KRONOSPAN, CHIRK

PROPOSED DEVELOPMENT OF 2NO. GAS ENGINES

INCEPTION MEETING BRIEFING NOTE

FEBRUARY 2018

Chester Office | Well House Barns | Chester Road | Bretton| Chester | CH4 0DH
South Manchester Office | Camellia House | 76 Water Lane | Wilmslow | SK9 5BB
t 0844 8700 007 | **e** enquiries@axisped.co.uk

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1.0 INTRODUCTION

1.1.1 The proposed development comprises the installation of two gas engines each with a maximum electricity generating capacity of 9.73 MWe. The site already operates three gas engines capable of generating 29.58 MWe and has a permit to operate a total of 5 gas engines.

1.1.2 The proposed gas engines would be located within an existing industrial facility; the Kronospan manufacturing site in Chirk. The engines would be located immediately to the west of three existing gas engines and would be similar in scale and appearance to the existing engines. The location of the proposed development is shown on Figure 1 and more detail is provided about the site and the proposed development in Section 3.0 and Section 5.0 respectively.

1.1.3 The Developments of National Significance (Specified Criteria and Prescribed Secondary Consents) (Wales) Regulations 2016 (The Regulations) Article 4 specifies the types of developments which are considered to be of national significance. The proposed development falls within the criteria of a 'Generating Station'. The regulations specify that where a generating station would have 'an installed generating capacity of between 10 and 50 megawatts' it would comprise a 'Development of National Significance' (DNS). As such, Kronospan Limited (hereafter referred to as Kronospan) are seeking to engage in early discussions with the Planning Inspectorate regarding the DNS process.

2.0 THE APPLICANT

2.1.1 The prospective applicant is Kronospan. Kronospan is the UK's leading manufacturer of high quality wood-based panels and associated products and has been operating in the UK since 1970. The primary products manufactured by Kronospan at the Chirk site are particle board and medium density fibreboard (MDF), from which a number of secondary products are produced such as laminate flooring, worktops and melamine facing boards.

3.0 THE SITE

3.1.1 The site is located on land adjacent to Holyhead Road (the B5070), Chirk. The site covers an area of circa 40ha, with circa 14ha of this developed with industrial buildings and plant. Figure 1 illustrates the location of the site. Appendix A provides a series of photographs of the Kronospan site from viewpoints in the surrounding area.

3.1.2 A number of large industrial process facilities are located in the south west portion of the site. These are used to process, sort and dry the raw wood materials used in the manufacture of MDF/particle board and include several tall structures including stacks that emit process emissions to the atmosphere. The tallest structure on the site is the combined heat and power (CHP) biomass plant stack which is 70m in height. The biomass plant is used to generate heat for use in the manufacturing process. The south eastern portion of the site is dominated by large warehouses and logistics facilities. The existing three gas engines, which have a total generating capacity of 29.58MW, are located to the north of the MDF/particle board production buildings.

3.1.3 A number of other process buildings are located in the northern half of the site including: a saw mill; formalin plant and the secondary product manufacturing facility (Kronoplus) which produces laminate flooring and worktops.

3.1.4 The site car park, reception building, weighbridge and main site offices are located in the south eastern corner of the site to the south of the MDF and board manufacturing buildings.

3.1.5 The western perimeter of the Kronospan site is formed by the Shrewsbury to Chester railway. The Llangollen Canal is located to the west of the railway line, circa 30m from the boundary of the site at its closest point. The canal is designated as the Pontcysyllte Aqueduct and Canal World Heritage Site (WHS) and as a Scheduled Monument. The eastern perimeter of the site is formed by Holyhead Road (B5070). An earth bund, planted with trees, has been developed along the eastern perimeter of the site in order to reduce the visibility of the site operations from neighbouring properties on Holyhead Road and the housing estate to the east.

3.1.6 A sewerage pumping station and one property owned by Kronospan, are located to the immediate north of the site. To the immediate south of the site is the Mondelez factory, the Chirk AAA sports ground and the Chirk recreational ground.

3.1.7 The main residential area of Chirk is located to the east of the site with residential properties lining the majority of the eastern side of Holyhead Road. Chirk town centre is located approximately 500m to the south east of the site. Parts of the town centre are designated as Chirk Conservation Area.

3.1.8 The wider area beyond the urban settlement of Chirk is dominated by agricultural fields and woodland. Chirk Castle (Grade 1 listed) and its grounds (Registered Park and Garden) are located circa 500m to the west of the site, beyond the canal. The Clwydian

Range and Dee Valley Area of Outstanding Natural Beauty (AONB) also lie to the west of the site, the closest boundary of the AONB runs concurrent with the grounds of Chirk Castle.

