

REGULATORY POSITION STATEMENT

ANAEROBIC DIGESTION (AD) OF AGRICULTURAL MANURE AND SLURRY

Background

Anaerobic digestion (AD) is a process which harnesses natural bacteria to treat biodegradable materials such as agricultural manure and slurry, food waste and sewage sludge. The AD process produces a methane rich biogas, which can be captured and used to generate electricity and heat. The digestate residue can be beneficially applied to farmland as fertiliser, or as a soil conditioner. The Northern Ireland Environment Agency (NIEA) supports the use of AD as a means of diverting biodegradable wastes from landfill, recovering value from them and reducing greenhouse gas emissions.

This Position Statement sets out how NIEA will apply waste regulatory controls to the AD of agricultural manure and slurry, and the use of the resulting digestate as a fertiliser on agricultural land in Northern Ireland.

NIEA Position

Agricultural manure and slurry is not considered waste when it is used directly as a fertiliser on land. When agricultural manure and slurry is destined for a treatment process for example composting, biogas production or incineration, it is waste and will be subject to regulatory control. This is a requirement under the revised Waste Framework Directive 2008/98/EC, Article 2, 2 (b).

Digestate

When the feedstock to an AD plant is waste, the resulting digestate and biogas are waste until put to their final use. However, NIEA recognises that the digestate produced from manure and slurry only, has improved fertilising properties and will have less of an environmental risk than undigested manure and slurry.

The NIEA will not regulate the AD digestate as waste if:

- the only feedstock to an AD plant is agricultural manure and slurry and it is spread as a fertiliser on agricultural land
- agricultural manure and slurry is mixed with a non-waste feedstock e.g. crops grown specifically for AD and it is spread as a fertiliser on agricultural land.

If the manure and slurry feedstock is mixed with other waste feedstocks, then the resultant digestate will be waste and subject to waste regulatory controls.

The joint NIEA/Environment Agency/WRAP Waste Protocols project has developed a Quality Protocol (QP) for anaerobic digestate. This QP defines the point at which waste may become a non-waste material and can be used without the need for any waste regulation controls. Digestate produced from waste feedstock in accordance with the QP can be spread to land as a fertiliser without the need for a PPC permit, waste management licence or exemption. Further information about the QP can be found at <http://www.biofertiliser.org.uk/pdf/Anaerobic-Digestion-Quality-Protocol.pdf>