

Response ID ANON-4WJ1-GM24-Z

Submitted to **Food Waste Management in Scotland**

Submitted on **2016-06-29 16:51:20**

Introduction

1 Please provide your name

Name:

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2 Please provide your email address

Email:

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3 What is your organisation?

Organisation:

Renewable Energy Association

page 1

4 Do you agree that the obligations listed in the 1. Food Waste Producer section of the guidance are appropriate?

no

If you do not agree or are not sure, please tell us why:

We support the obligations for Food Waste Producers and we think the guidance is clear and easy to understand but think there is more scope for them to be enforced. The obligations for high quality recycling should be applied fairly to all parties involved in food waste recycling and the guidance whilst identifying the obligations for each party, does not detail how these obligations will be enforced.

We have some specific comments on certain clauses:

1.2 Agree with this but some sites do specifically accept compostable tableware. Compostable liners, bags and sacks have 'packaging' status and there is potential for confusion about whether these are 'plastic packaging'. Potentially bleached white and non-pigmented paper napkins are okay to include, if the composter/AD operator is prepared to accept and treat them. We suggest that this should be amended either '...unless certified compostable and agreed in advance with the food waste collector.' or 'Do not contaminate food waste with non-food waste items, such as coloured or ink-printed paper napkins (unless certified compostable), non-compostable plastic packaging, non-compostable tableware or glass. Agree in advance with the food waste collector whether certified compostable packaging or certified tableware can be included with the food waste.'

The Zero Waste Scotland / Resource Efficient Scotland guidance on hospitality gives information on which packaging and serveware to use and a link to this document may be useful.

1.3. There seems to be a presumption that food waste will either be delivered loose or packaged or bagged, but what about packaged and in bags? If it is SEPA's intention to prohibit secondary packaging as in the example of packaged in bags or shrink wrapped on pallets, or boxed packaged wastes then this needs to be clearer. If it is preferred that secondary packaging in the form of boxes etc is removed and recycled separately prior to being delivered to the organic recycler then the guidance should state this.

1.4. Should also make mention of the fact that food waste collectors have an obligation to report persistent offenders to the local authority or SEPA.

1.7. The type and size of sack that can be accepted by the food waste processors may vary from site to site and this can be composting or AD so the message needs to apply to both. Whilst clear sacks allow for easy inspection, most certified compostable sacks are not clear but light green and opaque or transparent, and include the relevant certification body's certification mark and the product's certification code. The individual AD operator will choose whether he/she wants the food waste in conventional, clear plastic bags that will be removed during waste preparation at the AD site or in certified, compostable plastic bags that will be similarly removed or split and fed into the digestion process. In addition to this, the majority of the food industry uses blue plastic and requiring them too use clear bags could lead to them having to debag and re-bag all their food waste.

The size of the liners is likely to be more linked to the size of the bin, rather than what is acceptable on site. We don't see the advantage of stating the maximum sack volume, and would like to see either 'sacks as agreed with the food waste collector (and therefore appropriate for the treatment facility)' or 'sacks that enable the contents to be visually inspected'. Also, certified compostable liners/sacks may be used when food waste is destined for dry AD so this should be included.

We also repeat our comment from 1.3 regarding secondary packaging.

1.8. Most businesses do not produce garden waste so might be better to re-word this, particularly substituting 'green' with 'garden (plant tissue)'. We suggest 'food waste going to in-vessel composting treatment should be collected in certified compostable bags, and garden waste may also be accepted.' It may be worth listing the acceptable standards for the liners as a footnote: BS EN 13432, ASTM D 6400 or ISO 17088.

5 Do you agree that the obligations listed in the 2. Food Waste Collector section of the guidance are appropriate?

no

If you do not agree or are not sure, please tell us why:

We support the obligations for Food Waste Collectors and we think the guidance is clear and easy to understand but think there is more scope for them to be enforced. The obligations for high quality recycling should be applied fairly to all parties involved in food waste recycling and the guidance whilst identifying the obligations for each party, does not detail how these obligations will be enforced.

We would like to see more emphasis on training for collection crews as they are ultimately responsible for deciding if material is fit for collection. They need to understand the rejection criteria and be empowered to reject material that does not comply.

