



Using Anaerobic Digestates on Farms in Scotland

This guidance document will help you to make informed decisions about accepting and spreading anaerobic digestates on your farm

Accepting Anaerobic Digestates – Checklist of Key Questions to Ask



On this page you will find a list of key questions to ask when considering accepting anaerobic digestate products on your farm. Tick the boxes as you go along and follow the guidance notes throughout. Where you are unsure, you should investigate further before accepting because there can be strict requirements related to the use of these products on-farm; **do not spread if in doubt**. Other suitable digestate types or organic materials may be available.

Start

<p>Do you have an up-to-date nutrient management plan showing a specific crop nutrient requirement for spreading anaerobic digestion products?</p> <p>Digestates are best used for crops with a high nitrogen (N) demand. A nutrient management plan must show the crop N requirement is not exceeded. See CAR GBR 18¹. Refer to FAS Technical Notes² including FAS TN699³.</p>	<p>(✓) <input type="checkbox"/></p>	<p>Is the PAS110 Certificate of Analysis up-to-date, from a UKAS and REAL BCS approved laboratory⁸ and is it relevant to the product or batch that you will receive?</p> <p>The certificate must clearly show compliance with the limits set under the standard. See the REAL BCS website for a list of approved laboratories.</p>	<p>(✓) <input type="checkbox"/></p>	<p>Does your customer or quality assurance scheme approve the use of digestates and approve the feedstock that you are considering?</p> <p>Check with your customer and quality assurance scheme rules to stay compliant. These can be strict on the feedstocks used, contaminants present and on the use and spreading of AD products. Request improvements with analytical evidence from the producer or supplier before spreading if there are stricter requirements under the scheme rules. If in doubt, do not spread.</p>	<p>(✓) <input type="checkbox"/></p>
<p>Is the digestate PAS110:2014⁴ certified?</p> <p>PAS110 certified digestate meets minimum quality standards for the industry and has been laboratory tested. These digestates will not require additional waste regulatory controls from SEPA if it meets SEPA's Position Statement⁵ and quality standards contained within, and the Additional Scheme Rules for Scotland.</p> <p>Digestates from AD processes that do not comply with SEPA's Position Statement⁵ on the Use of PAS110 Digestate may be subject to full waste regulatory controls.</p>	<p>(✓) <input type="checkbox"/></p>	<p>Agricultural manures and slurries used in an AD plant alone or as a mixture with non-waste feedstocks (e.g. energy crops grown specifically for the AD) will not have waste regulatory controls applied by SEPA provided the digestate is spread as a fertiliser on agricultural land in compliance with other regulatory controls.</p> <p>Manures and slurries mixed with waste feedstocks will be subject to waste regulatory controls when the digestate does not comply with SEPA's Position Statement⁵ on the Use of PAS110 Digestate. Check SEPA's Position Statement⁵ and clarify your specific situation with SEPA if unsure to stay compliant.</p>	<p>(✓) <input type="checkbox"/></p>	<p>Before accepting the product, check what form the digestate is going to be (whole, liquid or fibre) in order to determine appropriate spreading rates and techniques with the spreading contractor. This will also determine what type of on-farm storage you will require to comply with GBR 18.</p>	<p>(✓) <input type="checkbox"/></p>
<p>Can the producer show that the product meets SEPA's Position Statement⁵ on the Use of PAS110 Digestate?</p> <p>Non-compliant digestates may require a Waste Management License (WML) or Exemption⁶ in order to be spread. For example:</p> <ul style="list-style-type: none"> • Those containing any amount of sludge from sewage treatment processes • Certain wastes from leather industry • Non-specification anaerobic digestates 	<p>(✓) <input type="checkbox"/></p>	<p>Request a nutrient analysis of digestates that do not meet SEPA's Position Statement⁵ on the Use of PAS110 Digestate from suppliers in order to show a crop requirement and to comply with GBR 18. It is inadvisable to accept digestate without a PAS110 Certificate of Analysis as these digestates meet minimum industry quality standards.</p>	<p>(✓) <input type="checkbox"/></p>	<p>Digestate must only be stored on-farm if it will be used on-site otherwise it is regarded as a waste and will be subject to waste regulatory controls. Digestates stored in excess to requirements will also be subject to waste regulatory controls</p>	<p>(✓) <input type="checkbox"/></p>
<p>Digestate producers certified by REAL BCS⁷ will be compliant to both PAS110 and SEPA's Position Statement⁵ and can be supplied, stored and used as 'products' (without waste regulatory controls) in Scotland.</p>	<p>(✓) <input type="checkbox"/></p>	<p>Ask the supplier if SEPA has been notified that the digestate produced is being spread to land outwith the production site. Ask for a SEPA contact to allow you to verify if in doubt.</p>	<p>(✓) <input type="checkbox"/></p>	<p>A PAS110 Certificate of Analysis will show the results for whole digestate. If it has been separated into liquid or fibre fractions then the nutrient value will have changed. Request an analysis of the fraction you will receive.</p>	<p>(✓) <input type="checkbox"/></p>
		<p>Does the feedstock for the digestate contain Animal By-Products or food waste?</p> <p>These digestates are subject to specific statutory requirements^{9,10} which you must comply with.</p>	<p>(✓) <input type="checkbox"/></p>	<p>Revisit your nutrient management plan to ensure spreading rates and intervals between applications for the digestate you have accepted does not result in application of nutrients in excess of crop requirements. Consult the WRAP "Renewable Fertiliser Matrix"¹¹ for guidance on best practice for using digestates in different cropping scenarios.</p>	<p>(✓) <input type="checkbox"/></p>
				<p>Produce a Risk Assessment for Manures and Slurries (RAMS) map – this is particularly important for those farming in Nitrate Vulnerable Zones¹² where the NVZ rules apply.</p>	<p>(✓) <input type="checkbox"/></p>

