Variation Notice with introductory note

The Environmental Permitting (England & Wales) Regulations 2007

Chirk Particleboard

Kronospan Ltd
Holyhead Road
Chirk
Wrexham
LL14 5NT

Permit number

BW9999IG / KP3735SC

Variation Number

EA/EPR/BW9999IG/V003

Chirk Particleboard
Variation number EA/EPR/BW9999IG/V003

Introductory note

This introductory note does not form a part of the permit

The main features of the facility are as follows.

The products that are manufactured by the Operator (Kronospan Limited) at the Chirk Particle Board Factory are laminate flooring, chipboard and medium density fibreboard (MDF). The Chirk site is co-regulated by the Environment Agency and the Local Authority; Wrexham County Borough Council. The listed activities that are regulated by the Agency are the manufacture of formaldehyde by catalytic oxidation of methanol, and the manufacture of urea-formaldehyde and melamine-urea-formaldehyde resins. The activities that are directly associated with these are the VITS Paper Impregnation process, and the Surface Water Lagoons. Wrexham County Borough Council regulates all other areas on the Chirk Particle Board site, including the combustion plants.

The manufacture of formaldehyde is carried out by the oxidation of methanol in air using a iron / molybdenum oxide catalyst. There are two plants in operation of a similar design. The formaldehyde gas is absorbed in water via an absorption column, to produce a 55% solution of formaldehyde. The designs of the plants are in accordance with the Guidance for the Large Volume Organic Chemicals Sector, and as such is considered to be BAT. They consume a combined total of ~50,000 tonnes of methanol per year, producing ~90,000 tonnes of (50–55%) formaldehyde solution per year, for use on site in the resins plant. Emissions to air from the formaldehyde plant have been demonstrated to be 'not significant' within Agency environmental assessment criteria. Releases to water from the plant are via the formaldehyde plant effluent storage tank, containing nominally uncontaminated surface water. This tank is sampled and tested prior to discharge to the Surface Water Lagoons. Reportable limits have been set on this discharge to the Lagoons.

The Resin Plant manufactures a variety of formaldehyde-based resins by means of a semi-batch process. The resin is used on site in the production of various grades of boards. The resins are all formaldehyde-urea, formaldehyde-melamine-urea or formaldehyde-melamine polymers. This variation permits the installation of a new 46 m^3 reactor which will replace two of the existing 15 m^3 reactors. This variation also permits the installation of a 300 te capacity urea silo to replace the bulk urea store. The reactors are all linked to the VITS Paper Impregnation Plant via the NAIRB scrubber. For a short time following the issue of this variation the two 15 m^3 reactors will still be in operation (whilst the new 46 m^3 reactor is installed and commissioned). On completion of this modification there will be two 46 m^3 and two 15 m^3 reactors remaining.

The Surface Water Lagoons receive surface run-off water from the whole of the Chirk site. The plant consists of two lagoons, located side by side, each 2022m^3 in capacity. Effluent is discharged into the Afon Bradley, which is a minor tributary of the River Dee, 2km away.

Status Log of the permit		
Detail	**Date**	**Response Date**
Application BW9999IG	Received 28/11/03	Duly Made. Supersedes withdrawn application BR7194.
Response to request for information via Schedule 4 Notice	Request dated 23/02/04	Response in part dated 19/04/04
Additional information in response to original Schedule 4 notice.	Information received on 21/05/04	Noise survey.
Re-submission of Schedule 4 response.	Request dated 26/05/04	Information received on 30/06/04
Permit BW9999IG Issued	17/09/04	
Variation Notice KP3735SC Issued	05/04/06	Re-issue of conditions to account for administrative errors and to change emission limit values from the original Permit.
Variation Application EA/EPR/BW9999IG/V003		Duly Made 2nd December 2008
Request to extend determination	23/02/09	
Request to extend determination	17/03/09	
Request to extend determination	2/04/09	
Variation Notice EA/EPR/BW9999IG/V003 Issued	28/04/09	

End of Introductory Note

Variation Notice

Permit number
BW9999IW/ KP3735SC

Variation Number
EA/EPR/BW9999IW/V003

The Environment Agency hereby authorises, under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2007

Kronospan Ltd ("the operator"),

of/ whose registered office (or principal office) is
Kronospan Ltd
Holyhead Road
Chirk
Wrexham
LL14 5NT

company registration number **981905**

to operate a facility comprising part of an installation at

Chirk Particleboard
Holyhead Road
Chirk
Wrexham
LL14 5NT

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

Name	Date
Alison Soper	25th April 2009

Authorised on behalf of the Agency

Schedule 1- Conditions to be deleted

1. Conditions 1 to 6 inclusive and schedules 1 to 5 inclusive, in PPC Permit KP3735SC,issued on 5th April 2006 to Kronospan Ltd.

