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SENT BY EMAIL

Natural Resources Wales Permitting Service

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Dear permitting team

Application for a variation of permit to install and operate an additional digester, engine, back up boiler, storage tank and pasteurizer to an anaerobic digestion facility – Bryn Power Limited, Gelliargwellt Farm, Gelligear, Hengoed, CF82 8FY.

We welcome the opportunity to comment on this permit application. This assessment is based on actual or potential health risks from environmental exposures to chemicals, noise and extreme environmental events such as flooding.

Proposed Development

The application by Bryn Power Limited relates to the operation of an Anaerobic Digestion (AD) facility at Gelliargwellt Farm. The permit allows a maximum throughput of 35,000 tonnes per annum of non-hazardous biodegradable waste, including those controlled by the Animal By-Products Regulations (ABPR).

The facility is situated at Gelliargwellt Farm, Gelligaer, Hengoed. The principal vehicle access is from Gelligaer road, which is located to the northwest of the site. It also connects neighbouring towns including Gelligaer and Penpedairheol, which are located approximately 500m and 1500m respectively to the northeast of the site. Penybryn is located approximately 1300m to the east and the Penallta industrial estate located slightly further east. Caerphilly is located approximately 8.5 km south of the site. The site is bound by agricultural land and Parc Penallta Country Park, comprising of woodland and public open space, including site of special scientific interest (SSSI) and Site of Importance for NATURE Conservation (SINC). The AD facility is adjacent to a permitted waste transfer station, owned and operated by Bryn Group Ltd.

The facility will process up to 35,000 tonnes of biodegradable waste per annum, producing biogas. Gas is collected off the top of the digesters and used to fuel the three Combined Heat and Power Engines (CHPs). The electricity will be used on site, with the surplus sold to the national grid, or possibly the local council offices, and the heat used on site to heat the digesters, pasteurisers and dryer.

The whole digestate is stored in a lagoon before being used as a biofertilizer on the adjoining farm.

Overall Conclusion

The risk of odour through inadequate management could impact on the locale, causing nuisance and health concerns. An odour management plan has been submitted, and the regulator should ensure they are fully satisfied with this. We strongly recommend that the regulator is completely satisfied with all the proposed storage and management controls of the biodegradable waste on site

Based upon the information received and provided operations are undertaken in line with industry practice and best available techniques (BAT), we have no public health concerns associated with the proposed development.

Public Health Risk Assessment

The applicant has provided management plans for potential adverse impacts for fugitive emissions, pest infestations, noise, vibrations and odours. The applicant has set out measures to manage those impacts. The nearest receptors have been identified and considered in assessments. **The regulator should ensure these measures are followed with best available techniques to reduce the risk of identified hazards on the locale.**

We note that the odour management plan has been produced in accordance with Environment Agency guidance on odour management plans and EPR H4 Odour Management. We recommend that the regulator is fully satisfied with this plan. The human nose is extremely sensitive and many odours have a strong smell at levels at which there are no direct harmful effects to health. However, we recognise that strong smells can be unpleasant and can impact on wellbeing, leading to stress and anxiety. Some people may also experience symptoms, such as nausea, headaches, or dizziness as a reaction to strong smells, even when the substances that cause those smells are themselves not harmful to health.

The applicant has provided an environmental risk assessment in which fire is mentioned, however no specific fire prevention plan has been provided. Our main concern with sites that store and manage waste is a risk of fire. Where fires do occur, they can present a potentially serious risk to public health and the environment. In order to achieve good fire risk management, we agree with the Waste Industry Safety and Health Forum (WISH) that waste management operators should go beyond basic legal and regulatory compliance. As such, we strongly recommend that the operator follow and adhere to the WISH 'Reducing Fire Risk at Waste Management Sites' Guidance¹. This sets out clear advice and information to help reduce the likelihood and frequency of fires, and measures to reduce the impact should fires occur. **In view of the potential local public**

¹ [WISH 'Reducing Fire Risk at Waste Management Sites' Guidance](#)

health impact of a fire and to minimise risks, the regulator must make sure that the operations are managed in accordance with current guidance.

Yours sincerely

Gwasanaeth Iechyd Cyhoeddus Amgylcheddol yng Nghymru
Environmental Public Health Service in Wales