We have some specific comments on certain clauses:

- 2.2. Similar comment to our comment on 1.3
- 2.4. Again similar to 1.7 above.
- 2.5. See comment 1.8.
- 2.7. We think this is the most important section and fully support the requirements detailed.

page 2

6 Do you agree that the obligations listed in the 3. Food Waste Treatment Facility section of the guidance are appropriate?

yes

If you do not agree or are not sure, please tell us why:

The guidance is clear and easy to understand. We note that the consultation also indicates that SEPA will be varying standard permit conditions of waste treatment facility permits but no information on this has been included with the consultation.

There is no mention of how a food waste processor will demonstrate that their product (compost or digestate) meets the critical limits in the regulatory position statements. We recommend that this is through the existing certification schemes to PAS100 and PAS110 and their associated testing requirements. These are based on a quality management system and HACCP approach where the process is validated against the end product requirements and batches are tested routinely to demonstrate compliance. It is important to note that not every batch is tested, as they are all produced using a validated process.

7 Do you agree that the obligations listed in the 4. Farmer, Contractor or Land Manager involved in the Application of Food Waste Derived Anaerobic Digestate or Compost to Agricultural Land section of the guidance is appropriate?

no

If you do not agree or are not sure, please tell us why:

We do not support the statement that states that material that exceeds the limit for physical contaminants is not suitable for application under a paragraph 7 exemption. We think this should still be an option and suggest amending the wording to 'may not be suitable'. The suitability for use will depend on many factors, including the properties of the compost and digestate, the land on which it is to be spread and the crop type.

In the case of off-specification compost or digestate, the end user would require to be made aware of its waste status and the reason for such, and retain the view whether the material is still fit for purpose for their intended use. If this is the case, an paragraph 7 exemption could be presented with the technical supporting information allowing SEPA to consider if this is a suitable outlet.

The process of application for an exemption requires the applicant to consider all aspects of the waste material with a view to providing beneficial use without endangering health of plant and animals, and the environment.

There is currently a requirement in the application to assess the points below;

1. If the material to be used includes waste (off-spec) compost or digestate from a PAS100 or PAS110 process respectively, it is required to state why the material has failed to comply with the relevant standard.
2. If the wastes to be used include compost or digestate, analysis must include physical contamination and state the plastic element of the physical contamination levels separately
3. The application is assessed by SEPA's technical experts, and they will then either:
 - i. enter the particulars of the exempt activity on the register and confirm this in writing to you before the expiry of the 21 day period; OR
 - ii. serve on you a notice of refusal stating that registration is refused and giving reasons for that decision before the expiry of the 21 day period.

SEPA is therefore provided with the opportunity to assess each exemption application for off-spec materials, which do not conform to the End of Waste Criteria for compost and digestate, and at this point assess if agricultural land recycling is a suitable option. Each batch of off-spec material can be assessed on its individual merits, and on a case by case basis, which will prove more pragmatic than a blanket ban/refusal.

This approach would still allow the organic materials to be recycled for a beneficial purpose as in some cases, the reason for its non-conformance and therefore waste status, will be the result of a minor failure to achieve the proposed strict limits on PCs and may have been previously spread to land without causing any environmental harm or pollution.

We also have a few comments on specific clauses:

- 4.4. This is only relevant to whole digestate and liquor and not for compost or separated fibres.

page 3

8 Do you agree with the proposed final physical contaminant (including plastic) limit in compost of 50% of those specified in the PAS100 standards?

no

If you do not agree or are not sure, please tell us why:

The current PAS100 limit for physical contaminants has become harder to meet with the introduction of mandatory food waste collections. Contamination has increased and engagement with customers has become more difficult for organic waste processors as the customer base has expanded from Local Authorities to businesses.

In SEPA's proposed 'Guidance for Food Waste Management' they are attempting to spread the responsibility for quality across the "chain" from waste producer, collector, processor to end user. This is a favourable approach as it recognises that regardless of technology and good practice at the processor there is a limit as to how clean compost or digestate can be if the incoming waste stream is high in contaminants.

