Greenhouse Gas Emissions Permit (with introductory note)

Greenhouse Gas Emissions Trading Scheme Regulations 2012

Operator name(s)
NORTHWOOD & WEPA Limited

Installation name
Bridgend Operation

Site name (if applicable)
Bridgend Paper Mill

Installation address
Bridgend Paper Mill
Llangynwyd
Bridgend
Bridgend
CF34 9RS
Wales

Permit number
UK-W-IN-12920

Effective Date of Consolidation
01 February 2016

Issued by Natural Resources Wales

INTRODUCTORY NOTE

This introductory note does not form part of the permit.

This Greenhouse Gas Emissions Permit ("permit") is issued by Natural Resources Wales ("the regulator"). It authorises the holder to emit the greenhouse gases specified in the permit from the regulated activities listed and is subject to a number of conditions, including the monitoring and reporting of such emissions, the surrender of allowances and notification requirements.

As required by the Regulations, the permit sets out a description of the installation to which it applies. An "installation" includes one or more regulated activities, and any directly associated activities, as defined in the EU ETS Directive. However, the monitoring and reporting requirements of the permit apply only to emissions from the regulated activities. The installation covered by a permit may in fact be part of a larger installation (where different regulated activities in the overall installation, or parts thereof, are operated by different operators).

Allocations of free allowances to installations are set out in the UK's National Implementation Measures document and are issued to operator's registry accounts each year as appropriate. In certain circumstances, operators may also be eligible to apply for an allocation of allowances from the New Entrant Reserve. The permit includes a requirement on the operator to surrender allowances equal to the annual reportable emissions from the installation in a particular year (increased to account for non-surrenders or reporting errors in respect of earlier years), by 30 April in the following year. Allowances may be bought or sold to enable operators to meet their surrender requirements.

Talking to us

If you contact the regulator about this permit, please quote the permit reference number.

You can contact us by e-mail on GHGHelp@naturalresourceswales.gov.uk.

Variations to the permit

This permit may be varied in the future, on application by the operator (in accordance with the permit conditions) or at the initiative of the regulator. The variation application requirements are set out in the permit conditions and the powers of the regulator to vary permits are set out in the Regulations.

Surrender of the permit

The operator must apply to surrender the permit where it has "ceased operation". The definition of "ceases operation", together with the procedure and requirements are set out in the Regulations.

Transfer of the permit or part of the permit

Before the permit can be wholly or partially transferred to another operator, a joint application to transfer the permit must be made by both the current and new operators. The procedure and requirements are set out in the Regulations.

Appeals

Operators may appeal against the provisions of this permit. The Regulations contain information about the appeals procedure.

Subsistence Charge

Following the issue of the permit, annual subsistence fees will be payable. Fees will also be payable in respect of permit variations (except where the variation relates to minor changes or changes of a purely administrative nature), transfers, surrenders or revocations.

Regulator's Address

Our contact address is as follows:

Email to: GHGHelp@naturalresourceswales.gov.uk

Status Log

Permit

Permit number	Date application received	Date further information received*	Date Permit issued
UK-W-IN-12920	22 December 2015		27 January 2016

Changes to Permit

Notice number	Change Type	Date application received	Date further information received*	Date Notice issued	Comment
AEMV12920-P3-3	AEM Variation	22 December 2015			1. Petrol fuel stream calc factors upgraded from tier 1 to 2a and to use the UNFCCC factors 2. Stoichiometric EF of 3.38 tCO2/t applied to the acetylene stream and upgraded from no tier to tier 1 3. Duly Authorised Person and job titles within management procedures updated. 4. Measurement units on F1 stream updated from CFT/h to m3/h
AEMV12920-P3-1	AEM Variation	08 October 2013		18 November 2013	1. removed S6 and A5 from the fuel stream F3 2. added a new fuel stream (F71) to account for the standby generator being fuelled from an on-site tank rather than by the F3 fuel stream 3. new site diagram submitted to show the standby generator moved from F3 to F71
AEMV12920-P3-2	AEM Variation	11 November 2014		13 November 2014	1) calculation approach description updated 2) Control of Outsourced Activities procedure updated 3) Risk Assessment Issue 9 updated

* Further information received in response to notices under Schedule 3, paragraph 1(12) of the Regulations.

End of introductory note

PERMIT

Under the Greenhouse Gas Emissions Trading Scheme Regulations 2012

Permit number
UK-W-IN-12920

Consolidation number
4

Natural Resources Wales **("the regulator")** in exercise of its powers under the Greenhouse Gas Emissions Trading Scheme Regulations 2012, hereby authorises:

NORTHWOOD & WEPA Limited **("the operator")**

Company Registration Number
08347876

Registered Office Address
Bridgend Paper Mill
Llangynwyd
Bridgend
Mid Glamorgan
CF34 9RS

to carry out regulated activities resulting in greenhouse gas emissions, as described and defined in and subject to the conditions set out in this permit, at:

Installation Name
Bridgend Operation

Site Name (if applicable)
Bridgend Paper Mill

Installation Address
Bridgend Paper Mill
Llangynwyd
Bridgend
Bridgend
CF34 9RS
Wales

National Grid Reference
SS87448724

PART 1

Scope of permit and of the installation

1. This permit authorises the operator to carry out in the installation the regulated activities listed in Table 1 below.

Regulated activities	Specified emissions
Production of paper or cardboard	Carbon Dioxide

Table 1 Regulated activities carried out in the installation.

