodologies used should be based on those given in Agency guidance note IPPC H1 (Environmental Assessment and Appraisal of BAT) and should justify, against the Best Available Techniques criteria, where potential improvements are not planned to be implemented. As part of their management system the Operator shall submit an updated report every 36 months.

4.1.4 The Reports described in paragraph 4.1.3 above shall include reassessments of the options for disposal of sludge from the effluent treatment plant and BAT justifications for the chosen option.

4.1.5 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets the Operator shall, not later than 31 January in each year, provide a summary report of the previous year's progress against such targets.

4.1.6 Fugitive emissions shall be reviewed on an annual basis and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them.

4.1.7 The Operator shall review the need to use bleached pulp and shall report to the Agency annually on the circumstances of its use. These annual reports shall continue to be submitted until such time as the Operator notifies the Agency in writing that bleached pulp will no longer be used on the installation.

4.1.8 The Operator shall submit a report not later than 31 January each year, giving the water consumption of the paper mill in the previous year, expressed as volume per air dried tonne (ADt) of product.

4.1.9 Following each annual survey of the integrity of all bunded areas and impermeable surfacing, required by condition 2.5.2, the operator shall submit a report to the Agency, summarising the results of the survey and giving an action plan.

4.1.10 The Operator shall submit a detailed site closure plan to the Agency by 31 March 2003 and shall ensure that it remains current thereafter.

4.1.11 The Operator shall produce a report annually on the energy consumption of the installation, and shall send a copy of each such report to the Agency. The report shall contain, as a minimum, the information specified in the form listed in Schedule 3.

4.1.12 The Operator shall produce a report annually, summarising the quantities of waste removed from the site for recovery / disposal, and shall send a copy of each such report to the Agency. The report shall contain, as a minimum, the information specified in the form listed in Schedule 3.

5 Notifications

5.1.1 The Operator shall notify the Agency **without delay** of:-

a the detection of an emission of any substance which exceeds any limit or criteria in this Permit specified in relation to the substance;

b the detection of any fugitive emission which has caused or may cause pollution unless the quantity emitted is so trivial that it would be incapable of causing pollution;

c the detection of any malfunction, breakdown or failure of plant or techniques which has caused or may have the potential to cause pollution; and

d any accident which has caused or may have the potential to cause pollution.

5.1.2 The Operator shall submit written confirmation to the Agency of any notification under condition 5.1.1 of this Permit by sending:-

a the information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification; and

b the more detailed information listed in Part B of that Schedule as soon as practicable thereafter;

and such information shall be in accordance with that Schedule.

5.1.3 The Operator shall give written notification, as soon as practicable, of any of the following:

a permanent cessation of the operation of any part of or all of the Permitted Installation;

b cessation of the operation of any part of or all of the Permitted Installation for a period, likely to exceed 1 year; and

c resumption of the operation of any part of or all of the Permitted Installation after a cessation notified under 5.1.3(b).

5.1.4 The Operator shall notify the following matters to the Agency, in writing, within 14 days of their occurrence:

i any change in the Operator's trading name, registered name or registered office address;

ii a change to any particulars of the Operator's ultimate holding company (including details of an ultimate holding company where the Operator has become a subsidiary);

iii any steps taken with a view to the Operator going into administration, entering into a company voluntary arrangement or being wound up.

5.1.5 Where the Operator has entered into a Climate Change Levy Agreement with the Government, the Operator shall, within 14 days, notify the Agency, in writing, in the event that the Secretary of State has not re-certified that agreement.

6 Emissions

6.1 Emissions into air

6.1.1 Emissions to air from the emission points specified in Table 6.1.1 shall only arise from the sources specified in that Table.

Table 6.1.1: Emission points into air

Emission point reference / description	Source	Location of emission point on drawing IPPC 2.3-3
A1 (b & a)	Boilers 2 & 3 respectively	Points 1 / 1A
A2	PM1 Hoods exhaust	Point 4
A3	PM1 Wet end	Point 2
A4	PM1 Vacuum exhaust	Point 3
A5	PM2 Hoods Exhaust (direct)	Point 11
A5 HX	PM2 Hoods Exhaust (via heat exchanger)	Point 12
A6	PM2 Wet end extractor fans	Points 6-9
A7	PM2 Vacuum exhaust	Point 10
A8	PM1 Dust removal exhaust	Point 5
A9	PM2 Dust removal exhaust	Point 13
A10	Whitewater silo	Point 14

6.1.2 The limits for emissions into air for the parameters and emission points set out in Table 6.1.3 shall not be exceeded.

