

SEPA Regulatory Position Statement: the Use of PAS 110 certified Digestate from Anaerobic Digestion

Background

Well managed anaerobic digestion (AD) systems are capable of conferring multiple environmental and socio-economic benefits. This type of biological treatment technology has become well established through the European Union and while uncommon in Scotland outside waste water treatment, there is growing interest for the local recovery of source segregated biowastes. The main use of AD derived digestates is to return useful amounts of organic matter to soils. For the purposes of this position statement, 'digestates' means whole digestate (a mixture of liquor and fibre), liquor, and separated fibre from anaerobic digestion.

Digestates are normally regarded as wastes and their use is only allowed under waste regulatory controls. However, work by WRAP (Waste & Resource Action Programme), AfOR (Association for Organic Resources), and the British Standard Institute (BSI), supported by SEPA and the Environment Agency, has resulted in a UK wide quality assurance scheme being produced. This was published in early 2010 as BSI PAS110:2010. This scheme establishes standards for digestate quality and usage criteria and a certification system to ensure the standards are met. Certification under the scheme is intended to ensure that digestates produced under the scheme may be used without risk of harm being caused to the environment or human health.

SEPA Regulatory Position

SEPA considers that the application of waste controls to the use of PAS 110 certified digestates on land would be disproportionate. SEPA has therefore adopted a regulatory position that it will not apply waste regulatory controls to waste derived digestates from AD processes as long as the production and usage complies with conditions listed below.

Note, that in all cases the digestates can only be used where their use will not pose a risk to human or animal health or the environment.

Conditions for the spreading of AD digestates on land under this regulatory position:

1. AD plants and processes that produce the digestates from waste must have and operate in compliance with the relevant environmental authorisation.
2. The AD process and any digestates produced must be certified to conform to the standards contained in BSI PAS110:2010. The digestates must meet this standard without having to be blended with any other materials including other digestates, composts, materials, products or additives. The PAS 110:2010 certification process must be carried out by a third party accredited by the United Kingdom Accreditation Service to carry out this certification. Digestates from AD plants which have not yet completed the certification process will be regulated as waste until full certification is achieved.
3. Only waste that conforms with the following criteria can be used to produce the digestates –
 - it is derived from animal or plant origin; and
 - it has been collected separately from other wastes and not combined with any other waste; and
 - it is capable of being decomposed by microorganisms or other soil-born organisms or enzymes; and
 - steps must have been taken to ensure no potentially polluting or toxic materials or products are used, including invasive plant species such as

Giant Hogweed, Japanese Knotweed and Himalayan Balsam or toxic species such as Ragwort and Yew.

4. No waste from the leather industry (i.e. those listed in the European Waste Catalogue under chapter 04.01) or sludge from sewage treatment processes can be included as input material to the AD process producing the digestates.

The digestates must be used without requiring any further processing or recovery operations. They must not be used in quantities or reapplied on the same land at frequencies that will result in any risk of adverse impact on the environment or human health. Otherwise, this is likely to be regarded as a disposal operation (i.e. a landfill).

5. All non-waste regulatory controls must be complied with for the use of the digestates and they must be used in accordance with good practice. For use in agriculture, such requirements include:
 - Prevention of Environmental Pollution From Agricultural Activity Code of good practice (PEPFAA code)
 - Four Point Plan
 - Nitrate Vulnerable Zones regulations (NVZ regulations).

Digestates from AD processes which do not comply with the above conditions will be subject to full waste regulatory controls. Any digestates that are subsequently discarded or mixed with waste materials will also be subject to full waste regulatory controls.

This regulatory position statement applies only in Scotland and is based on current scientific and technical understanding. It will be reviewed and may updated in light of regulatory or technological changes, changes in Government guidance, monitoring of practical application etc. SEPA reserves its right to depart from the position outlined in this statement and to take appropriate action to avoid the risk or harm to human health and the environment. Any enforcement action taken will be carried out in accordance with SEPA's Enforcement Policy.

For further information and guidance on good practice for the use of digestates see:

http://www.sepa.org.uk/land/land_publications.aspx

http://www.sepa.org.uk/waste/waste_regulation/agricultural_waste.aspx

http://www.sepa.org.uk/waste/waste_regulation/guidance_and_position_statemen.aspx

<http://www.defra.gov.uk/foodfarm/landmanage/cogap/documents/cogap090202.pdf>

<http://www.scotland.gov.uk/Resource/Doc/37428/0014235.pdf?lang=e>

<http://www.scotland.gov.uk/Publications/2008/12/12134339/0>

<http://www.organics-recycling.org.uk/>

<http://www.wrapsotland.org.uk/>