We would like to see that the obligations in the guidance for the Food Waste Producer and Collector are shown to be workable before the tighter limits on physical contaminant levels in compost and digestate are phased in.

We have a number of concerns around the proposed limit:

1. The proposed limits are based on the limits defined by Quality Meat Scotland in their standard. These were set on a subjective, visual perception basis. They were not the result of a quantitative assessment of risk of harm to humans, animals and the environment, nor did they take account of the quality that most, good practice production could achieve. We recognise that QMS is an organisation that sets rules applicable to producers of meat who want their products to comply with QMS standards and this affects compost and digestate use across much agricultural land in Scotland. SEPA's regulatory positions regarding compost and digestate products affect multiple market sectors in Scotland, not only agriculture. This wider influence on use of products in markets should mean that SEPA carefully takes into account the compost and digestate quality that industry can achieve when it uses suitable waste types and treats these according to requirements in the relevant PAS.
2. We collated data from composters in Scotland from the past 18 months, this included samples from open windrow sites processing green waste and in-vessel facilities processing food waste and co-mingled food and green waste. This data shows that the 90th percentile for total physical contaminants is 0.18% and for plastics is 0.08%. These are tighter than the existing PAS100 limits but not as stringent as those proposed. We recommend that these levels are used as the new limits in SEPA's position statement to enable the majority of sites to achieve them and maintain the recycling rates.
3. We have some concerns around the reliability of the test method for determination of physical contaminants. WRAP funded some research into this and the report has not yet been published. We believe the report may include recommendations on improvements to the test methodology to produce more reliable results that reflect the actual quality of the material and we would like to see these improvements made before any changes are made to the limits.
4. PAS100 already has a requirement that compost is fit for purpose and clause 4.2 requires compost producers to check with their customers for any requirements regarding the compost grade(s) fitness for purpose. This means that if any end user has any specific requirements for the compost to meet their use (for example, stricter limits on physical contaminants) then these will be agreed with the compost producer, incorporated into the producers' quality policy and these additional requirements will be checked by the Compost Certification Scheme at the annual audit.
5. For compost, visual assessment by the end users is an easy way to determine if the material is fit for purpose. This in addition to the analysis results should be used to determine if the compost is suitable. This enables end users to refuse material that they are not happy with the quality, regardless of what the paperwork says.
6. It is important that stones are not included with physical contaminants. Stones are inert and if screened out to a determined size, pose little or no threat to human, animal or plant health, nor do they pose any threat to the environment. If a limit stricter than PAS100 is introduced, it should be made clear that this applies to physical contaminants excluding stones.

We also have a comment on clause 9 regarding dispatch to the end user. Whilst we agree on the importance of certainty of use for compost, we feel the wording of this clause as it is could prevent some legitimate and beneficial uses of compost. For example when compost is supplied to a third party for use in a growing media, this is not the 'end-user' of the compost. Similarly to a third party making specified blends tailored to crop requirements or sports turf blends. These are likely to be the higher value markets that Zero Waste Scotland are keen to develop and support. Suggested alternative wording is 'the compost has been dispatched to the customer or user and there is certainty of use for that material. PAS100 certified compost being stored in intermediate storage (either on or offsite of the site of production) with no identified user will be regarded as waste.'

9 Do you agree with the proposed phased implementation timescale presented in Table 1 of the Regulation of Outputs from Composting Processes regulatory position statement? i.e. 66% of PAS100 levels by 1st April 2017 and 50% of PAS100 levels by 1st April 2018

no

If you do not agree or are not sure, please tell us why:

In principle we support the phasing in of the requirements to allow time for industry to make changes to their process as needed. However, we would like to see that the obligations in the guidance for the Food Waste Producer and Collector are shown to be workable before the tighter limits on physical contaminant levels in compost and digestate are phased in. It has also been suggested that introducing the limits during the quieter supply periods (Oct-March) would be beneficial as the sites will be under less pressure and have more time to ensure that their process meets the requirements.

