The use of up flow anaerobic sludge blanket anaerobic digestion systems

If you comply with the requirements below, we will allow the use of fast anaerobic digestion systems with a manure and slurry feedstock on farms without the need for an environmental permit.

Background

The Environmental Permitting Regulations (EPR) 2010 provides a waste exemption T24 for on-farm anaerobic digestion (AD) at premises used for agriculture and burning of resultant biogas. This exemption allows plant tissue waste and farm yard manures and slurries as feedstock to an AD plant. One of the limits in the T24 exemption is that the feedstock must remain in the digester for a minimum of 28 days.

There are different types of AD systems. Traditional AD systems typically require feedstock to remain in the reactor vessel for four weeks or more in order to produce a stable digestate. The fast AD process or the 'up-flow anaerobic sludge blanket system' is designed to process waste waters by rapidly breaking down the sugars in the liquid feedstock and converting them into biogas. These systems can be used for manures and slurry feedstocks provided they have been hydrolysed into a liquid feedstock. The retention time in this type of AD system varies between hours and a few days. Since fast AD is capable of producing stable digestate in a much shorter period of time, we will allow fast AD operations to benefit from the T24 exemption without needing to comply with the 28 day residence time.

Our approach

We will not pursue an application for an environmental permit for a fast AD system where:

- The AD plant is sited on a farm.
- The feedstock is produced from the following wastes only; hydrolysed farmyard manures and slurries (list of waste code 020106).
- A T24 exemption is registered for the AD process and all the requirements of T24 are complied with except sub-paragraph 3b (minimum retention time for the waste in the digester is 28 days).
- You meet the relevant objectives of the Waste Framework Directive;
‘... ensuring that waste management is carried out without endangering human health, without harming the environment and in particular:
(i) without risk to water, air, soil, plants or animals;
(ii) without causing a nuisance through noise or odours; and
(iii) without adversely affecting the countryside or places of special interest.’

Enforcement

In not pursuing an application for a permit, we will not normally take enforcement action unless the activity has caused, or is likely to cause, pollution or harm to health. For a more detailed explanation of this enforcement position, please see our Enforcement and Sanctions statement. This can be found on the ‘How we regulate you’ page in the Business & Industry section of our web site.

This regulatory position will be reviewed by March 2013.

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