2. For the purposes of this permit, the installation is as described in Table 2, as supplemented by any change notified to the regulator in accordance with the permit conditions.

The Bridgend Paper Mill, owned and operated by Northwood & WEPA Ltd, manufactures hygienic paper in jumbo roll form, followed by conversion to final product. There is currently 1 paper machine. The paper is mainly of toilet tissue, kitchen towel napkin and facial grades, although others can be produced. The raw material for this production is virgin pulp. The majority of the paper production is converted to final product on site, in extremely modern plant. As such the mill has an environmental permit (EP3738NG). Papermaking capacity is 200 tpd (a schedule 1 activity). The sites primary power and heat requirement is supplied via a gas turbine based combined heat and power plant, which comprises two Solar Taurus 60 gas turbines (19MWth each) associated heat recovery steam generators (HRSG) (9MWth each) and one shell boiler (16MWth) plus a standby generator. The CHP plant supplies steam and electricity to the tissue-paper manufacturing facility, with excess electricity being exported to the National Grid. Fuel for the plant is obtained from the local Transco natural gas network or on-site fuel oil storage (delivered by road). There are also drying hoods on the paper machines, heated by duct burners, the maximum total heat input capacity here being 11.6 MW th. Carbon dioxide emissions arise as a result of the combustion of these fuels. The plant is located on the Bridgend Paper Mill site towards the South-East corner. Both the CHP and the duct burners are primarily fired by natural gas, although gas oil may be burnt if necessary. Apart from the CHP turbine and boiler exhaust stacks and the hood burners, there are no CO2 emitting points within the mill apart from those arising from de-minimis sources.The site itself is located in the Llynfi valley adjacent to the A4063, between Maesteg and Bridgend.

Table 2 Description of the installation

PART 2

Conditions

1. The operator must monitor the annual reportable emissions of the installation in accordance with the Monitoring and Reporting Regulation and the monitoring plan (including the written procedures supplementing that plan).

2. The operator must, by 31 March in every year, submit a verified report of its annual reportable emissions made in the previous year to the regulator, in accordance with the Monitoring and Reporting Regulation and the Verification Regulation.

3. The operator must satisfy the regulator, if an emission factor of zero has been reported in respect of the use of bioliquids, that the sustainability criteria set out in Article 17(2) to (5) of the Renewable Energy Directive have been fulfilled in accordance with Article 18(1) of that Directive.

4. The operator must, by 30 April in each year, surrender a number of allowances in the registry equal to the annual reportable emissions of the installation made in the previous year.

5. Where an operator proposes to make a significant modification to its monitoring plan under Article 15, the operator must apply to the regulator for a variation of its permit at least 14 days prior to making the change or, where this is not practicable, as soon as possible thereafter and such application must:

   (a) include a description of the change; and

   (b) set out how it affects the information contained in the monitoring plan.

6. Where an operator makes a change to its monitoring plan under Article 14 or 58(4) that is not a significant modification, the operator must notify the regulator by 31 December in the year in which the change occurred and such notification must:

   (a) include a description of the change;

   (b) set out how it affects the information contained in the monitoring plan; and

   (c) explain how the change is in accordance with the Monitoring and Reporting Regulation.

7. Where the name of the operator changes, the operator must apply to the regulator for a variation of its permit in order to reflect the change as soon as practicable following the change.

8. Where the operator does not apply at least the tiers required or applies a fall-back methodology pursuant to the Monitoring and Reporting Regulation, the operator must submit a report to the regulator in accordance with the requirements specified in Article 69(1) by the following deadlines, starting in the case of a new operator with 30 June in the year following that in which the permit is granted and for any other operator, with 30 June 2013:

   (a) for a category A installation, by 30 June every four years

   (b) for a category B installation, by 30 June every two years

   (c) for a category C installation, by 30 June every year

9. Where a verification report states outstanding non-conformities or recommendations for improvements as specified in Article 69(4), the operator must submit a report to the regulator in accordance with the requirements of that Article by 30 June of the year in which the verification report is issued.

10. The operator must notify the regulator in accordance with the Monitoring and Reporting Regulation at least 14 days prior to commencement of any of the circumstances in paragraphs (a) to (d) below or, where this is not practicable, as soon as possible thereafter:

    (a) where there is a temporary change to its monitoring methodology as specified in Article 23;

    (b) where tier thresholds are exceeded or equipment is found not to conform to requirements which require corrective action as specified in Article 28(1);

    (c) where a piece of measurement equipment is out of operation as specified in Article 45; and

    (d) where an installation with low emissions exceeds the relevant threshold as specified in Article 47(8).

11. Except in the case of installations not eligible for an allocation, where a sub-installation has had a qualifying significant capacity reduction, the operator must, by the later of (a) the end of the period of 7 months following the change of capacity, (b) 31 December in the year in which that change occurred or (c) 1 February 2013 ("the relevant date"), submit a notice to the regulator containing:

    (a) a statement of the reduced capacity and the installed capacity of the sub-installation after taking into account the capacity reduction; and

    (b) a statement that the data under paragraph (a) have been verified

    except that, where the relevant date is before 30 May 2013, the statement required in (b) above need only be submitted by 30 May 2013.

12. Except in the case of installations not eligible for an allocation, where a sub-installation has had a qualifying partial cessation, the operator must, by the later of (a) 31 December in the year in which the reduction occurred or (b) within one month after the date on which it occurred, notify the regulator that a reduction in activity level has occurred, stating the amount of that reduction and the sub-installation to which it applies.