Schedule 2- Conditions to be amended

2. None

Schedule 3- Conditions to be added

3. Conditions 1 to 4 inclusive and schedules 1 to 7 inclusive to be added, as attached, on pages 3 to 22 of this Variation Notice.

Conditions

1 Management

1.1 General management

1.1.1 The activities shall be managed and operated:

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

(b) by sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

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

1.2 Accident management plan

1.2.1 The operator shall:

(a) maintain and implement an accident management plan;

(b) review and record at least every 4 years or as soon as practicable after an accident, (whichever is the earlier) whether changes to the plan should be made;

(c) make any appropriate changes to the plan identified by a review.

1.3 Energy efficiency

1.3.1 The operator shall:

(a) take appropriate measures to ensure that energy is used efficiently in the activities;

(b) review and record at least every 4 years whether there are suitable opportunities to improve the energy efficiency of the activities; and

(c) take any further appropriate measures identified by a review.

1.4 Efficient use of raw materials

1.4.1 The operator shall:

(a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;

(b) maintain records of raw materials and water used in the activities;

(c) review and record at least every 4 years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and

(d) take any appropriate further measures identified by a review.

1.5 Avoidance, recovery and disposal of wastes produced by the activities

1.5.1. The operator shall:

(a) take appropriate measures to ensure that waste produced by the activities is avoided or reduced, or where waste is produced it is recovered wherever practicable or otherwise disposed of in a manner which minimises its impact on the environment;

(b) review and record at least every 4 years whether changes to those measures should be made; and

(c) take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

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

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 2 to this permit, which is within the area edged in red on the site plan that represents the extent of the installation covered by this permit and that issued by Wrexham County Borough Council.

2.3 Operating techniques

2.3.1 (a) The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Agency.

(b) If notified by the Agency that the activities are giving rise to pollution, the operator shall submit to the Agency for approval within the period specified, a revision of any plan specified in schedule 1, table S1.2 or otherwise required under this permit, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Agency.

2.3.2 The Operator shall implement and maintain the odour management plan submitted in response to Improvement Condition 7. This plan shall be reviewed and updated as necessary but at least every two years.

2.3.3 The Operator shall implement and maintain the noise management plan submitted in response to Improvement Condition 8. This plan shall be reviewed and updated as necessary but at least every two years.

2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:

(a) the nature of the process producing the waste;

(b) the composition of the waste;

(c) the handling requirements of the waste;

(d) the hazard classification associated with the waste; and

(e) the waste code of the waste.

2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.3.6 The operator shall implement and maintain the site protection and monitoring programme and shall carry out and record a review and update as necessary of it at least every 4 years.

2.4 Improvement programme

2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Agency.

2.4.2 Except in the case of an improvement which consists only of a submission to the Agency, the operator shall notify the Agency within 14 days of completion of each improvement.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 4 tables S4.1, S4.2 and S4.3.

3.1.2 The limits given in schedule 4 shall not be exceeded.

3.1.3 Where a substance is specified in schedule 4 table S4.2 or S4.3 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.

3.1.4 For periodic measurements, compliance shall be determined from the measured value after having subtracted the uncertainty error for the selected method of sampling and analysis for each relevant pollutant.

3.2 Fugitive emissions of substances

3.2.1 Fugitive emissions of substances (excluding odour, noise and vibration) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including those specified in any approved fugitive emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 The operator shall:

(a) if notified by the Agency that the activities are giving rise to pollution, submit to the Agency for approval within the period specified, a fugitive emissions management plan;

(b) implement the approved fugitive emissions management plan, from the date of approval, unless otherwise agreed in writing by the Agency.

