

Notice of request for more information

Environmental Permitting (England and Wales)
Regulations 2016

Notice requiring further information

To: Mr R M Jones
Company Secretary
Kronospan Ltd
Maesgwyn Farm
Chirk
Wrexham
LL14 5NT

Application number: EPR/BW9999IG/V008

Natural Resources Wales, in exercise of its powers under paragraph 4 of Part 1 of Schedule 5 of the above Regulations, requires you to provide the information detailed in the attached schedule. The information is required in order to determine your application for a substantial variation to your environmental permit, duly made on 27th July 2018. The information requested should be sent to the following address by **2nd January 2019**.

Information should be sent to:

Anna Lewis
Permitting Service
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

Name	Date
<i>A. M. Lewis</i>	23/11/2018

Anna Lewis, Principal Permitting Officer
Authorised on behalf of Natural Resources Wales

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Gwefan/Website www.cyfoethnaturiolcymru.gov.uk www.naturalresourceswales.gov.uk Croesewir gohebiaeth yn y Gymraeg a'r Saesneg
Correspondence welcomed in Welsh and English

Schedule

1. Air Quality Assessment

Appendix B of the “Kronospan Chirk Dispersion Modelling Assessment” (dated 25/05/18) lists the dispersion model inputs. Within this appendix, the source data for MDF1 and 2 cyclones is based on emission limit values (ELVs) of 120 mg/Nm³ and 15 mg/Nm³ at 273.15K, O₂ dry gas for Total Volatile Organic Compounds (TVOC) and Formaldehyde (CH₂O) respectively.

However, Wrexham County Borough Council (WCBC) permit WCBC/IPPC/03/KR(V3) gives ELVs of 130 mg/m³ and 20 mg/m³ at 101.3 kPa, 273K wet gas for Condensable Volatile Organic Compounds (CVOC) and CH₂O respectively. As such, the emission rates for TVOC and CH₂O used in the submitted modelling, are not consistent with current WCBC permit limits for MDF1 and 2, although our check modelling shows that they do appear to have been calculated at WCBC permit conditions of 101.3kPa, 273K and wet gas contrary to the information provided in Appendix B of the submitted air dispersion modelling assessment, for MDF1 and 2.

On this basis, please confirm which reference conditions the source data for MDF cyclones 1 and 2 is based on in Appendix B of the “Kronospan Chirk Dispersion Modelling Assessment”:

- (i) at 273.15K, O₂ dry gas; or
- (ii) at 101.3 kPa, 273K wet gas.

2. Kronoplus

Section 1.4.7, on Page 14 of the application supporting information document (dated 25/06/18) states that:

“Flooring and Worktop manufacturing from the Finished HDF or Particle Board is undertaken by Kronoplus Ltd”.

The answer to Q5a on application form A shows that Kronospan Ltd have applied to be the Operator of the activities subject to this variation application. The company registration number for Kronospan Ltd is 981905, whereas the company registration number for Kronoplus Ltd is 03425921. As such Kronospan Ltd and Kronoplus Ltd are separate legal entities. This means that Kronospan Ltd cannot hold the environmental permit for Kronoplus Ltd.’s operations and that Kronoplus Ltd operations may require a separate environmental permit which together with permit EPR/BW9999IG would form part of a multi-operator installation, that being Chirk Particleboard Factory.

We therefore need to determine which type of permit is most appropriate for the Kronoplus Ltd operation:

- (i) a Directly Associated Permit where the Kronoplus operation is a directly associated activity to the Kronospan operation; or

- (ii) a Part B activity permit for Kronoplus which is independent of the Kronospan operation.

To determine this, we need to establish the degree to which Kronospan and Kronoplus operations are technically connected. Therefore, please provide a written assessment of the relationship between Kronospan and Kronoplus operations using the Environment Agency guide EPR RGN 2 “Understanding the meaning of regulated facility”, which can be found at the following link: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/435475/LIT_6529.pdf

The written assessment shall consider the limb (i) and limb (ii) tests for stationary technical unit and directly associated activities respectively, which are in the Appendix 2 “Defining the Installation” part of the RGN2 guidance.

3. Noise

The noise modelling assessment which supports the noise impact assessment that forms Appendix K of the application, uses a background noise survey from April 2011. More specifically, paragraph 4.3 of this report states:

“It should be noted that the baseline survey in 2011 excluded all the additional plant or plant that has been removed from site over the last 7 years. The survey does however include the noise from all other plant operating at the Facility at that time as well as residual noise from noise sources in the local area not associated with the operation of the Facility”.

As the survey is from 7 years ago and noise sources have been removed and added from the site, there is high uncertainty as to how representative it is of current conditions at receptor locations. As such there is uncertainty in the BS4142:2014 assessment findings. Therefore, please undertake an up to date background monitoring survey in line with BS4142:2014 “Methods for rating and assessing industrial or commercial Sound”, to provide confidence in the noise assessment findings or satisfactorily demonstrate that the 2011 background noise survey is representative of current background noise conditions.

