

Standard Rules Consultation N.8



Response by Association for Organics Recycling

1 Introduction

- 1.1 The Environment Agency are proposing some new and revised rules and risk assessments in relation to activities that will become installations under the Industrial Emissions Directive (IED) and also to some activities that are waste operations.
- 1.2 The consultation document as well the draft standard rules and associated risk assessments are available here: <https://consult.environment-agency.gov.uk/portal/ho/ep/src/rules8?pointId=1338200036873>.
- 1.3 The Industrial Emissions Directive (IED) will, in the future, apply to all composting sites with a capacity of over 75 tonnes/day. The IED requirements will come into effect for these sites from 7 January 2013 (for new sites) and from 6 July 2015 for sites that were already operational on 7 January 2013.
- 1.4 The EA are proposing to replace each of the four sets of composting standard rules with two new sets, one for above 75 tonnes/day and one for up to 75 tonnes/day.
- 1.5 The Association for Organics Recycling is the United Kingdom's membership organisation, working on behalf of its members to raise awareness of the benefits of biological treatment processes and use of the outputs from such processes. The Association is committed to the sustainable management of biodegradable resources by promoting the benefits of composting and other biological treatment techniques for the enhancement of the environment, business and society.
- 1.6 The Association aims to act as an advocate for the wider biological treatment industry and to represent its views in a constructive dialogue with policy makers. It envisages an industry in which best practice is shared, standards are maintained and surpassed and which makes a positive contribution to safeguarding the environment.
- 1.7 The Association currently has about 350 members including compost and digestate producers, local authorities, consultants, technology suppliers, users of treated biodegradable materials, academics, other membership organisations and individuals. Given that it represents the majority of compost producers in England, it particularly welcomes the opportunity to comment on the draft document.
- 1.8 The Association welcomes the above consultation and the opportunity to discuss any of the points raised in this response.

2 Answers to EA's questions

Question one: Do you agree with our approach to use standard rules for activities that will become installations under IED in section 3 of this document?

AfOR agrees with this approach.

Question two: Do you agree with the proposed new and revised rules that we have set out in section 4 of this consultation?

Generally we agree with the proposed new and revised set of rules. However we would like to raise the following concerns:

Consistency in the permit titles

For the sake of clarity, all titles of the standard permits should include the maximum capacity per day (e.g. 75 tonne/day) as well as the maximum annual quantity (or quantity at any one time) allowed to be processed under the permit. For example, Standard rules 2012 N. 3, 4, 7 and 8 should all include reference to 75,000 tonnes per annum.

Sensitive receptors

AfOR welcomes a clarification on the definition of 'nearest sensitive receptor'. In the new permits this is now defined as *'the nearest place to the composting operations where people are likely to be for prolonged periods. This term would therefore apply to dwellings (including any associated gardens) and to many types of workplaces. NB We would not normally regard a place where people are likely to be present for less than 6 hours at one time as being a sensitive receptor. It does not apply to the operators of composting facilities or their staff while carrying out the composting operation as their health is covered by Health and Safety legislation.'*

Please note that the GRAs should be amended accordingly to reflect the new definition of sensitive receptors.

The new definition does still not clarify whether a sensitive receptor includes the operator's dwelling. This has not been previously regarded as sensitive receptor by the EA. If the operator's dwelling is not included, please make it clear whether a 'sensitive receptor' includes the operator's dwelling if a) only the operator individual lives in that dwelling, and b) the operator individual and any other person who is, or people who are, not an employee of the operator lives in that dwelling (e.g. the operator's family). This is an issue of significance and one which continues to be raised by our members.

In addition, the definition should take site operations into account. The issue of people's presence for prolonged period of time has been addressed with 6 hours being proposed as a threshold. The unstated assumption appears to be that bioaerosol generating activities are continuous. The same assessment needs to take account of whether the operation itself is going to be for prolonged periods or not. For example, some members of AfOR manage a network of small farm based composting sites processing less than 500 tonnes of green wastes at any one time. These are normally delivered over a period of up to 7 days. The windrows are monitored every 4 weeks for temperature and moisture starting 2 weeks after delivery; batches are turned every 4 weeks. There are no operations on site that would cause any disturbance of the material (hence any release of dust or bioaerosols) for 340 days of the year. However, given the definition of sensitive receptor, dwellings 250m away from any of the farm sites would qualify as sensitive receptors based on the 6hrs of occupancy at any one time.