3.2.3 All liquids, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

3.3.1 Emissions from the activities shall be free from odour at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures, including those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures, including those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

3.4.2 Emergency generators / alarms / sirens / relief valves shall only be tested between the hours of 09.00 and 17.00 Monday to Friday and not on any Public Holiday.

3.5 Monitoring

3.5.1 The operator shall, unless otherwise agreed in writing by the Agency, undertake the monitoring specified in the following tables in schedule 4 to this permit:

(a) point source emissions specified in tables S4.1, S4.2 and S4.3;

3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Agency.

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 4 tables S4.1, S4.2 and S4.3 unless otherwise specified in that schedule.

4 Information

4.1 Records

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

(a) be legible;

(b) be made as soon as reasonably practicable;

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

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

(i) off-site environmental effects; and

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

4.1.2 All records, plans and the management system required to be maintained by this permit shall be held on the site.

4.2 Reporting

4.2.1 All reports and notifications required by the permit shall be sent to the Agency using the contact details supplied in writing by the Agency

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

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

(b) the annual production /treatment data set out in schedule 5 table S5.2; and

(c) the performance parameters set out in schedule 5 table S5.3 using the forms specified in table S5.4 of that schedule.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

(a) in respect of the parameters and emission points specified in schedule 5 table S5.1;

(b) for the reporting periods specified in schedule 5 table S5.1 and using the forms specified in schedule 5 table S5.4 ; and

(c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding 4 years, submit to the Agency, within 6 months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

4.3.1 The Agency shall be notified without delay following the detection of:

(a) any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution;

(b) the breach of a limit specified in the permit; or

(c) any significant adverse environmental effects.

4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 6 to this permit within the time period specified in that schedule.

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

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

Where the operator is a registered company:

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

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

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

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

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

In any other case:

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

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

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

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

(a) the Agency shall be notified at least 14 days before making the change; and

(b) the notification shall contain a description of the proposed change in operation.

4.3.6 The Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.3.7 Where the operator has entered into a climate change agreement with the Government, the Agency shall be notified within one month of:

(a) a decision by the Secretary of State and the Welsh Ministers not to re-certify the agreement;

(b) a decision by either the operator or the Secretary of State and the Welsh Ministers to terminate the agreement; and

(c) any subsequent decision by the Secretary of State and the Welsh Ministers to re-certify such an agreement.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 7 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