6.1.3 The Operator shall carry out monitoring of the parameters listed in Table 6.1.3, from the emission points and at least at the frequencies specified in that Table.

Table 6.1.3: Emission limits into air

Parameters	Emission Point			
	A1 (b & a)	A2, A5 & A5HX	A4, A7 & A10	A8 & A9
Oxides of nitrogen (as NO_2), mg m^{-3}	-	-	-	-
Frequency of monitoring	Annually	Annually	-	-
Carbon Monoxide, mg/m^3	-	-	-	-
Frequency of monitoring	Annually	Annually	-	-
Oxygen, mg/m^3	-	-	-	-
Frequency of monitoring	Annually	-	-	-
Particulate, mg m^{-3} (min 4 hour sample)	-	-	-	50
Frequency of monitoring	-	-	-	Annually
Volatile Organic Compounds, mg m^{-3}	-	-	-	-
Frequency of monitoring	-	Annually	Annually	-
Total Organic Carbon, mg m^{-3}	-	-	-	-
Frequency of monitoring	-	Annually	Annually	-

6.1.4 Where an annual mass limit for a substance is stated in Table 6.1.4, the aggregate emission of such substance from the Permitted Installation into air from the emission points specified in Table 6.1.2 shall not exceed that limit in any year.

Table 6.1.4 Annual mass limits

There are no annual mass limits set.

6.1.5 There shall be no odour from the activities at the installation detectable beyond the site boundary.

6.2 Emissions to land

6.2.1 There shall be no emission to land from the Permitted Installation

6.2.2 The Operator shall notify the Agency, as soon as practicable, of any information concerning the state of the Site which affects or updates that provided to the Agency as part of the Site Report submitted with the application for this Permit.

6.3 Emissions to water [other than emissions to sewer]

Emissions to water from the emission points specified in Table 6.3.1 shall only arise from the sources specified in that Table.

Table 6.3.1: Emission points into water

Emission Point Reference	Source	Receiving Water
W1	Treated effluent from Effluent Treatment Plant	Lead Brook
W2	Site drainage including sand filter wash-water	Lead Brook
W3	Surface water drainage	Lead Brook

6.3.1 The limits for emissions to water for the parameters and emission points set out in Table 6.3.3 shall not be exceeded.

6.3.2 The Operator shall carry out monitoring of the parameters listed in Table 6.3.3, from the emission points and at least at the frequencies specified in that Table.

Table 6.3.3: Emission limits into water

Parameter	Emission Point W1	Emission Point W2	Emission Point W3
Biochemical Oxygen Demand (measured after 5 days at 20°C with nitification suppressed by the addition of allyl-thiourea), mg/l	50	-	-
Frequency of monitoring	Weekly (Note 1)	-	Annually
Suspended Solids, mg/l	50	100	-
Frequency of monitoring	Daily (Note 2)	Monthly	Annually
Chemical Oxygen Demand, mg/l	200	-	-
Frequency of monitoring	Daily (Note 2)	-	Annually
Ammoniacal Nitrogen (expressed as N), mg/l	16	-	-
Frequency of monitoring	Weekly (Note 1)	-	Annually
Temperature, degrees Celsius	(Note 5)	-	-
Frequency of monitoring	Continuous	-	-
pH Minimum	5	5	-
Maximum	9	9	-
Frequency of monitoring	Continuous (Note 3)	Weekly	Annually
Total Hydrocarbon Oil, mg/l	-	15	-
Frequency of monitoring	-	Monthly	-
Maximum Daily Flow (Notes 4, 6), m3/day	2200	-	-
Frequency of monitoring	Daily	-	-
Maximum Instantaneous Flow Rate (Note 6), l/s	30	-	-
Frequency of monitoring	Continuous	-	-
Water Pollutants as listed on Form W4 in Schedule 3	-	-	-
Frequency of monitoring	Annually	-	-

Note 1 – Monitoring based on composite 24-hour samples, once per week.

Note 2 – Monitoring based on composite 24-hour samples.

Note 3 – This monitoring requirement applies from 1 November 2003.

Note 4 – Calculated from continuous monitoring of instantaneous flow

Note 5 – To be set subject to Improvement Condition 9.1 & 9.5.

Note 6 – Discharge flows to be measured at the outlet NGR SJ 2626 7157.