Given the circumstances under which this and other small farm based composting sites operate, AfOR suggests that the definition of sensitive receptor is amended as follows:

“Nearest sensitive receptor” means ‘*the nearest place to the composting operations where people are likely to be exposed to emissions from the operations for prolonged periods. This term would therefore apply to dwellings (including any associated gardens) and to many types of workplaces. NB We would not normally regard a place where people are likely to be present for less than 6 hours at one time as being a sensitive receptor or when site operation itself takes place for less than 6 hours at one time. It does not apply to the operators of composting facilities or their staff while carrying out the composting operation as their health is covered by Health and Safety legislation.*’

1. Standard rules SR2012 N.1

Permit title

We suggest that the title of this permit and permit SR2012 N.2 includes clear reference to the fact that these permits are pursuant to T23 exemption. This would help the operator to distinguish them immediately from permits SR2012 N.5 and 6.

Permit charges

AfOR understands that the current application fee for an SRP to carry out composting or anaerobic digestion is £1590 excluding VAT, regardless of which of those SRPs are applied for and the site’s actual throughput tonnage per annum. Subsistence fees also appear to be flat fees. The permit charges should be proportional to the level of risk posed by the activity. We envisage that the risk posed by an SR2012 N.1 operation should be less significant than the risk posed by the operations covered by the other standard permits, given the tonnages processed at any one time and the limited types of wastes allowed (only T23 wastes). We would therefore expect SR2012 N.1 and N.2 to have a lower fee than the other permits. Similar considerations apply to SR2012 N.5 and 6.

These permits would be more business friendly if there were a fee scale which took into account actual throughput tonnage per annum, both for application and subsistence fees; it is obligatory for operators who operate under an Environmental Permit to submit to the EA each year a return stating how much material the site has treated for that year, so the EA should be able to cost-effectively check accurate data. AfOR would welcome dialogue with the EA on this opportunity. AfOR are keen to encourage the operation of smaller scale biowaste sites and not disproportionately penalise them through unaffordable compliance costs.

Distance criteria

With regard to the following distance restrictions, AfOR would like to understand what evidence such restrictions are based upon:

‘The activity shall not be:

- 50 meters of a site that has relevant species or habitats protected under the Biodiversity Action Plan that the Environment Agency considers at risk to this activity;
- 50 meters of National Nature Reserves (NNR), Local Nature Reserves (LNR), Local Wildlife Site (LWS), Ancient Woodland, or Scheduled Ancient Monument;
- 500 meters of a European Site, or Site of Special Interest; and
- 250 meters of the presence of Great Crested Newts where it is linked to breeding ponds of the newts by good habitat.

AfOR questions whether the specified distances are evidence based. We are not aware that the Agency has assessed the impact of composting and anaerobic digestion sites on the

above areas/species. Research should be prioritised to establish an adequate evidence base about such an impact. If these criteria are deemed necessary, then there needs to be formal consultation with industry to understand better their concerns and the impact this will have on their sites.

AfOR would also like to remind to the Agency that the impact of the proposed activities on nature conservation is already taken into account at the planning stage, as AfOR has already extensively highlighted in its response to Standard Permit Consultation N.7 and AfOR's Response to the Environment Agency's consultation on the draft guidance for developments requiring planning permission and environmental permits (please see <http://www.organics-recycling.org.uk/uploads/article2342/JJRES.pdf>). Thus, it should not need to be reconsidered at the permitting stage.

Table 2.2A Waste types – open or closed systems

The table specifies that 'Waste containing wood-preserving agents or other biocides' shall not be accepted. AfOR suggests that 'other biocides' is removed, as this statement is too woolly. Biocides can cover a wide range of products, some of which would not have an adverse impact on the composting and AD operations.

For example, wastes may contain residues of disinfectants that have been used to clean collection containers. There are also biocides of natural origin (e.g. derived from bacteria or plants) that will not have an adverse impact on the composting/AD operation and resulting outputs.

Clause 3.5.3 under section 'Monitoring' says: '*All composted waste shall be monitored to ensure it is sanitised and stabilised*'.

It is not clear how the operator is supposed to demonstrate compliance with this requirement and this would be enforced by the Agency. Clear guidance which explains the requirements needs to be made available.

Clause 4.1.1d '*All records shall be maintained for at least 6 years*'. 'At least 6 years' is a long time given the number of records composters keep; AfOR's members prefer 'at least 4 years' as this would make storage of non-electronic records more practicable and should be sufficient as it is unlikely that problems requiring reference to past records would occur 4 years after the relevant activity had been carried out.