Schedule 1 - Operations

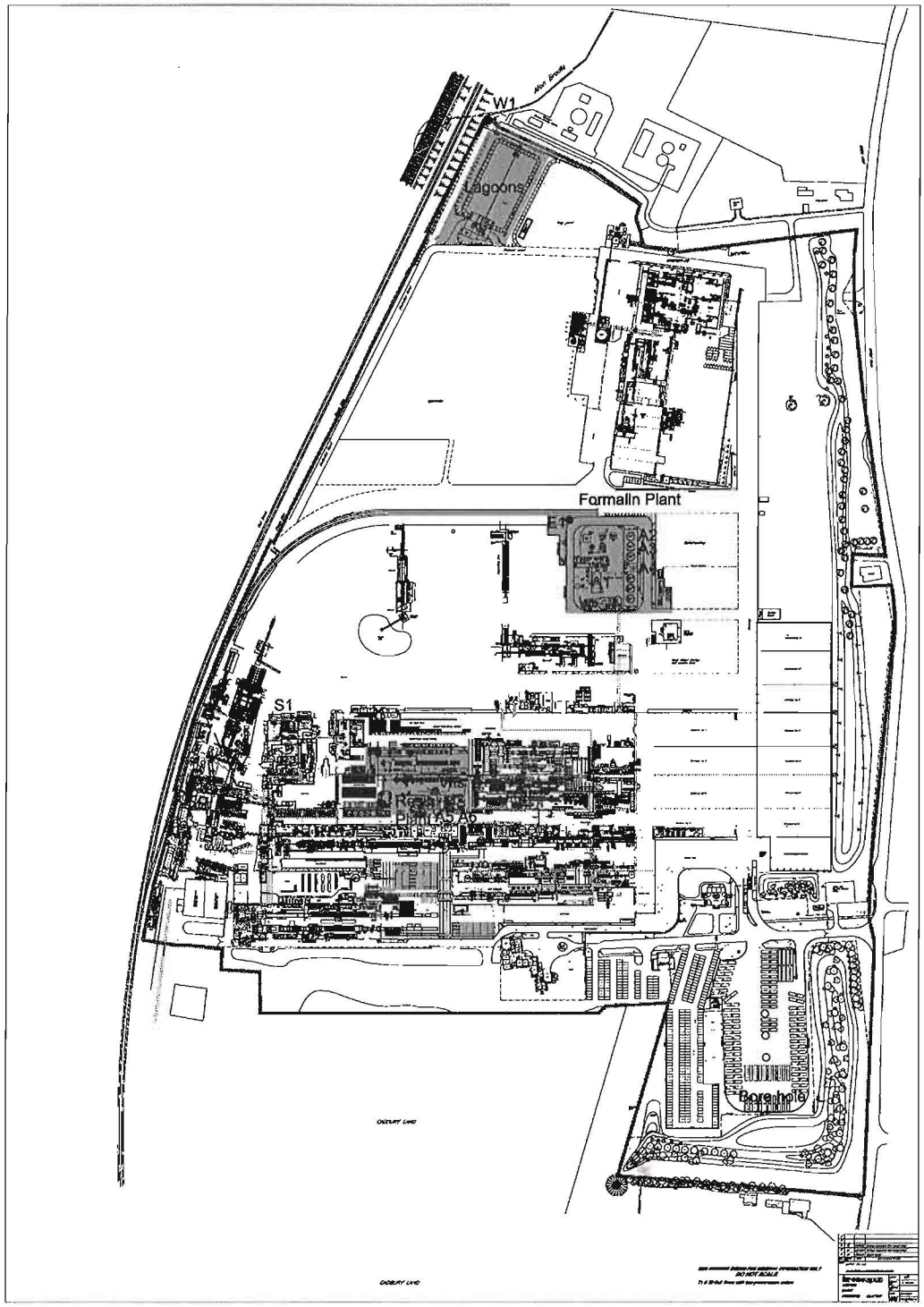
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
4.1 A(1) (a) (ii)- producing organic chemicals containing oxygen	Manufacture of Formaldehyde by catalytic oxidation of methanol	From receipt of raw materials to intermediate storage of formaldehyde product
4.1 A(1) (a) (viii)- producing organic chemicals such as polymers	Manufacture of Urea-formaldehyde and melamine-urea-formaldehyde resins	From intermediate storage of formaldehyde and receipt of other materials to intermediate storage of resin products
Directly Associated Activity		
Unlisted Directly Associated Activity	VITS Paper Impregnation process	From resin intermediate storage and receipt of other raw materials to intermediate storage of impregnated paper products
Unlisted Directly Associated Activity	Surface Water Lagoons	Receipt of site drainage from whole installation and effluent from formaldehyde plant, then discharged into the Afon Bradley via valve Penstock A. The effluent from the Formaldehyde Plant includes inputs from the process bunds, tank farm bunds and tanker loading bay

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application for BW9999	The response to question 2.1 given in pages 7 – 10 and supporting document No 1 of the application	28/11/03
Response to Schedule 4 Notice dated 23/02/04	Responses to questions 10, 16, 17, 18, 21, 22 and 26	30/06/04
Variation Application	Response to questions 2a - e	Duly Made 2nd December 2009
Request for minor operational change dated 16/2/05 Replacement of VITS1 with VITS 5	All	Accepted
Works instruction KC/WI/ENV5006 relating to the lagoon operation	All	16/04/09
Further information request response dated 12th March 2009	All	26/03/09
Further information request response dated 23rd March 2009	All	26/03/09
Technical / Water Environmental Management Programme dated 21/10/04	9	Agreed 23/4/05