6.3.3 There shall be no emission into water from the Permitted Installation of any substance prescribed for water for which no limit is specified in Table 6.3.3 except in a concentration which is no greater than the background concentration.

6.4 Emissions to sewer

6.4.1 No emission shall be made into any sewer from the Permitted Installation

6.5 Emissions of heat

6.5.1 No conditions are specified

6.6 Emissions of noise and vibration

6.6.1 No conditions are specified

7 Transfer to effluent treatment plant

7.1.1 No conditions on transfers to the effluent treatment plant are imposed under this part of this Permit.

8 Off site conditions

8.1.1 There are no off-site conditions.

9 Improvement programme

9.1.1 The Operator shall complete the requirements specified in Table 9.1.1 by the date specified in that Table, and shall send written notification of the date of completion of each requirement to the Agency, at the Reporting Address, within 14 days of the completion of each such requirement.

Table 9.1.1: Improvement programme requirements

Reference	Requirement	Date
9.1	The Operator shall submit written details for the Agency's written approval of a programme to assess the impact from release point W1 on controlled waters, namely Lead Brook and the Dee Estuary.	31 October 2002
	The Operator shall implement the programme in accordance with the approved details and shall, on completion, submit a written report summarising the monitoring data and assessment.	31 October 2003
9.2	An Environmental Management System shall be implemented according to the timetable given in the Application and having regard to section 2.1 of Technical Guidance Note IPPC S6.01. A report shall be sent to the Agency confirming the implementation and shall include a summary of the findings of the second 6-monthly internal audit.	31 December 2002
9.3	A report shall be sent to the Agency in justification of the proposal that microdisc filtration technology represents BAT for this installation and setting out a time scale for the proposed replacement of the DAF/RDF unit on PM1.	31 December 2002
9.4	The Operator shall implement a Noise Management Plan and send a copy of it to the Agency. The Plan shall include a noise impact assessment and a justification of why the chosen techniques for noise management and control represent BAT for this installation.	31 December 2002
9.5	The Operator shall provide the Agency with a proposed timetable for the reduction in temperature of the release to Lead Brook to below a maximum of 25°C.	31 January 2003
9.6	The Operator shall propose a timetable for adopting the relevant standards for water quality monitoring (refer to section 2.10.4 and appendix 1 of Guidance Note IPPC S6.01). A report incorporating the timetable shall be submitted to the Agency.	31 January 2003
9.7	The Operator shall carry out a feasibility study into the segregation and separate discharge of roof and surface run-off waters from the process effluent and report the findings to the Agency.	31 March 2003
9.8	The Operator shall submit details of the continuous flow monitoring and recording system on emission point W1, including proposals for upgrading the system in accordance with the Environment Agency's Water Quality Consenting Standard and Guidance on Flow Measurement of Discharges.	31 March 2003

Table 9.1.1: Improvement programme requirements - continued

Reference	Requirement	Date
9.9	The Operator shall determine the levels of contaminants (including heavy metals and persistent organic compounds) in the effluent treatment plant sludge which is sent for land – spreading, and shall propose an extended monitoring programme. A report shall be submitted to the Agency.	30 June 2003
9.10	The Operator shall carry out an audit on all the waste storage areas. A report together with an action plan shall be submitted to the Environment Agency.	31 July 2003
9.11	The Operator shall undertake an assessment to determine whether any of the aqueous emissions are liable to contain any of the specified List I and List II Substances (as defined in the Dangerous Substances Directive 76/464/EEC).	30 September 2003
9.12	The Operator shall adopt the following standards for monitoring releases to air: Gas Flow — BS EN 13284-1:2002. CO — USEPA Method 10 NO_X — USEPA Method 7E SO_2 — BS6960:4.1 or BS6069.4.4. Particulates — BS EN 13284-1:2002 VOCs — BS EN 1076:1997 TOC — BS EN 13526:2001	30 September 2003
9.13	The Operator shall install and maintain continuous monitoring equipment for the measurement of pH in releases from emission point W1.	31 October 2003
9.14	The Operator shall carry out a monitoring programme to determine Adsorbable Organic Halogen (AOX) releases from release point W1, when bleached pulp is being used and report findings to the Agency.	31 December 2003
9.15	The Operator shall carry out a monitoring programme of NO_x and SO_2 releases from Release Points A1, A2 and A5 during abnormal operating conditions including start-up and shut-down operations and report the findings to the Agency.	31 December 2003

10 Interpretation

10.1.1 In this Permit, the following expressions shall have the following meanings:

"Authorised Officer"
means any person authorised by the Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, powers specified in Section 108(4) of that Act.