Section 4.4, Interpretation, definition of 'sanitisation'

The 70 °C upper temperature limit for sanitisation is a too low in the inflexible SRP context because the default minimum temperature required under EU Animal By-Products Regulations is 70 °C. It is extremely difficult to control sanitisation composting conditions such that none of the mass exceeds 70 °C at any time in any of the sanitising mass. It would be more practicable to set an upper limit of 80 °C, as per the maximum recommended in PAS 100:2011. Open air windrow composters only have limited tools available to manage the temperature of their feedstock to within + or – 5 degrees, the most common method is through turning, this however encourages the release of bioaerosols so should be encouraged just for temperature reduction purposes.

According to this SRP, sanitisation is required 'for a period of at least 7 days'. AfOR understands that the EA's motivation for introducing this requirement is containment of odours BUT this SRP allows the composting process to be 'either an open or a closed (in-vessel) composting system', so if the system is open '7 days in-vessel' would not be applicable and even for in-vessel sanitisation the primary purpose is pathogen reduction.

It is feasible for composting processes to minimise and manage odours by a variety of means so it is not appropriate to require the sanitisation phase to be a period of at least 7 days; ***the operator should define it as appropriate to his/her composting system*** (as per the approach taken in PAS 100:2011). It should not be in the regulator's remit to define what is an acceptable time limit for sanitisation, this will depend on the feedstock, time of year and other regulatory mechanisms already in place such as the ABP Regulations.

Composters who treat animal by-products have designed and operated their composting systems according to the requirements of the relevant Animal By-Products Regulation, and compliance is evaluated by one or more Animal Health vets. It should be satisfactory for the operator to manage the sanitisation phase as per the conditions, duration and monitoring practices approved by the Animal Health vet,

Furthermore, many ABP composting sites have been designed, laid out, operated and costed according to assumption that for the majority of composting batches sanitisation will not be required to extend beyond the minimum duration required in the relevant Animal By-Products Regulation. Imposition of the definition in this draft SRP would require the operator to a) significantly reduce throughput (a potential problem given existing contractual arrangements), b) build further in-vessel capacity (a potential problem if the site is not suited to such extra capacity or planning consent is not given), c) change to a Bespoke Permit (if the composter can get approval for it), or d) close the site. Site throughput is an issue of significance for operators as it has a direct correlation with profitability. Ensuring pathogen reduction is the primary function of the sanitisation phase and not odour reduction; this is a different issue and should not interfere with the existing flexibility allowed for within the ABP Regulations and PAS 100 specification.

Please align the definition to that used in PAS 100:2011 and require the operator to define in his/her relevant operating system document the details of the sanitisation phase and how it will be monitored and assessed.

2. Standard rules SR2012 N.2

Same comments as for permit SR2012 N.1.

With regard to the additional provisions (e.g. energy efficiency and efficient use of raw materials) specified in this permit and based on the IED requirements, **AfOR strongly encourages the Agency to produce and make available to the operators clear and comprehensive guidance on how such additional requirements should be met.** Until there is clear guidance in particular with reference to BAT, then it is difficult to pass any comment on the requirements imposed on the sector.

3. Standard rules SR2012 N.5

The comments related to the distance criteria, Table 2.2A 'Waste types – open or closed systems, and Section 4.4, Interpretation, definition of 'sanitisation' are as for permit SR2012 N.1 above.

4. Standard rules SR2012 N.6

The comments related to the distance criteria, Table 2.2A 'Waste types – open or closed systems, and Section 4.4, Interpretation, definition of 'sanitisation' are as for permit SR2012 N.1 above.

5. Standard rules SR2012 N.7

The comments related to the distance criteria, Table 2.2 'Waste types and quantities', and Section 4.4, Interpretation, definition of 'sanitisation' are as for permit SR2012 N.1 above.

Table 2.2 waste types and quantities

Waste type 19 02 06, which has now been added to the Appendix B of the 2012 edition of the Compost Quality Protocol, is missing from table 2.2 of this standard permit. We recommend this waste type is added to the table.

6. Standard rules SR2012 N.8

Same comments as per SR2012 N.7.

7. Standard rules SR2012 N.3

Same comments as per SR2012 N.7.

Table 3.5 – Monitoring requirements

The table refers to 'temperature probe' as the required monitoring method for temperature. Given the variety of monitoring devices available on the market and used by AD operators, please replace 'temperature probe' with a more generic term such as 'temperature monitoring devices' or 'temperature monitoring units' or 'temperature monitoring equipment'. This should include monitoring that work remotely through wireless operation.