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
1	The Operator shall undertake a BAT assessment for the prevention or reduction of emissions of formaldehyde from emission points A1, A5 and A6 in comparison with the benchmark of 5mg/m^3 as set out in the Agency Guidance Note (IPPC S4.01) for the Large Volume Organic Chemicals Sector. The assessment shall include options, impacts to the environment, cost comparisons and a schedule of actions to be implemented. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.	Completed
2	The Operator shall undertake a BAT assessment for the prevention or reduction of emissions of methanol from the storage tank vents. The assessment shall include options, impacts to the environment, cost comparisons and a schedule of actions to be implemented. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.	Completed
3	The Operator shall carry out a BAT assessment of the formaldehyde tank scrubber system. The assessment shall include options, impacts to the environment, cost comparisons and a schedule of actions to be implemented. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.	Refer to improvement condition 20
4	The Operator shall carry out a BAT assessment of the discharge to River Bradley to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it. The assessment should give priority to identification and treatment of contaminated effluent or surface water at source, and shall aim to reduce the emissions of biochemical oxygen demand, ammonia and formaldehyde to target levels of 9.5mg/l, 3.5mg/l and 0.15mg/l respectively. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified to meet this target.	Refer to improvement condition 17
5	The Operator shall carry out a Direct Toxicity Assessment of the effluent discharge to the River Bradley in accordance with the Agency Guidance identified in Appendix F of the Horizontal Guidance Note IPPC H1. A summary of the results shall be sent to the Agency in writing, together with a timetable for implementation of any further work identified by the assessment.	Completed
6	The Operator shall carry out an investigation to determine the levels of monomers released from the resin plant through the air extraction system to the NAIRB scrubber. The investigation may be of the form of monitoring of raw materials, products and emissions, and sampling of product to compare quality. The results of this investigation shall be used to assess the performance of the condensers, the impact of monomers and particulates on the performance of the NAIRB scrubber and identify any improvements that can be made. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.	Completed
7	The Operator shall produce and implement an Odour Management Plan to an approved Agency standard, as outlined in the Technical Guidance Note IPPC H4. Confirmation shall be sent in writing to the Agency that the plan has been formulated and implemented. (Document references shall be included). Documents shall be made available for inspection when requested.	Completed
8	The Operator shall produce and implement a Noise Management Plan in accordance with Agency Guidance. (Horizontal Guidance Note IPPC H3) Confirmation shall be sent in writing to the Agency that a plan has been formulated and implemented. (Document references shall be included). Documents shall be made available for inspection when requested.	Completed
9	The Operator shall carry out a BAT assessment of water usage, paying attention to the potential for minimising potable water use and effluent flow, through optimisation of recycling, and the considerations outlined in improvement condition 4 of this document. The assessment shall identify the areas where water usage can be minimised through improved management and process control, or supplemented with recycled water (e.g. operation of the lagoons, or the resin plant). The assessment shall also include a single sheet schematic detailing an overall plant water balance, which shall include normal and design flowrates. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.	Completed

10	The Operator shall carry out a review of their waste management systems and procedures, and address the deficiencies highlighted in the Waste Audit (Supporting document No.5) in the permit application. The findings of this review shall be sent to the Agency in writing together with a timetable to implement any necessary changes that are identified. Any relevant waste management procedures and associated documents shall be made available for inspection upon request.	Completed
11	The Operator shall carry out a BAT assessment of the energy usage of the Installation. The Operator shall provide to the Agency in writing a timescale for the implementation of any recommendations from the BAT assessment, and for any recommendations detailed in the Energy Survey (supporting document 2). Where a recommendation from the Energy Survey is not to be implemented, a justification shall be provided to the Agency taking into account BAT considerations.	Completed
12	The Operator shall review and update the relevant emergency on-site plans as identified in the Proposed Improvement Programme (Section 6 of the application). A summary of the review shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.	Completed
13	The Operator shall implement an Environmental Management System that satisfies the requirements set out in Agency Guidance Note (IPPC S4.01) for the Large Volume Organic Chemicals Sector. Confirmation in writing shall be submitted to the Agency when a recognised system has been implemented and certification achieved. If not achieved within this timescale the Operator shall notify the Agency of this and shall make available all Environmental Management System documents for inspection.	Completed
14	The Operator shall review their emissions monitoring with the intent to achieve MCERTS certification or MCERTS accreditation (as appropriate) or an equivalent standard that is acceptable to the Agency, where confirmation has been agreed in writing beforehand. Measurement methods should be to appropriate standards (examples in Appendix 1, Agency Guidance for Speciality Organic Chemicals, S4.02). Techniques should be in accordance with Agency Guidance Notes M1 and M2. Proposals for a revised emissions monitoring programme shall be sent to the Agency together with an implementation date.	Completed
15	The Operator shall repeat the Direct Toxicity Assessment of the effluent discharge to the Afon Bradley, using freshwater algal growth, once improvement condition 4 have been completed. A summary of the results shall be sent to the Agency in writing, together with a timetable for implementation of any further work identified by the assessment.	Completed
16	The Operator shall provide a timetable relating to the decommissioning of the two 15 m^3 reactors and commissioning of the new 46 m^3 reactor.	30th May 2009
17	The Operator shall investigate additional measures to further reduce the level of formaldehyde within the discharge to controlled waters. The assessment should give priority to identification and removal of contamination at source and should aim to reduce the emissions to 0.5 mg/l or below. A summary of the assessment shall be sent to the Environment Agency in writing and shall include a timetable for any proposals highlighted.	31st October 2009
18	The Operator shall update drawing 4000/121 to show the new reactor and remove 2 of the15 m^3 reactors. A copy of the updated drawing shall be forwarded to the Environment Agency.	31st May 2009
19	The Operator shall investigate the cause of the tonal noise from the formalin plant. A report detailing the findings of this investigation, including timescales for any improvements shall be submitted to the Environment Agency for agreement.	30th June 2009
20	The Operator shall carry out the improvements highlighted in response to improvement condition 3.	30th September 2009
21	The Operator shall carry out an additional set of monitoring for formaldehyde at emission point A5 when high solid resin products are being produced, ie during distillation. A summary of the results obtained and any improvements highlighted shall be forwarded to the Environment Agency.	31st December 2009
22	The Operator shall review the environmental risk and control measures associated with the loading and unloading of distillate from the resin plant. A report summarising the findings and any improvements highlighted shall be submitted to the Environment Agency.	Prior to the transfer of any distillate from the resin plant