"Background concentration"
means the same as "background quantity" as defined in paragraph 11 to Part 2 to Schedule1 of the PPC Regulations.

"Fugitive emission"
means an emission from any point other than those specified in the Tables in part 6 of this Permit.

"Monitoring"
includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.

"Permitted Installation"
means the activities and the limits to those activities described in Table 1.1.1 of this Permit.

"PPC Regulations"
means the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit.

"Staff"
includes employees, directors or other officers of the Operator, and any other person under the Operator's direct or indirect control, including contractors.

"Substances prescribed for water"
means those substances mentioned in paragraph 13 of Part 2 of Schedule 1 to the PPC Regulations.

"Year"
means calendar year ending 31 December.

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

10.1.3 Unless stated otherwise, any references in this Permit to concentrations of substances in emissions into air mean;

a in relation to gases from combustion processes, the concentration in dry air at a temperature of 273 K, 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 gases from non-combustion sources, the concentration at a temperature of 273 K and at a pressure of 101.3 kPa, with no correction for water vapour content.

11 Written agreement to changes

11.1.1 When the qualification "or as otherwise agreed in writing" is used in a condition of this Permit, the Operator shall seek such agreement in the following manner:

a the Operator shall give the Agency written notice of the details of the proposed change, indicating the relevant part(s) of this Permit; and

b such notice shall include an assessment of the possible effects of the proposed change (including waste production) on risks to the environment from the Permitted Installation.

11.1.2 Any change, proposed according to condition 11.1.1 and agreed in writing by the Agency, shall not be implemented until the Operator has given the Agency prior written notice of the implementation date for the change. As from that date, the Operator shall operate the Permitted Installation in accordance with that change, and any relevant documentation referred to in this Permit shall be deemed to be amended.

Schedule 1

Confirmation of condition 5.1.1 notifications, in accordance with condition 5.1.2

This Schedule outlines the information that the Operator must provide to the Agency to satisfy condition 5.1.2 of this Permit.

Units of measurement used in information supplied under Part A and B requirements must 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 PPC Regulations.

Returns should contain:

Part A

☐ Name of Operator.

☐ Permit Number

☐ Location of Installation

☐ Date information provided

☐ Time, date and location of the emission

☐ Identity and details of the substance[s] emitted to include:-

- ☐ Best estimate of the quantity or the rate of emission, and the time during which the emission took place
- ☐ Environmental medium into which the emission took place
- ☐ Measures taken, or intended to be taken, to stop the emission

Part B

☐ Date and time of emission

☐ Any more accurate information on the matters notified 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 or harm which has been or may be caused by the emission

☐ The dates of any Part A notifications within the previous 24 months

☐ Name ☐ Post.....

☐ Signature ☐ Date

☐ Statement that signatory is authorised to sign on behalf of North Wales Tissue Ltd.

Schedule 2

Reporting of monitoring data

Parameters for which reports shall be made, in accordance with condition 4.1.2 of this Permit, are listed in Table S2 below.

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins
Sulphur dioxide, mg m^{-3}	A1a, A1b, A2, A5, A5HX	Every 12 months	1 January 2003
VOCs, mg m^{-3}	A2, A4, A5, A5HX, A7, A10	Every 12 months	1 January 2003
TOC, mg m^{-3}	A2, A4, A5, A5HX, A7, A10	Every 12 months	1 January 2003
Oxides of nitrogen, mg m^{-3}	A1a, A1b, A2, A5, A5HX	Every 12 months	1 January 2003
Carbon monoxide, mg m^{-3}	A1a, A1b, A2, A5, A5HX	Every 12 months	1 January 2003
Oxygen, mg m^{-3}	A1a, A1b	Every 12 months	1 January 2003
Particulates, mg m^{-3}	A8, A9	Every 12 months	1 January 2003
Biochemical Oxygen Demand mg/l	W1	Every 3 months	1 January 2003
	W3	Every 12 months	1 January 2003
Annual Mass Release, kg, for Biochemical Oxygen Demand	W1	Every 12 months	1 January 2003
Chemical Oxygen Demand, mg/l	W1	Every 3 months	1 January 2003
	W3	Every 12 months	1 January 2003
Annual Mass Release, kg, for Chemical Oxygen Demand	W1	Every 12 months	1 January 2003
Suspended solids, mg/l	W1, W2	Every 3 months	1 January 2003
	W3	Every 12 months	1 January 2003
pH	W1, W2	Every 3 months	1 January 2003
	W3	Every 12 months	1 January 2003
Ammoniacal Nitrogen, mg/l	W1	Every 3 months	1 January 2003
	W3	Every 12 months	
Annual Mass Release, kg, for Ammoniacal Nitrogen	W1	Every 12 months	1 January 2003
Total Hydrocarbon Oil, mg/l	W2	Every 3 months	1 January 2003
Temperature, degrees Celsius	W1	Every 3 months	1 January 2003
Flow Rate, l/s	W1	Every 3 months	1 January 2003
Daily Flow, m3/day	W1	Every 3 months	1 January 2003
Water Pollutants as listed in Form W4 in Schedule 3.	W1	Annually	1 January 2003

