

Document Reference Part C2 5c

Non-Technical Summary

About the Application

Holbeach Biogas Limited is an Anaerobic Digestion (AD) plant, primarily developed to enable the anaerobic digestion of vegetable outgrades and green crops from the neighbouring agricultural facility to generate biogas, which in turn is used to produce exportable electricity, heat and a nutrient-rich organic fertiliser for use on the farm. The plant also processes a variety of similar food waste derived from the commercial food chain. The biogas generated from the process is used to produce renewable energy and heat through a combined heat and power (CHP) plant which produces an electricity output of approximately 1.487MWe. The facility also includes a remote digestate storage lagoon which has a storage capacity of approximately 24,000m³.

This application seeks to increase the site's annual throughput from 36,499 tonnes per year to 55,000 tonnes per year, thereby increasing the daily capacity from 100 to 150 tonnes. The additional 18,501tpa will consist of waste already currently permitted under the existing LOWs stipulated in the existing permit with a minor amendment to add 24 'similar' waste types and removing 3 existing. These have been listed in a document referenced Part C2 2b - Detailed list of EWC.

The site is accredited to the PAS 110 standard and therefore, as part of the application, Holbeach AD is seeking a modification to the List of Waste (LOW) types the site accepts so as to align it with the List of Waste input materials permitted within the PAS 110 Quality Protocol.

The Environmental Control Measures

Emissions to Air - The additional 18,501tpa of waste equates to an additional 70.9tpd, i.e. 2.9 additional lorries (based on a 5 day working week). The existing plant design already has spare capacity available to allow for this additional tonnage. The waste will be subject to the same controls as the existing feedstock, i.e. tipped onto reception bays and processed in an enclosed process room prior to being transferred to external gas tight vessels. Therefore, there is minimal risk of odour release as a result of the increase in tonnage.

Emissions to land and water - The waste will be tipped onto reception bays which benefits from an impermeable floor and a sealed drainage system. There will be no emissions to land or water from the receipt of the additional tonnage.