13. Except in the case of installations not eligible for an allocation, where a sub-installation has had a qualifying partial cessation which occurred during 2012, the operator must, by 1 February 2013, notify the regulator that a reduction in activity level has occurred, stating the amount of that reduction and the sub-installation to which it applies.

14. Unless already notified in accordance with other requirements of this permit, the operator must notify the regulator of any planned or effective changes to the capacity, activity level or operation of the installation by 31 December in the year in which the change was planned or has occurred.

15. The operator must keep records of all relevant data and information in accordance with Article 66.

Part 3

Definitions

(1) In this permit:

(a) “allowance” has the meaning given in Article 3a of the Directive but excludes aviation allowances;

(b) “annual reportable emissions” means the reportable emissions arising during any year;

(c) “aviation allowance” has the meaning given in Article 3a of the Directive but is limited to those allowances allocated in accordance with Article 3e or 3f of the Directive or auctioned in accordance with Article 3d of the Directive;

(d) “bioliquids” has the meaning given in Article 2(h) of the Renewable Energy Directive;

(e) “category A installation” has the meaning given in Article 19(2) of the Monitoring and Reporting Regulation;

(f) “category B installation” has the meaning given in Article 19(2) of the Monitoring and Reporting Regulation;

(g) “category C installation” has the meaning given in Article 19(2) of the Monitoring and Reporting Regulation;

(h) “the Directive” means Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emissions allowance trading within the Community and amending Council Directive 96/61/EC, as amended from time to time and as adapted by Annex 20 to the EEA agreement;

(i) “the Free Allocation Decision” means Commission Decision 2011/278/EU of 27 April 2011 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC;

(j) “installation” means the installation operated by the operator and as described in Part 1 of this permit, as supplemented by any change notified to the regulator in accordance with the conditions of this permit;

(k) “installations not eligible for an allocation” means installations that, by virtue of Article 10a(3) of the Directive, are not eligible for an allocation;

(l) “the Monitoring and Reporting Regulation” means Commission Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council, as amended from time to time;

(m) “monitoring plan” means the plan attached at Annex A, together with any modifications notified to the regulator under condition 6 and includes the written procedures supplementing that plan;

(n) “new operator” means the operator of an installation whose permit was granted after 1 January 2013;

(o) “operator” means the holder of this permit;

(p) “qualifying partial cessation” applies where one sub-installation of an installation which contributes to (a) at least 30% of the final annual amount of allowances allocated to the installation, or (b) the allocation of more than 50,000 allowances, reduces its activity level in a given year by at least 50% compared to the activity level originally used for calculating the sub-installation’s allocation;

(q) “qualifying significant capacity reduction” means a significant capacity reduction occurring:

i. after 30 June 2011; or

ii. on or before 30 June 2011, but the extent of the reduction could not be determined before 30 September 2011;

(r) “reduced capacity” has the meaning in Article 3(m) of the Free Allocation Decision;

(s) “the Registries Regulation 2011” means Commission Regulation (EU) No 1193/2011 of 18 November 2011 establishing a Union Registry for the trading period commencing on 1 January

2013, and subsequent trading periods, of the Union emissions trading scheme pursuant to Directive 2003/87/EC of the European Parliament and of the Council and Decision 280/2004/EC of the European Parliament and of the Council and amending Commission Regulations (EC) No 2216/2004 and (EU) No 920/2010, as amended from time to time;

(t) "registry" means the Union Registry established by Article 4 of the Registries Regulation 2011 and which can be accessed at https://ets-registry.webgate.ec.europa.eu/euregistry/GB/index.xhtml;

(u) "regulated activity" means an activity that is listed in Annex 1 to the Directive;

(v) "the Regulations" means the Greenhouse Gas Emissions Trading Scheme Regulations 2012;

(w) "the regulator" means the Environment Agency;

(x) "the Renewable Energy Directive" means Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC, as amended from time to time;

(y) "reportable emissions" means the total emissions of gases specified in Table 1 in Part 1 of this permit (expressed in tonnes of carbon dioxide equivalent) which arise from the regulated activities carried out in the installation;

(z) "significant capacity reduction" has the same meaning as in Article 3(j) of the Free Allocation Decision;

(aa) "significant modification" has the same meaning as in Article 15 of the Monitoring and Reporting Regulation;

(bb) "start of normal operation" has the same meaning as in Article 3(n) of the Free Allocation Decision;

(cc) "sub-installation" has the same meaning as in the Free Allocation Decision;

(dd) "verified", for the purposes of condition 11 only, means verified as satisfactory in accordance with Article 8 of the Free Allocation Decision (except that reference to Decision 2007/589/EC in Article 8(3) is to be read as a reference to the Verification Regulation);

(ee) "verification report", for the purposes of condition 9 means a report submitted in accordance with condition 2 of this permit;

(ff) "the Verification Regulation" means Commission Regulation (EU) No 600/2012 of 21 June 2012 on the verification of greenhouse gas emission reports and tonne-kilometre reports and the accreditation of verifiers pursuant to Directive 2003/87/EC of the European Parliament and of the Council, as amended from time to time;

(gg) "year" means a calendar year commencing on 1 January;

(2) In this permit, a reference to a numbered Article is to that Article of the Monitoring and Reporting Regulation.

