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1. Non-Technical Summary

This Non-Technical Summary supports an application for an Environmental Permit for a modified starch manufacturing facility and the proposed installation of a combined heat and power (CHP) plant at Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UH (the Site).

The Site is operated by Novidon Limited (the Applicant and Operator) and currently manufactures circa 15,000 tonnes per annum of modified starches.

The Site location and Environmental Permit boundary are shown on Drawing No CE_WH-1801-DW01.

The Site modifies starches to produce high quality wallpaper paste flake and drilling starches for the geological drilling industries.

It is proposed to install a combined heat and power (CHP) plant to generate electricity and heat for use at the Site in the future. The CHP plant would comprise a Jenbacher J312GS gas engine, which has an electrical output of 524Kw/hr and a recoverable heat output of 659 Kw/hr. Its net rated thermal input is 1363Kw/hr, because of which it is classed as a Medium Combustion Plant. As such it is required to meet the latest strict emission limits applicable in the UK and European Union.

An Air Quality Assessment has been produced to assess the risk posed by the MCP to air and accompanies this application. Updates to the Air Quality Assessment were undertaken in Autumn 2025 to include assessment of the following emission points; 5x refined starch drying units, 3x horizontal reactor vessels and 2x dust extraction systems. The AQA concludes that emissions to air from the operation of the plant is not predicted to result in exceedances of the relevant assessment levels at any sensitive human receptor or relevant ecological site within the vicinity of the installation. Impacts were not predicted to be significant.

All manufacturing processes are located within an enclosed building. The CHP plant will be located within a dedicated enclosure within the building complex. The building has a concrete floor and there is an external concreted yard area. The condition and integrity of both the building and internal concrete floor are good. The floor is fully sealed, with no internal drainage outlet, meaning that any inadvertent spillages or leakages within the building are fully contained.

The external yard area comprises engineered concrete and tarmac surfaces. Clean surface water run-off from the yard falls to surface water drains which discharge to surface water sewer, which in turn falls to the Redwither Brook. There are two discharge points to the sewer on Site and both drainage runs are fitted with penstock valves close to and upstream of the discharge points (see Drawing No CE-WH-1801 DW02 Drainage Plan). The penstock valves are maintained in the closed position and emptied when required. Runoff water is only released if confirmed to be suitable (i.e. there have been no accidental spillages or leakages). Therefore, in the event of an accidental spillage on Site, the penstock valves would already be shut, thereby preventing any discharge to the sewer. Drainage unsuitable for discharge to sewer will be tankered off site.

There is a foul sewer drainage system on Site, which receives waste waters from the welfare facilities (e.g. toilets and wash basins) and surplus water from wash downs and scrubber liquors associated with the manufacturing process. A Trade Effluent Discharge Consent, issued by Dwr Cymru Cyfyngedig (Welsh Water), (Consent no: 709008), is in force for the Site. Despite the consent, a H1 risk assessment to the sewer has been prepared as requested by Natural Resource Wales and accompanies this application.

There is a preventative maintenance programme in place to ensure that the surface water drainage system (including penstock valves), foul sewer drainage and all plant and equipment is suitable inspected and maintained etc.

It is important to note that as all the manufacturing processes take place inside the building and not on the external yard area any potential for noise or dust escape from the Site is minimal. The manufacturing process is not inherently dusty. In addition, there is no noticeable or significant odour external to the building; the manufacturing process does not generate any significant noise, dust or odour.

The Operator has an Environmental Management System and a Health, Safety and Environment Manual, which is subject to an independent audit each year. The Site will also be subject to independent inspections by Natural Resources Wales (NRW).

The Site does not fall under the requirements of the Control of Major Accident Hazards (COMAH) Regulations.

Quality Assurance

Issue Record

Version	Description	Date	Author	Reviewer	Approver
1.0	Issue (Crestwood Environmental Ltd)	05/11/2025	LP	AA	AA
2.0	(Crestwood Environmental Ltd)	06/01/2023	RM	KB	KB
3.0	Update to include add. emission points	05/11/2025	SD	KB	KB

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