Spreading Anaerobic Digestates – Checklist of Key Questions to Ask

On this page you will find a list of key questions to ask when considering spreading anaerobic digestate products on your farm. Tick the boxes as you go along and follow the guidance notes throughout. Where you are unsure, you should investigate further before spreading because there can be strict requirements related to the use of these products on-farm; **do not spread if in doubt**. Other suitable digestate types or organic materials may be available.

Start

<p>Be proactive; visit the production facility to understand the process and build confidence in the supplier and to inspect the product.</p>	<input checked="" type="checkbox"/>	<p>Will you store the digestate on farm or is the supplier offering to build storage facilities on your farm?</p>	<input checked="" type="checkbox"/>	<p>Ensure a Waste Management Exemption⁶ is in place with SEPA before spreading digestate which is controlled under waste management legislation.</p>	<input checked="" type="checkbox"/>
<p>Anaerobic digestates are produced as 'whole digestate' before being separated into liquid and fibre fractions.</p>	<input checked="" type="checkbox"/>	<p>Anaerobic digestates are considered a fertiliser under GBR 18¹ which sets out requirements for fertiliser storage and application. If storing digestate on farm, you must have adequate storage facilities that comply with GBR 18¹, is approved by SEPA and meets relevant engineering or building regulations.</p>	<input checked="" type="checkbox"/>	<p>Check the weather conditions are suitable before permitting spreading. Digestate must not be spread on frozen, waterlogged or snow-covered ground or during heavy rainfall or when heavy rainfall is forecast within 24 hours, see GBR 18¹.</p>	<input checked="" type="checkbox"/>
<p>Is the product in a form that was advertised to you (whole, liquid or fibre)?</p>	<input checked="" type="checkbox"/>	<p>Upon delivery to your farm, is the digestate in the form that you expected? Always check regardless of whether it is intended for storage or if it is to be immediately spread. Ensure the product meets the specification that was advertised to you.</p>	<input checked="" type="checkbox"/>	<p>Check if you are in an NVZ¹²; the NVZ Regulations and other regulator controls also apply in addition to GBR 18¹.</p>	<input checked="" type="checkbox"/>
<p>Is a nutrient analysis available for the fraction and batch that you will receive? If not, request this from the producer.</p>	<input checked="" type="checkbox"/>	<p>If the digestate arrives in a form that you were not expecting or has visible contaminants that you are unsure of, reject the product and do not allow it to be spread or stored inappropriately.</p>	<input checked="" type="checkbox"/>	<p>Is the spreading operator aware of the minimum legal working distances from watercourses e.g. GBR 18¹ and do they know who to contact in an emergency or if a pollution incident occurs? If not, refuse access and discuss your concerns with the product supplier if it is their contractor.</p>	<input checked="" type="checkbox"/>
<p>Are the levels of plastics or other visible contaminants in the product greater than your expectations? SEPA have set limits for physical contaminants such as plastics that are greater than those in the baseline PAS110 standard. Check that the amounts in the Certificate of Analysis comply with SEPA's Position Statement⁵. If no analysis is available, reject and do not accept the product. Request further reductions in contaminants, with analytical evidence, to meet your requirements.</p>	<input checked="" type="checkbox"/>	<p>Supply the spreading contractor with a Risk Assessment for Manures and Slurries (RAMS) map and the required spreading rates.</p>	<input checked="" type="checkbox"/>	<p>Consider how the digestate will be spread. It is best practice to use precision spreading equipment to reduce odour, greenhouse gas emissions and reduce surface run-off.</p>	<input checked="" type="checkbox"/>
<p>The supplier may provide a contractor to spread the digestate to your land. If not, find a spreading operator suitably trained in spreading organic materials to land and who is aware of the rules e.g. SOMA¹³ trained and certified.</p>	<input checked="" type="checkbox"/>	<p>You have a statutory requirement to restrict livestock access to stored digestate that is produced from animal by-products or food wastes. You must also maintain minimum livestock grazing and harvest intervals after spreading these digestates and keep records to demonstrate compliance with the legislation or where your customer or quality assurance scheme requires it to stay compliant with scheme rules. The WRAP "Renewable Fertiliser Matrix"¹¹ has guidance on applying digestates on agricultural land.</p>	<input checked="" type="checkbox"/>	<p>Contact the emergency services on 999 if there is an immediate threat/danger to life, health and/or property. If a pollution incident occurs contact SEPA on the Pollution hotline on 0800 80 70 60.</p>	<input checked="" type="checkbox"/>
<p>Implement a land access agreement with suppliers and contractors to protect soil and land quality and the wider environment. Land access agreements can help avoid bad spreading practices by establishing what conditions are suitable for spreading and when spreaders should not be showing up to the farm.</p>	<input checked="" type="checkbox"/>	<p>The Farming and Water Scotland 'Know the Rules'¹⁴ booklet provides useful information on how to stay on the right side of the rules regarding diffuse pollution and reducing the risk to watercourses.</p>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