3.1.9 Appendix A contains a series of photographs of the site from several viewpoints around the facility. Photographs from these viewpoints have been used to support a number of recent planning applications. Where visible the three existing gas engines have been highlighted in blue to assist in understanding the location and likely visibility of the proposed gas engines, which would be located directly to the west of the existing engines.

Access

3.1.10 The site is accessed via a T-junction with Holyhead Road (B5070) which runs in a north south direction to the east of the site. The B5070 meets the A5 approximately 1.5km to the north of the site via a roundabout junction, known as Whitehurst Roundabout. Approximately 1km to the east of this roundabout the A5 forms a junction with the A483. The A483/A5 provide links north to Chester, west to Llangollen and south to Shrewsbury. To the south of the site access the B5070 leads to the A5 via Chirk town centre, this route is restricted to non-HGV traffic.

3.1.11 The existing railhead and sidings within the site are used to import timber for the manufacturing process.

Employment at the Site

3.1.12 The Kronospan manufacturing facility in Chirk is a major local employer within Wrexham County Borough (WCBC) with the site at Chirk employing approximately 650 staff. It is estimated that the facility also provides indirect employment to 6,000 people in industries relating to the manufacturing and supply chains associated with the operations at the site.

4.0 PLANNING CONTEXT

Introduction

4.1.1 Prior to the 1970s, the site was greenfield agricultural land and included a farm house. The original 17th Century farmhouse still forms part of the offices of Kronospan.

4.1.2 The construction of the first factory building commenced in 1971 and the company began operating in 1973. In the late 1980s, the company bought a factory adjacent to

the original site. This has since been extended to provide the base for the company's 'Kronoplus' operation.

4.1.3 Over the past 5 years Kronospan has started a modernisation and improvement programme which has involved the development of a series of facilities intended to deliver efficiency and environmental improvements to the site and neighbouring residential areas.

Vision 2020

4.1.4 Kronospan Vision 2020 is a capital investment programme with a total cost in the region of £200 million that is currently being undertaken by Kronospan. Kronospan Vision 2020 is seeking to deliver new buildings, improved raw material handling facilities and increase onsite energy generation. The Vision 2020 programme will also deliver environmental improvements at the site and ensure the long term viability of the business by improving manufacturing efficiency and productivity.

Recent and Current Planning Applications

4.1.5 Due to the recent investments made by Kronospan there have been numerous planning applications for developments in recent years. Table 1 summaries the planning history at the site since 2012.

Table 1 – Recent Planning History

Application Ref. No.	Proposal	Decision
P/2012/0165	Development of biomass plant, recycled wood fibre (RCF) offloading & screening facility & associated infrastructure to support existing production operations	Approved - 14 September 2012
P/2013/0824	Development of biomass plant comprising biomass boiler & furnace ash, handling facility & flue, gas treatment facility including stack & air pollution control, reagent storage silos, recycled wood fibre offloading & screening facility, biomass storage area & associated infrastructure (substitution of planning permission code P/2012/0165)	Approved - 07 May 2014
P/2014/0215	2.5m diameter by 7m high extension to existing 15m high abatement stack.	Approved 02 June 2014
P/2015/0728	Erection of building to contain three gas engines and three steam boilers, erection	

Application Ref. No.	Proposal	Decision
	of electrical substation building, oil tank compound, a duct from the press abatement system to carry process emissions to the SEKA (WESP) stack and associated infrastructure to support existing operations.	Approved - 04 Jan 2016
P/2016/0219	Construction and Operation of a Recycled Fibre (RCF) Reception Facility, Grading Plant, Storage Silos and Other Associated Infrastructure (referred to as the log yard RCF project).	Approved – 03 May 2016
P/2016/0336	Extension of a building to house a new melamine facing (MF) press following the demolition / relocation of the existing MF department's ventilation system, hydraulic oil and diesel storage tanks, a vehicle filling station, garage service building and other associated infrastructure.	Refused – 05 September 2016 Granted at Appeal – 04 May 2017 (Reference APP/H6955/A/16/ 3165368)
P/2016/0534	Proposed building extension to store medium density fibreboard (MDF) and chipboard.	Refused – 05 September 2016
P/2017/0416	Replacement of existing wood chip preparation facility and development of a new wood chip dryer and associated equipment.	Approved – 31July 2017
P/2017/0700	Development of a raw board store	Refused – 6th November 2017 Currently subject to Appeal (Reference: APP/H6955/A/18/ 3193142)
P/2017/0699	Development of a log delivery and transfer system and buildings to house a replacement wood chipping and flaking system and demolition of existing debarking and chipping facilities.	Submitted – 15 August 2017 Awaiting determination

5.0 DEVELOPMENT PROPOSAL OVERVIEW

5.1 Introduction

5.1.1 The manufacturing processes which take place at Kronospan require large quantities of heat and electricity. The high voltage electricity network in this part of Wales is sub-standard for the level of demand it is required to meet. As such Kronospan are only allowed to draw approximately 55% of their total demand from the grid. In order to safeguard against the fragility of the local electricity grid, and reduce the risk of the limitations of the local grid hindering the manufacturing efficiency of the site, Kronospan have previously installed the existing gas engines. The existing gas engines enable Kronospan to supply up to 70% of their current total demand.