(3) When interpreting the provisions of the Monitoring and Reporting Regulation, references to competent authority are to be read as references to the Environment Agency (with the exception of Article 68(3)).

(4) Where this permit has been issued following a partial transfer of the permit under the Regulations, "final annual amount of allowances" in relation to the definition of qualifying partial cessation means the amount of allowances transferred to the transferred units authorised by this permit.

(5) Where this permit has been issued following a partial transfer of the permit under the Regulations, "initial activity level", in relation to the definition of qualifying partial cessation, means the activity level used for calculating the sub-installation's allocation following the partial transfer.

(6) For the purposes of condition 4 (surrender of allowances), the amount of annual reportable emissions in relation to a recovery year is deemed to be increased by an amount equal to the amount of annual reportable emissions, arising in a non-compliance year, in respect of which the operator failed to comply with the surrender requirements. For these purposes:

(a) a "non-compliance year" is a year in respect of which an operator fails to comply with the surrender requirements; and

(b) the “recovery year” is (i) the year following that non-compliance year; or (ii) where the non-compliance results from an error in the verified emissions report submitted by the operator under condition 2, the scheme year in which the error is discovered.

Appendix 1 to Greenhouse Gas Emissions Permit Number UK-W-IN-12920

Monitoring Plan

List of environmental licenses related to this installation

Permit number	Type of permit	Permit holder	Competent body
EP3738NG	EPR	Northwood & WEPA ltd	Natural Resources Wales

Estimated annual emissions (tonnes $CO_{2(e)}$) 40000

Emission Sources

Summary of emission sources which relate to the regulated activities at the installation.

Emission Source Reference	Emission Source Description
S1	Gas Turbine 1
S2	Gas Turbine 2
S3	Heat Recovery Boiler 1
S4	Heat Recovery Boiler 2
S5	Shell Boiler
S6	Standby Generator
HV2	Jupiter Paper Machine
S7	Sprinkler fire pumps
S8	Mobile fire pump
S9	Oxy/Acetelyne torch
S10	Propane torch

Emission Points

Summary of the emission points which relate to the regulated activities at the installation.

Emission Point Reference	Emission Point Description
A1	Main stack
A2	Shell boiler stack
A4	Jupiter machine hood exhaust vent
A5	Standby Generator Exhaust
A6	Sprinkler fire pumps exhaust
A7	Mobile fire pump exhaust
A8	Oxy/Acetelyne / Propane torch extract

Source Streams (fuels and/or materials)

Summary of the source streams used in the regulated activities at the installation.

Source Stream Reference	Source Stream Type	Source Stream Description
F1	Combustion: Other gaseous & liquid fuels	High Pressure Natural Gas

Source Stream Reference	Source Stream Type	Source Stream Description
F2	Combustion: Other gaseous & liquid fuels	Natural Gas
F3	Combustion: Commercial standard fuels	Gas/Diesel Oil
F31	Combustion: Commercial standard fuels	Gas/Diesel Oil
F41	Combustion: Commercial standard fuels	Petrol
F51	Combustion: Other gaseous & liquid fuels	Acetylene
F61	Combustion: Commercial standard fuels	Propane
F71	Combustion: Commercial standard fuels	Gas/Diesel Oil

Technical details of the regulated activities

Source streams (Fuel / Material)	Emission Source Refs.	Emission Point Refs.	Regulated Activity
F1	S1,S2	A1	Production of paper or cardboard
F2	HV2,S3,S4,S5	A1,A2,A4	Production of paper or cardboard
F3	HV2,S1,S2,S5	A1,A2,A4	Production of paper or cardboard
F31	S7	A6	Production of paper or cardboard
F41	S8	A7	Production of paper or cardboard
F51	S9	A8	Production of paper or cardboard
F61	S10	A8	Production of paper or cardboard
F71	S6	A5	Production of paper or cardboard

Calculation

Approach Description

NATURAL GAS (F1 & F2):
Activity Data will be calculated using meter readings taken from the main high pressure fiscal gas supply meter into the site (owned by NGT) and the low pressure fiscal gas meter into the site (also owned by NGT). The Net Calorific Value and Emissions Factor are taken from the National Inventory (Tier 2a). A Tier 1 default value Oxidation factor is used. The CO2 emissions are calculated as a product of AD*NCV*EF*OxF. The uncertainty using this method resolves down to the meter accuracy and this is +/- 1% (see NGT advice).

GAS Oil (F3, F31 & F71):
Gas Oil is available on site as a back up supply in the event of a gas Interrupt, largely declared by NGT, or by the standby generator in the event of power interruption. Gas oil supply to the CHP plant is via a single coriolis flowmeter and gas oil supply to the burners is via two rotary meters each supplying a distinct burner bank. Gas oil to standby generator is via the site diesel storage tank and off take is measured via a odometer. The Net Calorific Value and Emissions Factor for Gas Oil are taken from the National Inventory (Tier 2a). A Tier 1 default value Oxidation factor is used. The CO2 emissions are calculated as a product of AD*NCV*EF*OxF.

SIte Gas Oil Consumed = GOJup1 + GOJup2 + GOMeter2 + GO odometer(diesel tank)

PETROL (F41):
Petrol consumption will be recorded on the servicing bill of the fire protection contractor, the usage will be recorded in exception i.e. when top up of fuel tanks is required. The Net Calorific Value and Emissions Factor for petrol are taken from the National Inventory (Tier 2a). A Tier 1 default value Oxidation factor is used. The CO2 emissions are calculated as a product of AD*NCV*EF*OxF. This is a de-minimis source.