10 Do you agree that compost which exceeds the revised limits for physical contaminants (including plastic) will not be suitable for application to agricultural land under an exemption from waste management licensing (i.e. paragraph 7(1) exempt activity)?

no

If you do not agree or are not sure, please tell us why:

We do not support the statement that states that material that exceeds the limit for physical contaminants is not suitable for application under a paragraph 7 exemption. We think this should still be an option and suggest amending the wording to 'may not be suitable'. The suitability for use will depend on many factors, including the properties of the compost the land on which it is to be spread and the crop type.

In the case of off-specification compost the end user would require to be made aware of its waste status and the reason for such, and retain the view whether the material is still fit for purpose for their intended use.

If this is the case, an exemption could be presented with the technical supporting information allowing SEPA to consider if this is a suitable outlet.

The process of application for an exemption requires the applicant to consider all aspects of the waste material with a view to providing beneficial use without endangering health of plant and animals, and the environment.

There is currently a requirement in the application to assess the points below;

1. If the material to be used includes waste (off-spec) compost from a PAS100, it is required to state why the material has failed to comply with the relevant standard.
2. If the wastes to be used include compost, analysis must include physical contamination and state the plastic element of the physical contamination levels separately
3. The application is assessed by SEPA's technical experts, and they will then either:
 - i. enter the particulars of the exempt activity on the register and confirm this in writing to you before the expiry of the 21 day period; OR
 - ii. serve you a notice of refusal stating that registration is refused and giving reasons for that decision before the expiry of the 21 day period.

SEPA is therefore provided with the opportunity to assess each exemption application for off-spec materials, which do not conform to the End of Waste Criteria for compost, and at this point assess if agricultural land recycling is a suitable option. Each batch of off-spec material can be assessed on its individual merits, and on a case by case basis, which will prove more pragmatic than a blanket ban/refusal.

This approach would still allow the organic materials to be recycled for a beneficial purpose as in some cases, the reason for its non-conformance and therefore waste status, will be the result of a minor failure to achieve the proposed strict limits on PCs and may have been previously spread to land without causing any environmental harm or pollution.

page 4

11 Do you agree with the proposed final physical contaminant (including plastic) limit in digestate of 8% of those specified in the PAS110 standards?

no

If you do not agree or are not sure, please tell us why:

We support the principles of reducing the level of physical contaminants in digestate but we have a number of concerns.

In SEPA's proposed 'Guidance for Food Waste Management' they are attempting to spread the responsibility for quality across the "chain" from waste producer, collector, processor to end user. This is a favourable approach as it recognises that regardless of technology and good practice at the processor there is a limit as to how clean digestate can be if the incoming waste stream is high in contaminants. We would like to see that the obligations in the guidance for the Food Waste Producer and Collector introduced before the tighter limits on physical contaminant levels in digestate are phased in.

We have a number of concerns around the proposed limit:

1. The proposed limits cover digestate with a scale of nitrogen (N) concentrations, to demonstrate the loading rate of the materials when applied to land. Any digestate with higher N concentration than 9kg/t is subject to the same maximum limit (0.36 kg/t, PAS 110:2014) but will be spread at a significantly lower rate if used within a Nitrate Vulnerable Zone and is likely to be spread at a significantly lower rate if used in a non-NVZ in accordance with good agricultural practice (PEPFAA code) for supply of total N. This is particularly relevant for separated fibre digestate which can have significantly higher N concentrations; data from the main UK lab that tests PAS 110 digestates demonstrates that the 90th percentile figure for N concentration for separated fibre is 15.2 kg/t. We would like PAS 110's limits table to extend beyond the 9kg/t N, with corresponding physical contaminants limits increased in proportion to allow the same physical contaminant loading rates per hectare of land where digestate is spread. We will be providing this feedback for future review of PAS110 and hope that SEPA could and would set physical contaminant limits that are a little higher than 0.36 kg/t for digestates that contain ≥ 10 k/t total N* and then reduce those by the same percentage as applied to the rest of the limits. If SEPA cannot or will not do this, please do not make SEPA's maximum limit for digestate that contains ≥ 10 kg/t total N any stricter than it already is (i.e. 0.36 kg/t). * We have worked out what these limits should be, and can provide this to SEPA.