Schedule 3

Forms to be used

Unless otherwise agreed in writing between the Agency and the Operator, the Operator shall use the Agency forms specified in Table S3 for reports submitted to the Agency.

Table S3:Reporting Forms		
Medium / parameter	**Form Number**	**Date of Form**
Air	A1	15/08/02
Water (frequently sampled parameters, W1)	W1	27/08/02
Water (releases from W2)	W2	28/08/02
Water (releases from W3)	W3	14/08/02
Water (annual sample, W1)	W4	14/08/02
Energy	E1	27/08/02
Waste Return	R1	14/08/02

END OF PERMIT

SCHEDULE 3

EMISSIONS TO AIR

Release Summary for 12 months to --/--/20—

Permit Number BJ9681

North Wales Tissue Ltd., Oakenholt Mill

Table S3 - A1 Reporting Form – Emissions to air

Parameters	Emission Point									
	A1 a	A1 b	A2	A4	A5	A5HX	A7	A8	A9	A10
Dates of extractive samples for particulates	■	■	■	■	■	■	■			■
Results of extractive samples for particulates mg m^{-3}	■	■	■	■	■	■	■			■
Dates of extractive samples for gaseous parameters								■	■	
Sulphur dioxide mg m^{-3} (as 2 hour average)				■			■	■	■	■
Volatile Organic Compounds mg m^{-3} (as carbon)	■	■						■	■	
Total Organic Carbon mg m^{-3} (as carbon)	■	■						■	■	
Oxygen mg m^{-3}			■	■	■	■	■	■	■	■
Carbon monoxide mg m^{-3}				■			■	■	■	■
Oxides of nitrogen (as NO_2) mg m^{-3}				■			■	■	■	■

Notes to Table S3-A1

For A1a and A1b, all reported values are to be expressed at 273 K, 101.3 kPa, dry basis, 3% oxygen.

For all other release points, all reported values are to be expressed at 273 K, 101.3 kPa, dry basis, actual oxygen.

Signed on behalf of the Operator .....

Dated .....

Form A1

15 August 2002

SCHEDULE 3

EMISSIONS TO WATER [other than emissions to sewer]

Release Summary for 3 months to --/--/20--

Permit Number BJ9681

North Wales Tissue Ltd., Oakenholt Mill

Release Point W1

Table S3 – W1 Reporting Form – Emissions to Water – Emission Point W1				
Parameter	**Mean value in period**	**Maximum value in period [#]**	**Sample date corresponding to maximum value**	**Permit Limit**
Biochemical Oxygen Demand, mg/l				50
Suspended Solids, mg/l				50
pH				Maximum value 9
pH minimum				Minimum value 5
Temperature, °C				
Chemical Oxygen Demand, mg/l				200
Ammoniacal Nitrogen (expressed as N), mg/l				16
Daily Flow, m^3/day				2200
Flow Rate, l/s				30

Parameter	Annual Mass Release [$]
Biochemical Oxygen Demand, kg	
Chemical Oxygen Demand, kg	
Ammoniacal Nitrogen, kg	

Note # - In the case of pH minimum, the minimum period value should be recorded.
Note $ - These annual "mass" releases are to be reported on the same form as that used for reporting the fourth calendar quarter result, and shall give the totals for that calendar year.

Signed on behalf of the Operator .....

Dated .....