Schedule 2- Site Plan



Note: Further detail of the Site Boundaries and Emission Points can be found on the original drawing from which this was copied. This drawing was submitted on 30/03/06, reference: Drawing number 7000/282-B (30/03/06) Areas of Environmental Responsibility.

Schedule 3 - Waste types, raw materials and fuels

Table S3.1 Raw materials and fuels

Raw materials and fuel description	Specification
"_"	

Schedule 4 – Emissions and monitoring

Table S4.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 (Point A1 on plan DRG 7000/282-B)	Formaldehyde	Emissions Control System- Formaldehyde Plant	5 mg/m^3	30 minutes	Annually in triplicate	2, 4 DNPH impingement technique (NIOSH 2541 / 2539 procedures)
A2	N/A	Methanol Storage Tank (1A) Vent				
A3	N/A	Methanol Storage Tank (1B) Vent				
A4	N/A	Wet scrubber on Formaldehyde Storage Tanks				
A5 (Point A5 on DRG 4000/121 11/02/09)	Formaldehyde	NAIRB Wet Scrubber- Resin VITS 2, 3, 5 Paper Impregnation Plant	5 mg/m^3	30 minutes	Annually in triplicate	As agreed (1)
	Total Volatile Organic Compounds (as Carbon) Class B		50 mg/m^3	30 minutes	Annually in triplicate	As agreed in writing (2)
	Particulates		20 mg/m^3		Annually in triplicate	BS 13284-1
A6 (Point A6 on DRG 4000/121 11/02/09)	Formaldehyde	NAIRB Wet Scrubber- Resin VITS 4 Paper Impregnation Plant	5 mg/m^3		Annually in triplicate	As agreed (1)
	Total Volatile Organic Compounds (as Carbon) Class B		50 mg/m^3		Annually in triplicate	As agreed in writing (2)
	Particulates		20 mg/m^3		Annually in triplicate	BS 13284-1

Table S4.1cont'd Point source emissions to air – emission limits and monitoring requirements		
A7 (Point A7 on DRG 4000/121 11/02/09)	N/A	Exhaust fan for existing urea silo
A8 (Point A8 on DRG 4000/121 11/02/09)	N/A	Exhaust fan for urea tipping hopper
A9 (Point A9 on DRG 4000/121 11/02/09)	N/A	Exhaust fan for urea screw conveyor
A10 (Point A10 on DRG 4000/121 11/02/09)	N/A	Dust filter for melamine hopper feeding reactor R210 and R220
A11 (Point A11 on DRG 4000/121 11/02/09)	N/A	Exhaust fan for melamine bag station hopper
A12 (Point A12 on DRG 4000/121 11/02/09)	N/A	Dust filter for melamine hopper feeding reactor 4
A13 (Point A13 on DRG 4000/121 11/02/09)	N/A	Exhaust fan for urea silo
A14 formalin plant	N/A	All pressure relief venting systems
A15 resin plant	N/A	All pressure relief venting systems