2. We have analysed some data from the laboratory approved under the Biofertiliser Certification scheme regarding the typical levels of physical contaminants in digestate and how these compare to the current PAS110 limits and proposed limits. We can provide this data to SEPA but will summarise the findings here. We have data from 278 samples in total and these are from sites across the UK, cover whole and solid and liquid digestate. For the current PAS110 limit on physical contaminants, the number of samples passing (i.e. with levels within the limit) is 82.7%. For the proposed levels of 50% of the PAS110 limit, 72.7% of samples pass. For the proposed level of 25% of the PAS110 limit, 65.5% of samples pass and for the proposed level of 8% of the PAS110 limit, 55% of samples pass (i.e. have physical contaminants within the limit).

When you split these into solid and liquid digestates the number of samples within the limits vary. For the tighter limits, the pass rate for liquid digestates is lower than that of solids, with 53.4% of samples achieving the proposed 8% of the PAS110 limit. You can see from this that almost half the samples would fail to meet the proposed levels and would not comply with the position statement.

3. The limits on physical contaminants apply to all types of digestate (whole, separate liquor and separated fibre). If we use the 5th percentile value for total N in

separated fibre digestate (5.9 kg/t) and its mean dry matter content (25.57 % w/w), the corresponding PAS 110 physical contaminants limit of 0.22 kg/t translates to just 0.10 % w/w in dry matter. If reduced to 8 % of PAS 110 limits, this translates to only 0.008 % w/w in dry matter, which is an extremely low limit.

4. We have some concerns around the reliability of the test method for determination of physical contaminants. WRAP funded some research into this and the report has not yet been published. We believe the report may include recommendations on improvements to the test methodology to produce more reliable results that reflect the actual quality of the material and we would like to see these improvements made before any changes are made to the limits. We also have concerns around the sensitivity of the test methodology to such low detection limits (i.e. 8% of PAS 110). At the lowest end of the N concentration scale, 8 % of the current limit is 3.2g/t. Only 1 litre of digestate is tested in the lab, so this limit translates to 3.2mg of physical contaminants in 1 litre of liquid digestate and 2.14mg of physical contaminants in 1 litre of solid digestate. We are investigating with the main UK lab that tests PAS 110 digestates whether it would be feasible and cost effective to obtain and use equipment that would enable such low limits of detection. Before any decisions are made by SEPA, further discussion is needed with the laboratories to determine if the proposed limits of detection would be achievable.

5. PAS110 already has a requirement that digestate is fit for purpose and clause 4.2 requires digestate producers to check with the digestate users if they have any requirements in addition to the minimum quality requirements set out in PAS110. This means that if any end user has any specific requirements for the digestate to meet their use (for example, stricter limits on physical contaminants) then these will be agreed with the digestate producer, incorporated into the producers' quality policy and compliance with these additional requirements will be checked by the Biofertiliser Certification Scheme at the annual audit (as currently happens for those sites supplying to QMS members). As part of the producer's Quality Management System, we would expect that portions of production to be sent to users who have additional quality requirements would be sampled, tested and verified compliant (by the producer) before the digestate is dispatched.

We also have a comment on clause 9 regarding dispatch to the end user. Whilst we agree on the importance of certainty of use for digestate, we feel the wording of this clause as it is could prevent some legitimate and beneficial uses of digestate. For example there may be developments of other markets for digestate and the material may be supplied to a third party (e.g. in a supply chain) prior to the 'end-user' of the digestate. These are likely to be the higher value markets that Zero Waste Scotland is keen to develop and support. Suggested alternative wording is 'the digestate has been dispatched to the customer or user and there is certainty of use for that material. PAS110 certified digestate being stored in intermediate storage (either on or outwith the site of production) with no identified supply chain customer or end user will be regarded as waste.'

12 Do you agree with the proposed phased implementation timescale presented in Table 1 of the Regulation of Outputs from Anaerobic Digestion Processes regulatory position statement? i.e. 50% of PAS110 levels by 1st April 2017;25% of PAS110 levels by 1st April 2018 and 8% of PAS110 levels by 1st April 2019

don't know

If you do not agree or are not sure, please tell us why:

In principle we support the phasing in of the requirements to allow time for industry to make changes to their process as needed. However, we would like to see that the obligations in the guidance for the Food Waste Producer and Collector are shown to be workable before the tighter limits on physical contaminant levels in digestate are phased in.

