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 **24th March 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	08/03/2017

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

Ffôn/Tel 03000 654 358
Ebost/Email anna.lewis@cyfoethnaturiolcymru.gov.uk
anna.lewis@naturalresourceswales.gov.uk

Schedule

1. Site Plan

Please provide an update to the site plan showing the overall installation boundary supplied within Annex 1 of the Variation application folder. The updated site plan needs to incorporate the following changes:

- Natural Resources Wales combustion plant (C4 and C5 – Bab 2 Heat for Chipboard 2 and Bab 3 Heat for Chipboard 3). This plant is not included within the scope of the current variation application and is therefore not Natural Resources Wales (NRW) combustion plant. On this basis, please remove the green shading from these plant items and please also remove them from the list of NRW combustion plant shown on the plan legend;

- Boilers K1, K5 and K6 are included in the scope of the current variation application and therefore need to be shown as NRW air emission points, rather than Wrexham County Borough Council emission points.

- The location of the dedicated stacks for Gas Engines 1 – 5 are not shown on the current site plan. Please update the site plan to show the location of these five release points.

- The dedicated stacks for Gas Turbines 1 and 2 also need to be listed as NRW emission points on the plan legend and their location shown on the plan itself.

2. Releases to Sewer

Please confirm if emission point "S1" shown on the overall site plan of the installation in Annex 1 of the variation application folder is for the release of boiler blowdown from K1, K5, K6, Gas Engines 1 – 5 and Gas Turbines 1 and 2. Page 11 of the application supporting information states that "All process effluent generated by the operation of the combustion plant will be discharged to sewer in accordance with the existing Trade Effluent Consent…." 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 in Annex 1 of the variation application folder to show the location of this emission point(s), if it is not "S1".

3. Monitoring Location Assessment

Please provide an assessment of the sampling locations used to measure point source emissions to air for the five individual gas engine stacks. The assessment must use Technical Guidance Note M1 (monitoring) which is available on our website at the following link:

https://naturalresources.wales/apply-for-a-permit/environmental-permitting-regulations-guidance/guidance-to-help-you-comply-with-your-environmental-permit/?lang=en.

4. Air Quality Assessment

The following items relate to the Fichtner Air Quality Assessment report. If any of the provided source terms (i.e. Emission Limit Value, emission concentration, volume flow rate etc.) change as a result of addressing the following items, a revised modelling assessment must be provided.

a) The Fichtner Air Quality Assessment report explains that the NO_x emission limit value (ELV) for the gas engines was taken from EPR 1.01 – Engines SI SCR NO_x 250 mg/Nm^3[1]. However no secondary abatement techniques are proposed to mitigate the generation of NO_x from the gas engines. On this basis, please provide evidence (e.g. monitoring results) of how the ELV of 250 mg/Nm^3 can be achieved without SCR (Selective Catalytic Reduction or other secondary NO_x abatement technology).

b) Please also provide any available monitoring data to demonstrate that the proposed 400 mg/Nm^3 CO ELV is achievable.

c) The management summary of the Air Quality Assessment report states that:

"A review of the existing monitoring data on site showed that the emissions from the driers were typically well below the BAT AELS. Therefore, it was considered appropriate to base the assessment on the actual emissions and provide a sensitivity of worst-case impact. This is also supported by the modelling which has predicted similar concentrations to those observed in the local area".

Please provide the existing monitoring data which underpinned the review described above. In addition, please also provide some more specific information about how the review was conducted. For example, how was the typical emission concentration in the Likely Case derived? How many measurements have been carried out in the past, at what frequency? Also, how does the modelling prediction support the local observations and at what averaging times?

d) Page 5 of the Air Quality Assessment report states that:

"The existing permit includes an ELV for NO_x for the K8 biomass plant of 300 mg/Nm^3 (dry air, 273K, 101.3kPA, 6% reference oxygen content)"...

[1] The forthcoming indicative BAT standard for gas engines which are new plant is around 85-95 mg NOx/Nm3 (daily or extractive sample average) (dry air, 273.15K, 101.3kPA, 15% reference oxygen content) based on use of enhanced lean burn technology, but the BAT case for not using SCR or other secondary abatement technology, should be made for plant that operate continuously.

It also states that:

"In lieu of any limit for NO_x from the K7 biomass plant, we have assumed the NO_x emissions to be the same as the unabated NO_x emissions from biomass plant K8 (550 mg/Nm^3). The fuel used in K7 and K8 is the same, therefore this assumption is justified".

Please provide a justification for the difference in the abated and unabated NO_x emission concentrations for K8 biomass plant. What operating technology or technique is used to achieve the 45% reduction in NO_x emission concentrations in the abated case.

In addition, please confirm which averaging period the 300 mg/Nm^3 and the 550 mg/Nm^3 applies to (i.e. daily average or half hour average). Please also ensure that emission concentrations for both averaging periods are provided for both the Biomass plants.

e) Page 6 of the Air Quality Assessment report states that:

The Bab 2 and Bab 3 are the only sources of NO_x entering the SEKA. Therefore for this dispersion modelling the NO_x emissions from the SEKA have been calculated as the sum of the NO_x entering the SEKA from the Bab 2 and Bab 3 driers".

However, Appendix B of report shows that the volume flow rates between SEKA (218.34 Nm^3/s) and Bab2 + Bab3 (49.31 + 47.52 = 96.83 Nm^3/s) are not matched. Higher volume flow rate was used in the modelling which would lead to a smaller prediction. Please confirm that there are no other NO_x emissions (apart from Bab 2 and Bab 3) from SEKA. Please also explain where the other SEKA volume flow would come from.

f) In Appendix B of the Air Quality Assessment report, please confirm if the NO_x emission rate between the proposed typical case and BAT-AEL case should be swapped, as the current configuration appears to be a typo? Please also confirm that the exit oxygen content from the SEKA emission is 22%, as this is a higher oxygen content than that in the atmosphere.

g) Annual mean nitrogen deposition calculation against nutrient and acid Critical Loads at the identified habitats sites has not been provided. Please provide an assessment against these critical loads for the normal operating scenario described in section 10.4 "Deposition of Emissions", which is expected to occur for periods of more than one day.

End of Schedule.