The table refers to 'moisture meter or moisture touch test' as the required monitoring methods for moisture. Please include other equivalent methods to measure the moisture content in composting material. Moisture content can also be assessed by checking calculations after weighing composting material samples before and after drying in an oven (as per BS EN 13040).

8. Standard rules SR2012 N.3

Same comments as per SR2012 N.3

9. Standard rules SR2012 N.12

Permit title

The title and the text of SR2012 N.12 does not refer to an overall maximum annual capacity, but the consultation document suggests the maximum annual capacity specified under this permit is 100,000 tonnes per annum. AfOR recommends that the title include reference to the maximum annual capacity, for consistency with all other permits.

Source Protection Zones

This proposed SRP includes a rule that 'The activities shall not be carried out within: (d) groundwater Source Protection Zone 1'. The SRPs for composting up to 75kte do not allow

those activities to be within a groundwater Source Protection Zone 2 (outer) and a Source Protection Zone 1 (inner) despite requiring that the site must store, physically treat and compost wastes on an impermeable surface with a sealed drainage system. Is it equitable that an AD process treating up to 75kte be allowed to operate within an SPZ Zone 2 when a similar throughput and waste-types composting facility is not allowed to?

250 meters rules

Inconsistency between the composting permit, which says '250 meters of the nearest sensitive receptor' and this permit, which specifies 250 meters from any off-site building used by the public, including dwelling houses...'. The permits should use the same terminology and made consistent so that the reader is not confused.

Section 2.3 'Waste acceptance' (re exclusions)

This section does not include any exclusion. On the other hand, the composting permits contain a list of specific waste types that are to be excluded. Should this or a similar list be also specified under SR2012 N12?

Table 2.3 waste types

Waste EWC 07 02 13 'biodegradable waste – must conform to BS EN 13432'. Please replace this with 'biodegradable waste – must be independently certified to BS EN 13432, BS 14995 or equivalent'.

Waste EWC 15 01 02 'biodegradable plastic packaging – must conform to BS EN 13432'. Please replace this with 'biodegradable plastic packaging – must be independently certified to BS EN 13432, BS 14995 or equivalent'.

Waste EWC 15 01 05 composite packaging - must conform to BS EN 13432'. Please replace this with 'biodegradable plastic packaging – must be independently certified to BS EN 13432, BS 14995 or equivalent'.

Waste EWC 19 05 03 off specification compost. This is described as 'off-specification compost from source segregated biodegradable waste'. However in the composting activity permits, off-specification compost is described as 'off-specification compost (from a composting process that accepts waste input types listed in these standard rules only).' The two definitions should be made consistent.

10. Standard rules SR2012 N.11

Same comments as for permit SR2012 N.12

Question three: Have we correctly identified all the risks for each activity, as described in the generic risk assessments associated with the consultation?

Yes we consider that you have considered all the necessary risks associated with each activity. However, as explained above, we question whether all risks considered are scientifically and technically sound.

For example, with regard to parameters 9 and 10 of GRA SR2012 No1 and No2 (distance restrictions), AfOR would like to understand what evidence such restrictions are based upon. We are not aware that the Agency has assessed the impact of composting and anaerobic digestion sites on the above areas/species. Research should be prioritised to establish an adequate evidence base about such an impact. If these criteria are deemed necessary, then

there needs to be formal consultation with industry to understand better their concerns and the impact this will have on their sites.

Other comments:

Parameter 8: The activities shall not be carried out within 250m of any dwelling or workplace. Should this be “within 250m of any sensitive receptors”?

Parameter 9: The activities shall not be carried out within 500 metres of a European site (SAC, cSAC, SPA, pSPA), Ramsar site or Site of Special Scientific Interest (SSSI).

We are not aware that there is any evidence showing that that small composting sites processing garden waste only (dry carbon rich material with no leachate) with 24 days of site activity in the whole year would cause harm to and deterioration of nature conservation sites (especially when comparing this practice with available alternatives, such as storage and spreading of bio-solids, animal manures and/or inorganic fertilisers).

Parameter 10: The activities cannot take place within 250 metres of the presence of Great Crested Newts where it is linked to the breeding ponds of the newts by good habitat; or 50 metres of a site that has relevant species or habitats protected under the Biodiversity Action Plan that the Environment Agency considers at risk to this activity or 50 metres of a National Nature Reserve (NNR), Local Nature Reserves(LNR), Local Wildlife Site (LWS), Ancient woodland or Scheduled Ancient Monument.

Same as above

Information about LWSs needs to be available on Magic.

