

# SUSTAINABLE ORGANIC RESOURCES PARTNERSHIP UK OPINION IN RESPONSE TO THE EUROPEAN COMMISSION GREEN PAPER ON THE MANAGEMENT

OF BIO-WASTE IN THE EUROPEAN UNION COM(2008)811 final http://ec.europa.eu/environment/waste/compost/index.htm

- The Partnership supports the Opinion submitted already by the European Water Association, which is appended to this submission for ease of reference. The Partnership has worked with EWA previously and submitted a report to the Commission of an International workshop on Knowledge and Practices of Using Treated Sewage Sludge on Land at Pembroke College, Cambridge University UK in April 2008
- The Partnership is an independent organization established in 2008 to promote the safe, sustainable trusted and welcome recycling of all organic resources.
- It organized an Annual Meeting in London on February 19<sup>th</sup> 2009 'Increasing Public Confidence in the Recycling of Organic Resources'. Inevitably the Green Paper was mentioned several times and the Partnership would like to draw comments to the attention of the Commission as a companion to the submission already made by the EWA.
- In the waste water sector there is a specific European commitment to the recycling of what we now term biosolids treated sewage sludge in the Urban Waste Water Treatment Directive. There should be such a commitment for biowaste.
- 5 The waste water sector has much experience in the recycling of biosolids this should be used to develop recycling of biowaste
- The nomenclature of biowaste is confusing. In the waste water sector when sewage sludge is properly treated and properly used it qualifies for the title of biosolids. Such a transformation of terminology is needed for biowaste which by definition is the raw waste. Those raw wastes have a very wide range of risk profiles .For example simple garden waste will have a very different risk profile to , say , meat processing waste . So, whatever treatment technology is used for each waste, the ultimate products used appropriately should have the same risk profile and a new term is needed for these equivalent to biosolids . One possibility would be bioproducts

Fach raw biowaste will have its own risk profile and will need appropriate treatment - a matrix would be helpful which would being together source sector, treatment and safe use of the bioproducts

It is clear from UK experience that there are many ways in which biowastes may be mixed, and the EWA refers to this. But there does seem to be a need at a national and local level to provide advice on how to manage waste at source. So for example reference was made in the Meeting to the potential risks of ragwort and privet in green waste creating a toxic fraction in compost bioproducts. But advice is rarely given to householders on these issues and if it was given, it would reduce, but not avoid risk. Some advice to homes is given already in the UK by such waste management companies as Viridor. There is need for consistency on such matters as to whether or not it is appropriate to mix domestic green waste and kitchen waste.

The SORP would be pleased to provides further inputs to the Commission on these matters

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#### **ADDENDUM**



#### **EUROPEAN WATER ASSOCIATION**

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#### INTRODUCTION

- <sup>1</sup> The European Water Association, the EWA, is the non governmental organisation representing professionals working in water management throughout the European continent. It is recognised as the sector professional NGO by the European Commission. It has Members which are also involved in waste management. Bio wastes are often created as a consequence of good water management. Their disposal and use may have consequences for water management. The impacts and opportunities for bio wastes must also be considered alongside those for treated sewage sludges also referred to as biosolids.
- <sup>2</sup> The general view is that organic matter produced by society, as a by-product of its activities, should be considered as a potential valuable resource for soil fertility and land management. Recycling the carbon contained in organic matter contributes to climate change mitigation and recycling the nutrients, which will otherwise be discharged into the environment, saves costs of production and losses of mineral resources. There are issues of environmental and public health risks which need to managed at the same time. It is important that each type of organic waste is regulated appropriately to mitigate risks and thus create an equal chance of success for the use of different types of waste. Different sources of organic resources can then compete on the basis of cost and service and not prejudice.
- <sup>3</sup> Thus the EWA encourages the European Commission to develop a clear overall strategy, which encourages safe, sustainable and welcome recycling of all organic resources, be they bio wastes, biosolids, agricultural wastes, industrial wastes or forestry wastes. The EWA is not advocating integrated regulation but it does advocate that the

regulation of each sector should fit into a 'big picture' and it has previously submitted extensively on a similar basis in the context of biosolids management.