13 Do you agree that digestate which exceeds these revised limits for physical contaminants (including plastic) will not be suitable for application to agricultural land under an exemption from waste management licensing (i.e. paragraph 7(1) exempt activity)?

no

If you do not agree or are not sure, please tell us why:

We do not support the statement that states that material that exceeds the limit for physical contaminants is not suitable for application under a paragraph 7 exemption. We think this should still be an option and suggest amending the wording to 'may not be suitable'. The suitability for use will depend on many factors, including the properties of the digestate, the land on which it is to be spread and the crop type.

In the case of off-specification digestate, the end user would require to be made aware of its waste status and the reason for such, and retain the view whether the material is still fit for purpose for their intended use.

If this is the case, an exemption could be presented with the technical supporting information allowing SEPA to consider if this is a suitable outlet. The process of application for an exemption requires the applicant to consider all aspects of the waste material with a view to providing beneficial use without endangering health of plant and animals, and the environment.

There is currently a requirement in the application to assess the points below;

1. If the material to be used includes waste (off-spec) digestate from a PAS110 process, it is required to state why the material has failed to comply with the relevant standard.
2. If the wastes to be used include digestate, analysis must include physical contamination and state the plastic element of the physical contamination levels separately
3. The application is assessed by SEPA's technical experts, and they will then either:
 - i. enter the particulars of the exempt activity on the register and confirm this in writing to you before the expiry of the 21 day period; OR
 - ii. serve on you a notice of refusal stating that registration is refused and giving reasons for that decision before the expiry of the 21 day period.

SEPA is therefore provided with the opportunity to assess each exemption application for off-spec materials, which do not conform to the End of Waste Criteria for digestate, and at this point assess if agricultural land recycling is a suitable option. Each batch of off-spec material can be assessed on its individual merits, and on a case by case basis, which will prove more pragmatic than a blanket ban/refusal.

This approach would still allow the organic materials to be recycled for a beneficial purpose as in some cases, the reason for its non-conformance and therefore

waste status, will be the result of failure to achieve the relevant, proposed strict limit on physical contaminants by a narrow margin (e.g a result of 0.05 kg/t, narrowly exceeding the relevant PAS limit of 0.04 kg/t where digestate total N content is between 1.0 and 1.9 kg/t) and may have been previously spread to land without causing any environmental harm or pollution.

page 5

14 SEPA proposes to remove leather industry wastes from the list of acceptable inputs. Do you agree that this material should not be used as feedstock for anaerobic digestion?

no, don't know

If you do not agree or are not sure, please tell us why:

We have not had strong views expressed on this from our members but we believe that all potential inputs should be assessed on their own merits, on a case by case basis. Pre-acceptance criteria information i.e. source and process details and analysis, should be presented to evaluate its suitability for processing in AD. If the waste is biodegradable, or shown benefit to the AD process through a means other than just the addition of organics, for example by improving biological activity and process stability, and is non-hazardous, then there should be allowance for it to be consider as a potential input material to an AD process seeking PAS110 certification for its digestate. Restrictions could be applied to the broader EWC code, if necessary.

15 SEPA proposes to remove sludges from on-site effluent treatment from the manufacture, supply and use of fine chemicals and chemical products. Do you agree that this material should not be used as feedstock for anaerobic digestion?

no, don't know

If you do not agree or are not sure, please tell us why :

We have not had strong views expressed on this from our members but we believe that all potential inputs should be assessed on their own merits, on a case by case basis. Pre-acceptance criteria information i.e. source and process details and analysis, should be presented to evaluate its suitability for processing in AD. If the sludge is biodegradable, or shown benefit to the AD process through a means other than just the addition of organics, for example by improving biological activity and process stability, and is non-hazardous, then there should be allowance for it to be consider as a potential input material to an AD process seeking PAS110 certification for its digestate. Restrictions could be applied to the broader EWC code, if necessary.