Please provide clarification of the discrepancies between the noise impact assessment report in Appendix K of the application and the noise modelling files as listed below:

- (i) Octave band sound power levels have been used within the noise modelling files. However, these octave band sound power levels have not been detailed in the noise impact assessment report. For each of the proposed noise sources in Appendix 3 of the report, please describe how they correspond to noise sources as stated in the noise modelling files.
- (ii) The noise modelling files have two entries for the sound power levels for the sifters (Sift) source, called “Existing Sifters” and “Sifters”. In the model file “Kronospan-OSB Mitigated and Gas Engines 4&5 Map1.cna”, it appears all sources associated with the “Sift” noise level have used the power level defined for “Existing

Sifters” which is 6dB less than for the source labelled as “Sifters”. Please clarify whether the source terms used in the model are correct and represent the proposal.

- (iii) Regarding the gas engines, section 6.9 of the noise impact assessment report states that:

“The enclosure / container and associated radiator / attenuators would be designed to reduce noise levels down to a level not exceeding 75dB LAeq15mins@1m”.

This value is different to the value of 70dB LAeq@1m presented in the table in Appendix 3 of the noise impact assessment report. Therefore, please confirm the correct proposed noise source level for the gas engines and how it corresponds to those values used in the modelling.

- (iv) Within the modelling of the gas engines, the source noise levels have been added or subtracted to. The amount added or subtracted varies depending on where the source is situated on the engines. It is assumed this is due to proposed mitigation. However, this is not explained in the noise impact assessment report. Therefore, please provide clarification on this issue and provide further information relating to the assumptions that have been used to calculate the noise source levels for the proposed gas engines.
- (v) In section 6 of the noise impact assessment report, it is stated that the OSB building extension and new building would have a variety of cladding providing Rw values of 32dB, 35dB, and 42dB. However, within the modelling file “Kronospan-OSB Mitigated & Gas Engines 4&5 Map1.cna”, the OSB building noise sources have single skin cladding with an Rw value of 22dB applied. Please clarify the reason for this discrepancy and update the modelling file if required.
- (vi) Noise measurements of the new developments and existing sifters to be removed are presented in Appendix 2 of the noise impact assessment report. The measured noise around the existing sifters do not have a reference distance supplied. On this basis, please provide the reference distances used for the existing sifter measurements.

4. Kronospan comparison against Wood Panel BREF BAT Conclusions

We have reviewed Kronospan’s review of its operations against the Best Available Techniques Conclusions (BATC) document for the Production of Wood-based panels, implemented by Commission Implementing Decision (EU) 2015/2119 of 20th November 2015. This is provided as Appendix D to the permit variation application. In conducting this review, we have had regard to the BATC and also the UK Interpretation Guidance on the BATC.

This review has highlighted the following information requirements, which are necessary to further verify the responses to the BATC comparison. On this basis, please provide:

BAT 1

viii -

Please provide further written evidence to support the following statements made in the response:

“A first phase reporting of the Site Protection Monitoring Programme was completed (formal report) in May 2006 by consultants RSK ENSR. An audit was carried out in 2011 by the NRW and they were satisfied with the data in the baseline report. It was agreed that going forward the company would update the report by developing a lifetime records approach. To that end on an annual basis we have reviewed and documented changes to section 4 – 7 of the report”.

ix

Please confirm if the sectoral benchmarking referred to is internal within the Kronospan group of companies, or external, where Kronospan Ltd's sites are compared with sites of other companies within the wood-based panels sector. Please provide details of the environmental benchmarking and in particular, where Kronospan's Chirk site sits within the benchmarking results.

x

Please provide a copy of the waste management plan. The plan must identify the waste streams generated and their method of treatment in accordance with the waste hierarchy of prevent, reuse, recover.

xi

Please provide a copy of the Quality Control plan for recovered wood used as a raw material for panels and used as a fuel.

xii

Please provide a copy of the noise management plan.

xiii

Please provide a copy of the odour management plan. The odour management plan must include the identified elements I – IV in BAT 9.

xiv

Please provide a copy of the dust management plan.

BAT 2, (b) –

The UK Interpretation Guidance on the BATC states that BAT 2(b):

“relates to the use of “gatehouse protocols” as devised by the UK link authority and applied to UK sites to ensure that recovered wood entering site is not identified as Annex VI of the IED waste (wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coating, and which includes in particular such wood waste originating from construction and demolition waste)”.

Therefore, please expand on the response provided to demonstrate how the above interpretation guidance is addressed on site.

In addition, please explain how the quality control checks on recovered wood work in terms of differentiating between feedstocks for the Particleboard Production Process, K7 and K8 biomass boilers. Is it correct to assume that recovered wood feedstock to each of these items is tested more frequently than quarterly once on the site and does this testing also apply to wood recovered from within the process? Please provide the decision flowchart for deciding where recovered wood is used based on its sample characteristics. In addition, please confirm how many loads of recovered wood delivered to site are typically rejected in a year, what are the criteria for recovered wood being rejected and what happens to this rejected wood.