ACETYLENE (F51):
Engineering and maintenance gases may be employed on an ad hoc basis to attend to ignition, welding or other transient requirements. The quantity consumed is taken from the invoiced mass (rounded up to a whole number of bottles). The Emissions Factor used for acetylene is the Competent Authority approved Tier 1 value of 3.38 tCO2/t. A Tier 1 default value Oxidation factor is used. The CO2 emissions are calculated as a product of AD*EF*OxF. This is a de-minimis source.

PROPANE (F61):
Propane usage will be monitored by the amount of bottles withdrawn from the stores. This is a third party vendor and is billed directly on usage. The Net Calorific Value and Emissions Factor for LPG are taken from the National Inventory (Tier 2a). A Tier 1 default value Oxidation factor is used. The CO2 emissions are calculated as a product of AD*NCV*EF*OxF. This is a de-minimis source.

Measurement Devices

Source Stream Refs.	Emission Source Refs.	Measurement Device Ref.	Type of Measurement Device	Measurement Range	Metering Range Units	Specified Uncertainty (+/- %)	Location
F1	S1,S2	G2	Turbine meter	20-400	m3/h	1.00	Transco high pressure gas compound
F1	S1,S2	G2 (ECVI)	Electronic volume conversion instrument (EVCI)	700-14000	CFH	1.00	Transco high pressure gas compound
F2	S3,S4,S5,HV2	G1.1	Rotary meter	38000-1400	cfh	1.00	Transco low pressure gas compound
F2	S3,S4,S5,HV2	G1.1 (ECVI)	Electronic volume conversion instrument (EVCI)	38000-1400	cfh	1.00	Transco low pressure gas compound
F3	S1,S2,S5	GOMeter2	Coriolis meter	0-45000	kg/hr	1.00	CHP Compound
F3	HV2	GOJup1	Rotary meter	30-1500	lhr	1	Jupiter Burner Annexe
F3	HV2	GOJup2	Rotary meter	30-1500	l/h	1	Jupiter Burner Annexe

Source Stream Refs.	Emission Source Refs.	Measurement Device Ref.	Type of Measurement Device	Measurement Range	Metering Range Units	Specified Uncertainty (+/-%)	Location
F31	S7	D2	Supplier invoices & run hour meter	n/a	n/a	n/a	Supplier invoices retained by Purchasing Dept
F41	S8	D3	Supplier invoices	n/a	n/a	n/a	Supplier invoices retained by Purchasing Dept
F51	S9	D4	Supplier invoices	n/a	n/a	n/a	Supplier invoices retained by Purchasing Dept
F61	S10	D5	Supplier invoices	n/a	n/a	n/a	Supplier invoices retained by Purchasing Dept
F71	S6	D6	Odometer readings	N/A	N/A	N/A	Site Diesel tank South road

Applied tiers

Source Stream Ref.	Emission Source Refs.	Measurement Device Refs.	Overall uncertainty (+/-%)	Activity Data Tier	NCV Tier	Emission Factor Tier	Oxidation Factor Tier	Carbon Content Tier	Conversion Factor Tier	Biomass Fraction Tier	Category
F1	S1,S2	G2,G2 (ECVI)	<1.5%	4	2a	2a	1	N/A	N/A	N/A	Major
F2	S3,S4,S5,HV2	G1.1,G1.1 (ECVI)	<1.5%	4	2a	2a	1	N/A	N/A	N/A	Major
F3	S1,S2,S5	GOMeter2	N/A	No tier	2a	2a	1	N/A	N/A	N/A	De-minimis
F3	HV2	GOMeter2,GOJup1,GOJup2	N/A	No tier	2a	2a	1	N/A	N/A	N/A	De-minimis
F31	S7	D2	N/A	No tier	2a	2a	1	N/A	N/A	N/A	De-minimis
F41	S8	D3	N/A	No tier	2a	2a	1	N/A	N/A	N/A	De-minimis
F51	S9	D4	N/A	No tier	N/A	1	1	N/A	N/A	N/A	De-minimis
F61	S10	D5	N/A	No tier	2a	2a	1	N/A	N/A	N/A	De-minimis
F71	S6	D6	N/A	No tier	2a	2a	1	N/A	N/A	N/A	De-minimis

Uncertainty Assessment

The table below lists evidence attached that demonstrates compliance with the applied tiers in accordance with Article 12 of the MRR.

Attachment	Description
Uncertainty_Analysis_for_Main_Gas_Meters new.docx	Uncertainty calculations Natural Gas meters

Reference sources applied

The table below lists, for each parameter, the reference sources to be used for calculation factors.