5.1.2 The additional proposed gas engines are required to further increase Kronospan's self-sufficiency in terms of electricity supply.

5.2 Development Components

5.2.1 The proposed development comprises the installation and operation of 2no. gas engines each with a maximum generating capacity of 9.73MWe. The engines would be located within a new 2 storey building which would also house two steam boilers and a control room. The proposed gas engines would be located adjacent to buildings containing three existing gas engines (Planning permission reference: P/2015/0728) and would be connected to this building via a walkway.

5.2.2 In summary, the key elements of the development comprise the following:

- Erection of a new building
- Installation of 2no. gas engines;
- Installation of 2no. steam boilers;
- Installation of a control room;
- Roof mounted coolers; and
- Exhaust gas offtake pipes and steam pipes from the gas engine building
- Carbon Monoxide Catalyst abatement system.

5.2.3 The layout and elevations of the proposed development are shown on Figure 2.

Operation

5.2.4 The gas engines would be supplied with natural gas from an existing main which supplies the existing gas engines. The natural gas would be combusted to generate electricity which would be distributed throughout the site from the electrical substation.

5.2.5 The hot gases arising from the operation of the engines would be transferred to the boilers located on the first floor of the building where they would be used to produce steam. This steam would then be transferred to manufacturing buildings within the site to be used in the manufacturing process. Heat would also be recovered from the gas engine process and would be used to pre-heat the water in the boilers. Heat from the exhaust gases would also be sent to the MDF dryers to assist in the MDF drying process, these emissions would then be emitted via the existing stacks servicing the MDF dryers. Accordingly, the engines would be extremely efficient, maximising the energy derived from the combusted gas for use within the on-site manufacturing operations.

5.3 Need and Benefits

5.3.1 Due to the local supply problems associated with the local electricity grid, it is necessary for Kronospan to increase their self-sufficiency in terms of energy supply in order to avoid interruptions to the manufacturing processes. Avoiding interruptions to the manufacturing processes will enable to Kronospan to operate efficiently and remain competitive. The competitivity of the business in Chirk is crucial to sustaining the business in this location and ultimately the employment opportunities it provides.

5.3.2 Kronospan are proposing to maximise the efficiency of the operation of the engines by utilising the hot gases produced by the gas engines. The hot gases will assist in the production of steam to be used in the manufacturing processes.

5.4 Extant Environmental Permit

5.4.1 Both the proposed and existing gas engines are included within a current environmental permit issued by the NRW (Reference EPR/BW9999IG/V007).

6.0 ENVIRONMENTAL EFFECTS

6.1 EIA Screening

6.1.1 The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (hereafter referred to as '*the EIA Regulations*') define EIA

development as that falling under either Schedule 1 development, or Schedule 2 development.

Schedule 1 Development

6.1.2 The proposed development is not included within Schedule 1 and is therefore demonstrably not a mandatory EIA project.

Schedule 2 Development

6.1.3 Schedule 2 developments are screened as EIA projects and as such are required to be accompanied by an Environmental Statement (ES) *if* they are deemed *likely* to give rise to significant effects by virtue of their characteristics of development, location or characteristics of the potential impacts they may cause.

6.1.4 The proposed development may be considered to fall under two categories of Schedule 2 development. The first relevant category and threshold is paragraph 3 Energy Industry (a) Industrial installations for the production of electricity, steam and hot water (unless included in Schedule 1). However, the development does not exceed the relevant area threshold of 0.5ha.

6.1.5 The proposed development may also be considered to fall within paragraph 13(b) Changes or extensions to an existing Schedule 2 project. In this instance an industrial plant used for the production of paper and board (i.e. paragraph 8 of Schedule 2).

6.1.6 The proposed development itself does not exceed the thresholds set out in paragraph 8 of Schedule 2. Furthermore, the additional gas engines would not result in additional cumulative significant effects from the overall board manufacturing operations at the Kronospan site.

6.1.7 On this basis it is not considered that the development would be EIA development. However, a request for a screening direction formally setting out the proposed development in the context of the EIA Regulations will be provided to PINS, and the screening direction will be provided with the documents submitted to PINS for the DNS notification process.