Risk from Release of micro-organisms (bioaerosols):

Probability of exposure: High

Consequence: High

Justification: Composting produces and releases micro-organisms. There is potential for exposure if anyone living or working close to the site (excluding operator and employees).

As mentioned above, some members of AfOR manage a network of small farm based composting sites processing less than 500 tonnes of green wastes at any one time. These are normally delivered over a period of up to 7 days. There are no operations on site that would cause any disturbance of the material (hence any release of dust or bioaerosols) for 340 days of the year. It is therefore important to make the following points:

- 1) Composting releases bioaerosols when the material is being actively disturbed only e.g. during turning. Bioaerosols are not released from a windrow at rest. In the light of the above, plus the fact that exposure will also depend on specific wind directions amongst other factors, the probability of exposure may need to be revised.
- 2) The evidence so far on the risks from bioaerosols tends to show that exposure may be a problem for people already suffering from respiratory problems, who would avoid working and living in places where high levels are naturally found during the Spring or where farmers may be planting for levels to be linked to background levels.

Scavenging animals and scavenging birds - Permitted wastes may attract scavenging birds and animals.

This is another case where the permit attempts to covers too many materials. Shredded garden waste does not attract scavenging birds and animals as it does not contain any food sources.

Composting produces and is likely to release odour. There is potential for exposure for anyone living or working close to the site (excluding operator and employees). Local residents often sensitive to odour.

Composting is an aerobic process which if managed properly should not produce any unpleasant odours. A distinctive odour may be released at the time of turning but it should not be offensive. This should not be confused with the offensive odours that can arise from badly managed windrows that turn anaerobic.

Question four: Are there any barriers to complying with the standard rules?

AfOR understands that the 75 tonnes / day restriction comes from an European Directive and, thus, must be adhered to by the UK.

However, Sites have no control over the daily inputs to their site as this will vary according to the season, weather, bank holidays and weekends so this proposal using a daily limit appears to be restrictive and not based on any evidence that we have seen. A limit of yearly tonnages would make a lot more sense and allow for the inherent input volume variability which occurs on most organic processing facilities, particularly those dealing with green waste. The current restriction of 500t at any one time may allow some operators to process excessive tonnage on a SR2011No1, claiming short composting times. This creates unfair competition for those who try to operate a proper recovery operation by producing a valuable matured product. The proposed additional restriction on daily inputs will not address this, but instead place an additional difficulty on those who operate sites responsibly. Ideally one would form a 500t batch over the shortest period possible so all of the material is of similar age rather than older deliveries risking becoming anaerobic before they are mixed with more recent loads.

Question five: Are there any other activities that you think would benefit from the standard permitting approach or future revisions?

1. Standard Rules Permits for integrated digestion and composting

AfOR suggests that a series of Standard Rules Permits covering a range of scales of combined digestion (anaerobic and/or aerobic) and aerobic composting are developed. Such permits, if appropriately structured and written, would allow the cost-effective establishment of facilities that could treat source-segregated solid and liquid biodegradable wastes in a more optimised manner, with reduced CO₂ equivalent impacts compared with SRP-controlled facilities that carry out 'composting only' or 'anaerobic digestion only'.

AfOR recognises that combined digestion and aerobic composting could be carried out under a bespoke permit, but the associated high costs and uncertainty as to whether such a permit would be issued deters business, especially Small to Medium Enterprises. AfOR envisages that the agricultural sector in particular could benefit from such SRPs, especially where they accept and treat source-segregated biodegradable municipal wastes as well as agricultural biodegradable wastes (and possibly energy crops). There are likely to be a number of sites who will be looking to expand their current enterprises to diversify their activity and add an AD plant to their existing aerobic treatment which this permit would assist with.

2. Creation of an SRP that covers 'within premise' composting and spreading of the resultant compost

AfOR would like to discuss with the EA a potentially suitable SRP that covers 'within premise' composting and spreading of the resultant compost that better provides for small to medium scale composting than the T23 and relevant U-exemption provisions. AfOR would also like to

discuss with the EA a similar SRP for 'within premise' anaerobic digestion and spreading of the resultant digestate.

3. Creation of SRPs that cover aerobic digestion of source-segregated biodegradable wastes

AfOR would like to discuss with the EA future creation of SRPs that exclusively cover aerobic digestion of source-segregated biodegradable wastes.

Question six: Please tell us if you have any other views or comments on these proposed revisions that have not been covered by previous questions.

NA

Question seven: How did you find out about this consultation?

AfOR monitors the Environment Agency's website section 'What's new' and checks it for relevant consultations. In addition, the EA communicated with AfOR before the industry consultation and again when it began.

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