Key Reference Materials



1. CAR GBR 18. The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) – A Practical Guide. General Binding Rule 18: The storage and application of fertiliser. (https://www.sepa.org.uk/media/34761/car_a_practical_guide.pdf)
2. Farm Advisory Service (www.fas.scot)
3. FAS TN699 Agricultural use of biosolids, composts, anaerobic digestates and other industrial organic fertilisers (2019) (<https://www.fas.scot/publication/tn699-agricultural-use-of-biosolids-composts-anaerobic-digestates-and-other-industrial-organic-fertilisers/>)
4. BSI PAS 110:2014 Specification for Digestate (<https://www.wrap.org.uk/content/bsi-pas-110-specification-digestate>)
5. SEPA's Position Statement: Regulation of Outputs from Anaerobic Digestion Processes (2017) (<https://www.sepa.org.uk/media/219842/wst-ps-016-regulation-of-outputs-from-anaerobic-digestion-processes.pdf>)
6. SEPA Activities exempt from waste management licensing (<https://www.sepa.org.uk/regulations/waste/activities-exempt-from-waste-management-licensing/>)
7. REAL's Biofertiliser Certification Scheme Certified producers (<http://www.biofertiliser.org.uk/producers>)
8. REAL BCS Approved Testing Laboratories (<http://www.biofertiliser.org.uk/certification/laboratory-tests>)
9. Animal By-Products (Enforcement) (Scotland) Regulations (2013)
10. Animal By-Products (Miscellaneous Amendments) (Scotland) Regulations (2015)
11. WRAP The Renewable Fertiliser Matrix in "Digestate and compost use in agriculture, section 7.0" (2016) (http://www.wrap.org.uk/sites/files/wrap/Digestate_compost_good_practice_guide_reference_version.pdf)
12. Scottish Government Nitrate Vulnerable Zones (<https://www.gov.scot/policies/agriculture-and-the-environment/nvz/>)
13. Spreading Organic Materials Assurance (SOMA) scheme (www.sruc.ac.uk/soma)
14. Farming and Water Scotland 'Know the Rules' (<https://www.farmingandwaterscotland.org/know-the-rules/>)

Samantha Dolan, Gavin Elrick, John Farquhar & Bill Crooks
SAC Consulting
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