BAT 2, (d) –

Please provide the cleaning procedure for equipment, transport routes and raw material storages areas which forms part of the installation’s environmental management system (EMS), in line with the UK BATC interpretation guidance.

Please also provide an explanation of how preventative maintenance is managed on site, including an outline of Kronospan’s Computerised Maintenance Management System (CMMS). For example, is preventive maintenance scheduled in Kronospan’s Computerised Maintenance Management System?

BAT 4 (b) –

Please provide a copy of the 2012 noise survey report conducted by RSK. In addition, please provide a copy of the plant improvement programme and confirm the date by which it will be completed.

BAT 5 (iii) –

Kronospan’s response to this requirement states:

“A full engineering survey of all existing arrangements was carried out, some minor works were required which were completed to the satisfaction of NRW”.

Please clarify the extent of the engineering survey and explain what is meant by “minor works”. Please also provide a copy of the engineering survey report.

BAT 12 (b) –

Please confirm if Kronospan's response includes wood sludge from waste water filtration.

BAT 13 (a) –

Please confirm what Kronospan mean by the term "boiler ash". Please also explain what the word "derogation" means in the context of "a hazardous landfill site with a WAC derogation". Finally, please explain the likely source of the "lead content" in the boiler ash and confirm which combustion / co-incineration appliance this is associated with.

BAT 13 (c) –

Please confirm if the central location for on-site storage of ash from K7 and K8 biomass boilers is enclosed. Please also confirm if bottom ash from K7 and K8 is segregated or mixed during on-site storage pending off-site disposal. In addition, please explain if fly ash from K7 and K8 is segregated from the bottom ash and also if fly ash from K8 is segregated from K7 fly ash.

BAT 14, Table 1a

In the UK Wood Panel BATC Interpretation guidance, footnote (6) to the first table in BAT 14 states the following for formaldehyde where there is no EN standard available:

"In the absence of an EN standard, the preferred approach is isokinetic sampling in an impinging solution with a heated probe and filter box and without probe washing, e.g. based on the US EPA M316 method".

Furthermore, paragraph 28 of the UK interpretation guidance to BAT 14 states:

"Formaldehyde – Until an EN Std is published the standard described in the footnotes is to be followed, [this is the UK Std as nominated and developed by Dr B Acton]".

In Kronospan's BAT comparison document, the footnote to Table 1a in BAT 14 (page 21), states:

"Compliance Category 2 Formaldehyde – currently test using US EPA Method 316 with deionised water substituted with DNPH solution to improve sensitivity..."

In addition, the footnote to Table 1 in BAT 17 (page 25), states:

"Compliance Category 4 Formaldehyde – using the new test method contained in the BREF that requires the use of deionised water and a different analysis technique therefore gives higher results, the AELS in the above table will not be met"

Our understanding of this response is that Kronospan are currently using US EPA Method 316 for measuring formaldehyde releases to air but are using DNPH as a substitute for de-ionised water and are not using pararosaniline as a reagent. Please confirm if this assumption is correct. If this is the case, please provide any internal benchmarking and comparative analysis between the test method currently used by Kronospan and the pararosaniline method specified as the UK standard in the BATC. The comparative analysis must include a discussion of the monitoring results achieved using Kronospan's current test method, and any test results achieved using the UK standard in the BATC. In addition, please provide the modified US EPA M316 test method that Kronospan are currently using for the measurement of formaldehyde releases to air.

BAT 14, Table 5

Please confirm the location of the measurement point for each item of combustion and co-incineration plant that generates flue-gas that is subsequently used for directly heated dryers. The measurement point must be before the mixing of the flue-gas with other airstreams, where technically feasible.

BAT 17

Kronospan's BATC comparison response states that the techniques in (c) and (e) are employed in the case of BAT 17. Please confirm the site's position regarding technique (h) "chemical degradation or capture of formaldehyde with chemicals in combination with a wet scrubbing system", which is generally applicable for wet abatement systems.

BAT 19

Please confirm if in-duct quenching of collected press waste gas is used in combination with techniques (a), (b) and (c).

BAT 25

Kronospan's BATC response states that:

"Surface waters from the Logyard will, once the Logyard is fully concreted, pass through a mechanical screen that removes wood debris as well as silt before entering lagoon number 3".

Please confirm the current status of this. Is the mechanical screen now in place and operational? If so, please confirm the removal efficiency of the screen.

Please provide the minimum, maximum and mean results for all parameters discharged to emission point W1 over the last 12 months.

Table 6

Please confirm (and if relevant explain) if there are any technical characteristics associated the installation which mean achievement of the BAT-AEL for Total

Suspended Solids would lead to disproportionately higher costs compared to the environmental benefits (as per Article 15(4) of the Industrial Emissions Directive).

BAT 26

Kronospan's BATC response states:

"Waste Water from wood fibre production is minimised by efficient use of heat exchanger to pre-heat the wash water".

Please explain how this works to maximise process water recycling.

End of Schedule.