6.1.8 In order to assist PINS understanding of the proposed development we have considered the potential environmental effects of the proposed development further in the following paragraphs. This is based on Kronospan's assessment of other recent planning applications at the site and the recent environmental permit granted by Natural Resources Wales (NRW) for the operations at the Kronospan site, which

includes the proposed additional gas engines (permit reference: EPR/BW9999IG/V007).

6.1.9 The most sensitive environmental effects of the project are considered to relate to:

- Air quality;
- Cultural Heritage;
- Landscape; and
- Noise.

6.1.10 These topics are briefly considered in the following paragraphs.

Air Quality

6.1.11 Extensive monitoring and modelling of the emissions at the site have been undertaken to support the Environmental Permit required to operate the facility. Permit reference EPR/BW9999IG/V007 included modelling of the potential emissions arising from existing and proposed operations at the site, including the proposed additional gas engines. By virtue of granting this permit NRW were of the opinion that the additional two gas engines, when considered in combination with other emissions from the facility, would not result in unacceptable effects on human health or the environment. The air quality assessment undertaken to support the permit considered impacts on human and ecological receptors. On this basis it is considered that the proposed development would not give rise to likely significant effects on air quality.

Cultural Heritage

6.1.12 As detailed in Section 2, the proposed development is in close proximity to several cultural heritage designations, including the Pontcysyllte Aqueduct and Canal WHS. The site itself is located within the buffer zone for the WHS. The proposed development would be located within an established industrial development within the south west portion of the site where a number of large, industrial process facilities exist. As such the additional gas engines, would be well screened and barely appreciable amongst the existing development as evidenced by the photographs in Appendix A. Photographs from Viewpoints M and N are from the WHS where views towards the site are not screened by intervening vegetation and other structures. This demonstrates that the existing gas engines are not visible from the WHS and as such it is considered very unlikely that the proposed gas engines would have a significant effect on the setting of the WHS and Scheduled Monument. The gas engines would

be located on previously developed land and therefore there is unlikely to be any effects on buried archaeology. It is therefore considered that the proposed development would not have any significant effects on the heritage significance on the nearby historic assets or on buried archaeology.

Landscape

6.1.13 Extensive assessments have been completed of the landscape and visual effects potentially arising from the developments proposed over the past 2 years. These assessments have considered the impacts of developments much larger (up to 49.5m in height) than the proposed development. These assessments have concluded that as the developments would be introduced into an existing large-scale industrial site that is an established influence upon the town of Chirk and the surrounding rural area, the developments would not result in significant landscape or visual effects. The photographs provided in Appendix A demonstrate that the introduction of two new gas engines that would be similar in scale and appearance to the existing three engines are unlikely to result in significant landscape and visual effects.

Noise

6.1.14 Noise monitoring of the existing operations and modelling of the predicted effects of several recently proposed developments at the site has been undertaken to support a series of recent planning applications. The assessments have shown that the cumulative effect of all new plant which has received planning permission since 2011, or is currently the subject of a planning appeal, would not result in an increase in residual noise levels.

6.1.15 It is considered possible to design the gas engines such that their introduction would not result in an increase in residual noise levels. Based on the existing noise climate, the location of both the existing and proposed gas engines, and the options available for the attenuation of noise from gas engines, it is considered the development would not give rise to any significance noise effects.

Other Potential Effects

Ecology

6.1.16 The proposed development has potential to give rise to ecological impacts by virtue of emissions associated with the proposed operations. These potential ecological effects have been assessed as part of the environmental permit application process

through an air quality assessment. This assessment did not identify any adverse impacts. There are not considered to be any other potential ecological effects that could arise from the proposed development.

Contamination

6.1.17 It is considered that there are not any specific risks with regard to contamination which are likely to arise from the proposed development. Recent planning permissions for development at the site have included conditions to deal with contamination risk and it is considered that similar conditions could be employed to control the risk of contamination with regard to the proposed development.

Flood Risk

6.1.18 According to the Natural Resources Wales online Development Advice Map the proposed development is not located within an area at risk of flooding. The proposed development would also not increase the risk of flooding elsewhere.

Traffic

6.1.19 The proposed development would not give rise to any changes in the number of vehicle movements at the site and as such no there would not be any adverse impacts in terms of traffic.

Conclusion

6.1.20 In light of the above, there are not anticipated to be any significant environmental effects which would arise from the proposed development.

7.0 QUERIES REGARDING THE PROPOSED SCOPE OF THE DNS APPLICATION STAGES

7.1 A series of questions regarding the next phases of the DNS application process are presented in the following list:

- Agreement on the requirement to progress as a DNS application;
- At what point in the process is a case officer allocated;
- What additional information is required to support a formal pre-application enquiry;
- Discuss key steps in the DNS process and associated timings;
- What are the likely fees associated with the application;

- Discuss the likely scope of the application documents; and
- Discuss the consultation requirements with local planning authority both in terms of the applicant and PINS.