Source Stream Refs.	Emission Source Refs.	Parameter	Reference Source	Default Value applied (where appropriate)

Source Stream Refs.	Emission Source Refs.	Parameter	Reference Source	Default Value applied (where appropriate)
F1	S1,S2	NCV & EF	Data to be taken from the latest UK national inventory as submitted to the United Nations Framework Convention on Climate Change	n/a
F1	S1,S2	OxF	MRR Annex II Section 2.3	1
F2	S3,S4,S5, HV2	NCV & EF	Data to be taken from the latest UK national inventory as submitted to the United Nations Framework Convention on Climate Change	n/a
F2	S3,S4,S5, HV2	OxF	MRR Annex II Section 2.3	1
F3	HV2,S1,S 2,S5	NCV & EF	Data to be taken from the latest UK national inventory as submitted to the United Nations Framework Convention on Climate Change	n/a
F3	HV2,S1,S 2,S5	OxF	MRR Annex II Section 2.3	1
F31	S7	NCV & EF	Data to be taken from the latest UK national inventory as submitted to the United Nations Framework Convention on Climate Change	n/a
F31	S7	OxF	MRR Annex II Section 2.3	1
F41	S8	NCV & EF	Data to be taken from the latest UK national inventory as submitted to the United Nations Framework Convention on Climate Change	n/a
F41	S8	OxF	MRR Annex II Section 2.3	1
F51	S9	EF	Competent Authority approved Tier 1 value	3.38 tCO2/t
F51	S9	OxF	MRR Annex II Section 2.3	1
F61	S10	NCV & EF	Data to be taken from the latest UK national inventory as submitted to the United Nations Framework Convention on Climate Change	n/a
F61	S10	OxF	MRR Annex II Section 2.3	1
F71	S6	NCV & EF	Data to be taken from the latest UK national inventory as submitted to the United Nations Framework Convention on Climate Change	n/a
F71	S6	OxF	MRR Annex II Section 2.3	1

Management Procedures

Monitoring and Reporting Responsibilities

Responsibilities for monitoring and reporting emissions from the installation are listed below:

Job Title / Post	Responsibilities
Senior Mechanical Engineer	Collation and submission of year data to verifier, Submit verified emission report to EA, improvement reports, risk assessment's, Cpi /BSI verification process
Electrical Engineer	Submit data to CPi database
Environmental Health & Safety Manager	Site contact for Competent Authority
Engineering Manager	Meter readings

Assignment of Responsibilities

Details of the procedure used for managing the assignment of responsibilities for monitoring and reporting within the installation and for managing the competencies of responsible personnel in accordance with Article 58(3)(c) of the MRR:

This procedure identifies how the monitoring and reporting responsibilities for the roles identified above are assigned and how training and reviews are undertaken.

Title of procedure	CCLA/EUETS Data Collection and Reporting
Reference for procedure	"EPR 31
Diagram reference	N/A
Brief description of procedure.	This Procedure ensures that all staff receive internal or external training appropriate to their roles and that training records are kept. Training needs for all personnel are assessed annually by a responsible person.
Post or department responsible for the procedure and for any data generated	Engineering Manager
Location where records are kept	S:\Environmental\CCLA-EU ETS\EU ETS Phase III
Name of IT system used	N/A (normal network drives)
List of EN or other standards applied	ISO14001:2004

Monitoring Plan Appropriateness

Details of the procedure used for regular evaluation of the monitoring plan's appropriateness covering in particular any potential measures for the improvement of the monitoring methodology:

Title of procedure	CCLA/EUETS Data Collection and Reporting
Reference for procedure	"EPR 31
Diagram reference	N/A
Brief description of procedure.	This procedure ensures that internal audits and other forms of monitoring are carried out as a means of maintaining both the effectiveness of the health, safety and environment management system and compliance with our EPR and Greenhouse gas permits. Planned audit schedule, trained competent auditors complete the chercklists for specific areas

	including Energy Management and EUETS procedures. One auditor nominated to take responsibity for progressing corrective or preventative actions. Details recorded on a non-compliance notice and entered into the non -compliance register. Audit Frequency reflects the importance of the topic and the outcome of previous audits.
Post or department responsible for the procedure and for any data generated	Enviromental Heath & Safety Manager
Location where records are kept	S:\Environmental\CCLA-EU ETS\EU ETS Phase III
Name of IT system used	N/A (normal network drives)
List of EN or other standards applied	ISO14001:2004

Data Flow Activities

Details of the procedures used to manage data flow activities in accordance with Article 57 of the MRR:

Title of procedure	CCLA/EUETS Data Collection and Reporting
Reference for procedure	"EPR 31
Diagram reference	N/A
Brief description of procedure.	This procedure describes the actions to be taken to control and monitor energy consumption in the mill and to satisfy the requirements of our Climate Change Agreement , Greenhouse Gas Permit and EPR Permit. It includes actions to be taken in the event of gas meter or corrector failure.
Post or department responsible for the procedure and for any data generated	Senior Electrical & Senior Mechanical Engineers
Location where records are kept	S:\Environmental\CCLA-EU ETS\EU ETS Phase III
Name of IT system used	N/A (normal network drives)
List of EN or other standards applied	ISO14001:2004
List of primary data sources	Gas Meter its corrector, other meter data and invoices where appropriate
Description of the relevant processing steps for each specific data flow activity. Identify each step in the data flow and include the formulas and data used to determine emissions from the primary data. Include details of any relevant electronic data processing and storage systems and other inputs (including manual inputs) and confirm how outputs of data flow activities are recorded	"In order to comply with the monitoring and reporting requirements associated with CCLA/EUETS, Bridgend Mill utilise a data collection system developed for the Paper Federation. The system utilises Microsoft Access and requires the user to input data on a monthly basis to the database. The data is obtained from several different sources including the downloading of the Kenda database and is collated in a single excel spread-sheet, prior to input into the CPI Access database. Emissions will be calculated using the main High pressure fiscal gas supply meter into the site (owned by NGT) Plus the Low pressure fiscal gas meter into the site (owned by NGT). We will use national standard data for natural gas in this local delivery zone (LDZ). The uncertainty using this method resolves down to the meter accuracy and this is +/- 1% (see NGT advice). Following data input and error checking, a data file is created which must be downloaded and sent via email to the Paper Federation before the 10th day of the new month. Following receipt of the new data file the CPI will analyse the data and produce a file which includes CO2 emissions data which is emailed back to Stubbins Mill and must be uploaded into the database prior to the next download being created.