Notes

(1) A validated method which uses iso kinetic sampling and an impingement technique using 2,4 DNPH

(2) Kronospan letters dated 31st August 2005 and 1st November 2005

Table 4.2 Point Source emissions to water (other than sewer) and land- emission limits and monitoring requirements					
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Monitoring frequency**	**Monitoring standard or method**
W1 Point W1 on the site plan. DRG 7000/282-B)	pH	Discharge from Surface Water Lagoons via Penstock A	6 – 9		BS 6068-2.50:1995, ISO 10523:1994
	Biological Oxygen Demand (BOD)		9.5 mg/l		5 day ATU @ 20°C BS EN 1899-1 (1998)
	Suspended Solids		100 mg/l		Dried @ 105°C
	Ammonia		3.5 mg/l		BS 6068-2.33:1987 ISO 7150-2 1986
	Oil and Grease		15mg/l		SCA The determination of Hydrocarbon oils in waters by solvent extraction IR absorption and gravimetry. ISBN 011751 7283
	Formaldehyde		1.5mg/l		SCA The determination of formaldehyde, other volatile aldehydes and alcohols in water
	Discharge volume			Daily when discharging	

Table 4.3 Point source emissions to sewer, effluent treatment plant or other transfers off site- emission limits and monitoring requirements					
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. Unit)**	**Monitoring frequency**	**Monitoring standard or method**
E1	Formaldehyde	Formaldehyde Plant Effluent Tank Outlet	1 mg/l	Prior to each discharge	SCA The determination of formaldehyde, other volatile aldehydes and alcohols in water
	pH		6 – 9	Prior to each discharge	BS 6068-2.50:1995, ISO 10523:1994
	Oil and Grease		15 mg/l	Prior to each discharge	SCA The determination of Hydrocarbon oils in waters by solvent extraction IR absorption and gravimetry. ISBN 011751 7283
	Discharge Volume			For each batch discharge	

Schedule 5 - Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S5.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1.	A1, A5, A6	Every 12 months	01/01/09
Emissions to water Parameters as required by condition 3.5.1	W1	Every 3 months	01/01/09
Emissions from formaldehyde plant effluent tank Parameters as required by condition 3.5.1	E1	Every 3 months	01/01/09

Table S5.2: Annual production/treatment

Parameter	Units
Production of formaldehyde	tonnes
Production of resin	tonnes
Discharge of effluent from W1	m^3

Table S5.3 Performance parameters

Parameter	Frequency of assessment	Units
Total BOD emission to Water (other than Sewer) from point W1	Annual	kg
Total Methanol received into storage tanks.	Annual	tonnes
Total VOCs released – point A5 and A6	Annual	tonnes

Table S5.4 Reporting forms

Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Agency	04/02/09
Water and Land	Form water 1 or other form as agreed in writing by the Agency	04/02/09
Formaldehyde Plant Effuent Tank	Form FPET 1 or other form as agreed in writing by the Agency	04/02/09
Water usage	Form water usage1 or other form as agreed in writing by the Agency	04/02/09
Energy usage	Form energy 1 or other form as agreed in writing by the Agency	04/02/09
Other performance indicators	Form performance 1 or other form as agreed in writing by the Agency	04/02/09

Schedule 6 - Notification

These pages outline the information that the operator must provide.

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

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

Part A

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

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

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

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

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

Part B - to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of Kronospan Limited

Schedule 7 - Interpretation

"*accident*" means an accident that may result in pollution.

"*annually*" means once every year.

"*application*" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

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

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

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

"biological oxygen demand" means biological oxygen demand (BOD) measured after 5 days at 20OC with nitrification suppressed by the addition of allyl-thiourea.

"Class A or Class B" in relation to volatile organic compounds is as defined in Agency Guidance for Large Volume Organic Chemicals S4.01, Appendix 3.