Form W1

27 August 2002

SCHEDULE 3

EMISSIONS TO WATER [other than emissions to sewer]

Release Summary for 3 months to --/--/20--

Permit Number BJ9681

North Wales Tissue Ltd., Oakenholt Mill

Release Point W2, sampled monthly

Table S3 – W2 Reporting Form – Emissions to Water - Emission Point W2				
Parameter	**Mean value in period**	**Maximum value in period [#]**	**Sample Date corresponding to maximum value**	**Permit Limit**
Suspended Solids mg/l				**100**
pH				**Maximum Value 9**
pH min				**Minimum Value 5**
Total hydrocarbon oil mg/l				**15**

Note **#** - In the case of pH min, the minimum period value should be recorded.

Signed on behalf of the Operator .....

Dated .....

Form W2

28 August 2002

SCHEDULE 3

EMISSIONS TO WATER [other than emissions to sewer]

Release Summary for Year.....

Permit Number BJ9681

North Wales Tissue Ltd., Oakenholt Mill

Release Point W3, sampled annually

Table S3 – W3 Reporting Form – Emissions to Water - Emission Point W3		
Parameter	**Result**	**Date**
Biological Oxygen Demand, mg/l		
Suspended Solids, mg/l		
Chemical Oxygen Demand, mg/l		
Ammoniacal Nitrogen (expressed as N), mg/l		
pH		

Signed on behalf of the Operator .....

Dated.....

Form W3

14 August 2002

SCHEDULE 3

EMISSIONS TO WATER [other than emissions to sewer]

Release Summary for Year .....

Permit Number BJ9681

North Wales Tissue Ltd., Oakenholt Mill

Release Point W1, sampled annually

Table S3 – W4 Reporting Form – Emissions to Water - Emission Point W1		
Parameter	**Result**	**Date**
Mercury and its compunds, µg/l		
Cadmium and its compounds, µg/l		
Hexachlorocyclohexane – all isomers, µg/l		
All isomers of DDT, µg/l		
Pentachlorophenol and its compounds, µg/l		
Hexachlorobenzene, µg/l		
Hexachlorobutadiene, µg/l		
Aldrin, µg/l		
Dieldrin, µg/l		
Endrin, µg/l		
Polychlorinated Biphenyls, µg/l		
Dichlorvos, µg/l		
1,2-Dichloroethane, µg/l		
Trichlorobenzene – all isomers, µg/l		
Atrazine, µg/l		
Simazine, µg/l		
Tributyltin compounds, µg/l		
Triphenyltin compounds, µg/l		
Trifuralin, µg/l		
Fenitrothion, µg/l		
Azinphos-methyl, µg/l		
Malathion, µg/l		
Endosulfan. µg/l		

Signed on behalf of the Operator .....

Dated .....

Form W4

14 August 2002

SCHEDULE 3

ENERGY CONSUMPTION

Annual Summary for Year Ending 20--

Permit Number BJ9681

North Wales Tissue Ltd., Oakenholt Mill

Table S3 – E1 Reporting Form – Annual Energy Consumption of the Installation

Energy Source	Annual Energy Consumption[1]					
	Delivered		Primary[2]		Carbon Dioxide Emissions[3]	
	MWh	MWh/ADT[4]	MWh	MWh/ADT[4]	tonnes	tonnes/ADT[4]
Electricity						
Natural Gas						

Notes to Table S3-E1

1. Energy consumption figures shall incorporate all sub-metered cells within the scope of the installation.
2. Units of electricity from the public supply shall be multiplied by a factor of 2.6 to account for the energy loss in generation.
3. Direct and indirect emissions of carbon dioxide shall be calculated using the factors provided in Section 3 of the Environment Agency's Horizontal Guidance Note IPPC H2 - Energy Efficiency.
4. These refer to energy consumption figures expressed per air-dried tonne ("ADT") of product.

Signed on behalf of the Operator .....

Dated .....

Form E1

27 August 2002

SCHEDULE 3

WASTE RETURN

Annual Summary for year ending 20—

Permit Number BJ9681

North Wales Tissue Ltd., Oakenholt Mill

TABLE S3 – R1 Reporting Form - Annual Waste Return	
Description of Waste	**Quantity removed off site for recovery / disposal (tonnes)**
Waste Lubricating oil	
Metal Waste	
Cardboard, Coreboard and Paper	
Mixed Solid Waste	
Settled sludge from effluent treatment plant	

Signed on behalf of the Operator .....

Dated .....

Form R1

14 August 2002