	The Monitoring and Measurement Matrix (EU ETS) details what data is reported and collected on a weekly/monthly basis and the related responsibilities. "

Documents relevant to the recording of data flow activities

Attachment	Description
N/A	N/A

Assessing and Controlling Risks

Details of the procedures used to assess inherent risks and control risks in accordance with Article 58 of the MRR:

Title of procedure	CCLA/EUETS Data Collection and Reporting
Reference for procedure	"EPR 31
Diagram reference	N/A
Brief description of procedure.	Mill Procedure EPR 31 describes the actions to be taken to control and monitor energy consumption in the mill and to satisfy the requirements of our Climate Change Agreement , Greenhouse Gas Permit and EPR Permit. The risk of misstatement is minimised by a) Monthly meter readings allow errors to be picked up on subsequent readings.This also acts as a check on the correct functioning of the fiscal meter. b) Data being separately validated by the Management Consultant at CPI/TMC. c). The CPI/TMC active reporting programme prevents the inclusion of wrongly transcribed data. d) keeping the gas meter compound locked prevents unauthorised access to the gas meter and corrector and avoids disturbance and loss of data. e). Comparison of data against suppliers invoices is made but this economic valdation and not primary data management.
Post or department responsible for the procedure and for any data generated	Senior Electrical & Senior Mechanical Engineers
Location where records are kept	S:\Environmental\CCLA-EU ETS\EU ETS Phase III
Name of IT system used	N/A (normal network drives)
List of EN or other standards applied	ISO14001:2004

Quality Assurance of Metering / Measuring Equipment

Details of the procedures used to ensure quality assurance of measuring equipment in accordance with Article 58 and 59 of the MRR.

Title of procedure	CCLA/EUETS Data Collection and Reporting
Reference for procedure	"EPR 31
Diagram reference	N/A
Brief description of procedure.	The Procedure ensures compliance with our monitoring quality policy . It also ensures monitoring and measuring equipment is maintained and calibrated to preserve efficiency and accuracy. Each piece of equipment which requires calibration or regular maintenance is

	uniquely identified by serial number. Meters, where apprpriate, are permently connected to a telemetry link to the supplier and checked half hourly by the supplier . Gas meter(s) are serviced periodically by the supplier or NG/Transco. Actions in relation to gas meter or corrector failure are covered under EPR 31 EUETS Compliance and Reporting, This requires that the responsible person shall notify the EA of any failure without delay and the Energy Co-ordinator in conjunction with TMC/ CPI shall estimate the amount of gas used during the breakdown period by a method approved by the EA, Prompt action shall be taken to correct the failure.
Post or department responsible for the procedure and for any data generated	Electrical Engineer
Location where records are kept	S:\Environmental\CCLA-EU ETS\EU ETS Phase III
Name of IT system used	N/A (normal network drives)
List of EN or other standards applied	ISO14001:2004

Quality Assurance of Information Technology used for Data Flow Activities

Details of the procedures used to ensure quality assurance of information technology used for data flow activities in accordance with Article 58 and 60 of the MRR:

Title of procedure	CCLA/EUETS Data Collection and Reporting
Reference for procedure	"EPR 31
Diagram reference	N/A
Brief description of procedure.	This Procedure ensures compliance with the company's Monitoring Quality Policy . It ensures computer equipment and and IT systems are suitable and sufficient to meet the needs of the company and that maintenance and upgrading of both hardware and software takes place when necessary.
Post or department responsible for the procedure and for any data generated	Electrical Engineer
Location where records are kept	Records of equipment or software purchase are held at the mill and the company's head office. Information relating to CPI/TMC data handling and computer systems are held by CPI/TMC and its contractors.
Name of IT system used	N/A (normal network drives)
List of EN or other standards applied	ISO14001:2004

Review and Validation of Data

Details of the procedures used to ensure regular internal reviews and validation of data in accordance with Articles 58 and 62 of the MRR.

Title of procedure	CCLA/EUETS Data Collection and Reporting
Reference for procedure	"EPR 31
Diagram reference	N/A
Brief description of procedure.	This Procedure describes the actions to be taken to control and monitor energy consumption and emissions in the mill and to satisfy the requirements of our Climate Change Agreement, Greenhouse Gas permit and EPR permit. Daily usage of both gas and electricity is included on the daily Production Costing and Efficiency Report which is evaluated by the management team at routine production meetings . Anomalies can be discussed earlier if necessary. Additionally comparison checks are made against supplier invoices and historic data is also availble . Daily / Monthy meter readings use absolute readings rather than incremental consumption - a self checking procedure that avoids perpetuating problems associated with wrong readings . The CCA/EUETS data base is updated monthly and forwarded to TMC/CPI for separate validation.CPI /TMC responses advise on data management issues and automatically provide EU ETS data validation.
Post or department responsible for the procedure and for any data generated	Electrical Engineer
Location where records are kept	S:\Environmental\CCLA-EU ETS\EU ETS Phase III

