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/V007

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 13th January 2017. The information requested should be sent to the following address by **26th May 2017**.

Information should be sent to:

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

Name	Date
A. M. Lewis	19/05/2017

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

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Schedule

The following questions, are about specific aspects of the previous Schedule 5 Notice response, submitted to Natural Resources Wales (NRW) on 28th March and 13th April 2017.

1. Site Plan

An updated site plan showing the location of all combustion plant and associated air emission points to be regulated by NRW has been submitted. The plan has been reviewed and meets all the requirements specified in the original Schedule 5 notice. However, the numbering of the Natural Resources Wales Emission Points on the updated plan does not fully match the emission point references given in Table S4.1 of the NRW permit as given in variation notice EA/EPR/BW9999IG/V003.

Please provide an amended site plan showing all the existing air emission points as numbered in Table S4.1 of EA/EPR/BW9999IG/V003 and the Natural Resources Wales emission points shown on the site plan. Each air emission point needs to have a unique identifier (e.g. A4) and the additional NRW combustion emission points on the site plan should follow on sequentially from those emission points which are already listed in Table S4.1. This allows emission points in the site plan to be cross referenced with those in Table S4.1

2. Releases to Sewer

The response to Q2 “Releases to Sewer” states that:

“The K1, K5 and K6 combustion systems are effectively heat exchangers and do not produce effluents which would require discharge to sewer”.

Furthermore:

“The gas turbines (GT1 and GT2) and gas engines (Gas Engines 1 – 5) do not include a steam cycle, therefore do not produce effluents which would require discharge to sewer”.

It is NRW’s understanding from “Table 1.1 – Combustion Plant” on page 3 of the Fichtner Application Supporting Information document, that the K1, K5 and K6 combustion plant are natural gas boilers which would be expected to generate boiler blowdown and waste condensate for disposal.

Table 1.1 also states that the Gas Engines are used as a source of steam production for MDF1 and MDF2 and that the 2 x Gas Turbines will act as standby plant for the gas engines. Paragraphs 1.3.1.5 and 1.3.1.6 on page 6 of the Fichtner Application Supporting Information document confirms that the standalone gas turbines:

“will provide a back-up supply of heat/steam and electricity if a gas engine is not available”.

It would therefore also be the expectation that some quantity of blowdown water and waste condensate would also be generated for disposal by the gas engines and gas turbines as well.

In view of this, please confirm if emission point "S1" shown on the overall site plan of the installation (submitted in response to Q1 "Site Plan" of the previous schedule 5 notice) receives boiler blowdown and waste condensate from K1, K5, K6, Gas Engines 1 – 5 and Gas Turbines 1 and 2. If necessary, please provide further explanation to clarify if the point source release to sewer from the combustion plant subject to this variation is released from a single emission point or a number of different emission points. Please also update the overall site plan for the installation (as submitted in the previous Schedule 5 response) to show the location of this emission point(s), if it is not "S1".

3. Air Quality Assessment

Q4a & 4b:

The documentation provided in response to questions 4a and b of the original schedule 5 notice explains that the gas engines are currently "tuned for TA luft" (500 mg/Nm3 @ 5% O_2 for dry exhaust gas) and that retuning from the current setting to "half TA luft" (250 mg/Nm3 @ 5% O_2 for dry exhaust gas) can be done at the same time as the hot commissioning of the plant.

In addition, the document entitled "Wärtsilä 34SG engine tuning for different NO_x emission levels" states that:

"Wärtsilä has developed engine concept for different NOx tunings by running laboratory engines. By means of testing and process simulation there are known base settings that can be implemented on engine for each NOx emission level limitation. Limited fine tuning takes place on-site".

In view of this, please confirm if it is technically possible to use a different tuning configuration which would achieve NO_x emissions of less than 250mg/m^3 (@ 5% O_2 for dry exhaust gas). If a different tuning configuration can be adopted, please update the air quality modelling assessment to reflect this. If an alternative tuning configuration is technically possible, but will not be adopted, please provide full justification for this position.

Q4d:

Item d) on page 9 of the original Schedule 5 response states that:

"The (K7) monitoring showed that at standard temperature and pressure (STP) dry gas i.e. no correction for oxygen, the concentration of NO_x was 270 mg/Nm^3, and the measured oxygen content was 15.7% on a dry basis. Therefore, corrected to the 11% reference oxygen content, this equates to a NO_x concentration of 509 mg/Nm^3 (dry air, 273K, 101.3kPA, 11% ref O_2) is considered to be conservative".

However the table in Appendix B of the submitted initial Dispersion Modelling Assessment report (dated 15/12/2016) shows that both K7 (550 mg/Nm^3) and K8

(300 mg/Nm^3) have a reference oxygen content of 6%. The Schedule 5 response also suggests that 6% reference oxygen content is used in the WCBC permit in respect of K8. On this basis, we consider that the use of the 11% reference O_2 in the risk assessment for K7 and K8 may not be conservative. Please provide further clarification on this and update the modelling results to reflect the correct O_2 content for K7 and K8 if appropriate.

Q4d Table 2:

Table 2 "Summary – All Driers Offline – Emergency Only" on page 10 of the original Schedule 5 response, contains a column for the 99.79%ile of 1-hour mean (as % of AQAL), maximum outside the site boundary. This column shows that the process contribution against the daily ELV and the process contribution against the half hourly ELV are the same. Furthermore, the PEC associated with the daily ELV is the same as the PEC associated with the half-hourly ELV.

Please explain why the predicted impacts associated with the half hourly ELV are the same as those associated with the daily ELV, given that the half hourly ELV is twice that of the daily ELV in the Wrexham County Borough Council permit (WCBC/IPPC/03/KR(V3)). Please also update the modelling results associated with this if appropriate.

End of Schedule.