"emissions to land", includes emissions to groundwater.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2007 No.3538 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"fugitive emission" means an emission to air, water or land from the activities which is not controlled by an emission or background concentration limit.

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

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

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

"triplicate"means three separate replicates of a sample, taken one after the other.

"year" means calendar year ending 31 December.

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

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

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

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

END OF PERMIT

Permit Number: EA/EPR/BW9999IG/V003 Operator: Kronospan Ltd

Facility: Chirk Particle board factory Form Number: Air1 / 040209

Reporting of emissions to air for the period for the year.....

Emission Point	Substance / Parameter	Emission Limit Value	Result 1	Sample Date and TIme	Result 2	Sample Date and Time	Result 3	Sample Date and Time
A1	Formaldehyde	5mg/m^3						
A5	Formaldehyde	5mg/m^3						
A5	Total VOCs	50mg/m^3						
A5	Particulates	20mg/m^3						
A6	Formaldehyde	5mg/m^3						
A6	Total VOCs	50mg/m^3						
A6	Particulates	20mg/m^3						

Signed ..... Date.....
(Authorised to sign as representative of Operator)

Corrections have been made as per condition 3.1.4

Permit Number: EA/EPR/BW9999IG/V003 Operator: Kronospan Ltd

Facility: Chirk Particle Board Factory Form Number: Water1 / 040209

Reporting of emissions to water (other than to sewer) and land for the period from DD/MM/YYYY **to** DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]	Test Method	Sample Date	Uncertainty
W1	BOD	9.5 mg/l				
W1	Suspended Solids	100mg/l				
W1	pH	6 – 9				
W1	Ammonia	3.5 mg/l				
W1 W1	Oil and Grease	15mg/l				
W1	Formaldehyde	1.5 mg/l				
W1	Discharge Volume	N/A				

(1) The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

Signed ..... Date.....
(Authorised to sign as representative of Operator)

Corrections have been made as per condition 3.1.4

Permit Number: EA/EPR/BW9999IG/V003 Operator: Kronospan Ltd

Facility: Chirk Particle Board Factory Form Number: FPET1 / 040209

Reporting of emissions from the formaldehyde plant effluent tank for the period from DD/MM/YYYY **to** DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]	Test Method	Sample Date	Uncertainty
E1	pH	6 – 9				
E1	Oil and Grease	15mg/l				
E1	Formaldehyde	1mg/l				
E1	Discharge Volume	N/A				

(1) The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

Signed ..... Date.....
(Authorised to sign as representative of Operator)

Corrections have been made as per condition 3.1.4

Permit Number: EA/EPR/BW9999IG/V003 Operator: Kronospan Ltd

Facility: Chirk Particle Board Insulation Form Number: WaterUsage1 / 040209

Reporting of Water Usage for the year .....

Water Source	Usage (m^3/year)	Specific Usage (m^3/unit output)
Mains water		
Site borehole		
Canal abstraction		
TOTAL WATER USAGE		

Operator's comments :

(The water usage is for the whole installation not just the part regulated by the Environment Agency)

Signed ..... Date.....
(authorised to sign as representative of Operator)

Permit Number: EA/EPR/BW9999IG/V003 Operator: Kronospan Ltd

Facility: Chirk Particle Board Factory Form Number: Energy1 / 040209

Reporting of Energy Usage for the year .....

Energy Source	Energy Usage Quantity	Primary Energy (MWh)	Specific Usage (MWh/unit output)
Site electricity	MWh		
Formaldehyde Plant Electricity	MWh		
TOTAL	-		

* Conversion factor for delivered electricity to primary energy = 2.6

Operator's comments :

Signed ..... Date.....
(Authorised to sign as representative of Operator)

Permit Number: EA/EPR/BW9999IG/V003 Operator: Kronospan Ltd

Facility: Chirk Particle Board Factory Form Number: Performance1 / 040209

Reporting of other performance indicators for the year……..

Parameter	Units
Total BOD emission to water (other than sewer) from point W1 (kg)	
Total Methanol received into the storage tanks (tonnes)	
Total VOC's released from points A5 and A6 (tonnes)	

Operator's comments :

Signed …… Date……
(Authorised to sign as representative of Operator)