Name of IT system used	N/A (normal network drives)
List of EN or other standards applied	ISO14001:2004

Corrections and Corrective Actions

Details of the procedures used to handle corrections and corrective actions in accordance with Articles 58 and 63 of the MRR:

Title of procedure	CCLA/EUETS Data Collection and Reporting
Reference for procedure	"EPR 31
Diagram reference	N/A
Brief description of procedure.	Internal audit and other forms of monitoring are carried out as a means of maintaining both the effectiveness of the health,safety and environment management system and compliance with our EPR and Greenhouse Gas permits . Auditors seek evidence to demonstrate that the requirements of the HSE management system, EPR and Greenhouse Gas Permits are being fulfilled . Findings are recorded on Internal Audit Checklists. Non Compliances are entred on a non compliance notice and recorded in the non compliance catalogue. The non compliance notice contains information on the area under review , specific details on the non compliance and planned corrective action, including target date for completion, actual completion date and person responsible for action.Non- complinces are brought to the attention of the management team at the next daily production meeting and a full audit review report is provided for the Operations Manager on completion of the audit programme. Specifically in regard to gas meter or corrector failure enhanced meter readings help to capture break down periods and historical data acts as a reference.
Post or department responsible for the procedure and for any data generated	Enviromental Health & Safety Manager
Location where records are kept	S:\Environmental\CCLA-EU ETS\EU ETS Phase III
Name of IT system used	N/A (normal network drives)
List of EN or other standards applied	ISO14001:2004

Control of Outsourced Activities

Details of the procedures used to control outsourced processes in accordance with Articles 59 and 64 of the MRR.

Title of procedure	CCLA/EUETS Data Collection and Reporting
Reference for procedure	"EPR 31
Diagram reference	N/A
Brief description of procedure.	The Confederation of Paper Industries (CPI), through its wholly-owned subsidiary, The Paper Sector Climate Change Management Co Ltd (TMC), collects monthly energy data from all paper mills in the paper sector CCA and holds it on a web-based database (www.cpi-paper.co.uk). The database is used to produce reporting data for the purposes of CCA and EU ETS reporting. The data relationship between the two schemes is possible since the energy data required to be recorded for EU ETS purposes is generally a sub-set of that required for CCA purposes. Since 1 January 2013 CCA has required all non-trivial energy use at participating facilities to be recorded including that from renewables (although it should be noted that at the same time energy use covered by EU ETS was deemed to be non-reportable in CCA). Also, since 1 January 2013, the EU ETS scheme coverage has been enlarged in that trivial emissions sources are now included. The Database forms the basis for data collection, monthly checking and calculation/monitoring of EU ETS emissions for each and every mill obligated under EU ETS or the EU ETS Opt-Out for small emitters.
Post or department responsible for the procedure and for any data generated	Electrical Engineer
Location where records are kept	web-based database (www.cpi-paper.co.uk)

Name of IT system used	web-based database (www.cpi-paper.co.uk)
List of EN or other standards applied	ISO 14001:2004

Record Keeping and Documentation

Details of the procedures used to manage record keeping and documentation:

Title of procedure	CCLA/EUETS Data Collection and Reporting
Reference for procedure	"EPR 31
Diagram reference	N/A
Brief description of procedure.	Computerised records are held on the mill computer system which is backed up daily. Paper records are held in the Energy Management File . Master copies of HSE Procedures are held in the HSE Management System File which has a document location index at the front. Records are kept for 10 years.
Post or department responsible for the procedure and for any data generated	Electrical Engineer
Location where records are kept	S:\Environmental\CCLA-EU ETS\EU ETS Phase III
Name of IT system used	N/A (normal network drives)
List of EN or other standards applied	ISO14001:2004

Risk Assessment

The results of a risk assessment that demonstrates that the control activities and procedures are commensurate with the risks identified:

Attachment	Description
risk assesment Monitoring Reporting procedure - Issue 6.pdf	risk assessment
risk assesment Monitoring Reporting procedure - Issue 9.docx	risk assessment recognising inclusion of outsourced activity

Changes in Operation

Your permit conditions require you to notify the regulator of any planned or effective changes to the capacity, activity level or operation of the installation by 31 December in the year in which the change was planned or has occurred (or by different dates where significant capacity reductions or partial cessations have occurred).

The Regulations require you to provide a summary of the procedure ensuring that the operator regularly checks whether information regarding any planned or effective changes to the capacity, activity level and operation at the installation impacts on the free allocation of allowances and that the information is submitted to the regulator at the appropriate time.

Details of the procedure ensuring the above:

Title of procedure	CCLA/EUETS Data Collection and Reporting
Reference for procedure	"EPR 31
Diagram reference	N/A
Brief description of procedure.	This procedure sets ot the requirements of management review. Meetings are held periodically and include consideration of the environmental effect (including legislative) of any major process change , expansion or development plans via completion of an environmental risk assessment form by the management team .
Post or department responsible for the procedure and for any data generated	Enviromental Health & safety Manager
Location where records are kept	S:\Environmental\CCLA-EU ETS\EU ETS Phase III
Name of IT system used	N/A (normal network drives)
List of EN or other standards applied	N/A

Environmental Management System

Standard to which the Environmental Management System is certified:	ISO14001:2004

END

Abbreviations

Abbreviations, acronyms or definitions referred to in the monitoring plan

Abbreviation	Definition
N/A	N/A