- <sup>4</sup> The EWA recognises that, for practical and economic reasons in some locations, the most sustainable way of dealing with many organic wastes may well be incineration.
- <sup>5</sup> The EWA is also of a view that where possible the treatment techniques used to render a waste suitable for use or disposal should add as much value as possible. Thus if anaerobic digestion is used the digester gas should be used for energy recovery.
- <sup>6</sup> The EWA answers the questions in the Green Paper below, but before doing so, wishes to clarify some of the confusion in the classification of bio wastes.

#### **DEFINITIONS**

- <sup>7</sup> Bio waste is defined in the Green Paper as biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises and comparable waste from food processing plants. The Commission might like to think about the terminology of treated bio wastes, which would comply with legislation governing its use. In waste-water management, the raw product is sewage sludge and the treated material, suitable for use, is deemed to be biosolids.
- <sup>8</sup> The EWA has divided those wastes into more precise process streams, as these may be managed in different ways and thus for the answers given to the questions posed in the Green Paper there will some differences.

Garden and park waste

Food manufacturing wastes

Food wastes from restaurants and shops etc

Household food wastes

<sup>9</sup> There is an assumption that domestic biodegradable waste,(DBW),as part of the municipal solid waste approximates to household food waste (HFW). Whilst DBW comprises a significant proportion of HFW, it may also contain other biodegradable wastes, such as sanitary goods, floral products, pet products and wastes, etc. This may create problems of definition and product quality and increase risk.

#### ANSWERS TO QUESTIONS

#### Q1 Bio waste reduction

<sup>10</sup> The Green Paper is right to say that there are no administrative solutions, as possible actions are linked to changing consumer behaviour and retail policies. Indeed there is a challenge in terms of public opinion, understanding and engagement. If the uses of treated bio wastes are so valuable, then the question ought to be "how can we make more"? Asking how we can reduce the amount of product gives the impression that it is

of no value. This point is made somewhat 'tongue in cheek', but it does underline the need for clear and careful communication.

#### Green Waste

- <sup>11</sup> It is important to understand that that some wastes cannot be reduced in any practical way such as green wastes. Apart from more home composting (and that has limited scope in many homes), the only possible way would be a wholesale change to evergreen shrubs, which would be unrealistic.
- <sup>12</sup> There are plenty of opportunities for waste reduction in food production. It is estimated that from farm to plate, or rather from farm to domestic waste collection, 30% of food is wasted and there is scope for better resource utilisation efficiency. Indeed it can be argued that whilst cheap food has been a great social boon, it has also encouraged wasteful behaviour. Food and drink processing can be made more efficient and effective by environmental regulation of sources, particularly through IPPC regulations. If food retailers were to be less choosey over products there would be less wastage at source and processing such as by allowing a greater diversity in the size of fruit.

#### Food wastes from shops and restaurants

This covers a wide range of sources of waste and hence opportunities for waste reduction. The opportunities usually revolve around retail practices. It is possible that the requirements for 'sell by dates' are unnecessarily restrictive and onerous and are unnecessarily demanding, leading to excessive food wastage. This theory needs to tested against the legitimate needs for sound food quality practices. It is also possible that restaurants which trade on the basis of 'help yourself to all you can carry' menus may lead to excessive food wastage from plates. The only way in which society at large can affect these matters, is through planning and business licensing procedures. These ideas may be more appropriate for large businesses, such as hypermarkets and large restaurants, rather than for small shops and cafes. If the Commission wishes to address these issues and other retail matters, it will need to enter a dialogue with organisations representing European food retailers.

#### Food wastes from homes

There is little that society can do directly to reduce household waste, apart from ensuring that education and public information programmes emphasise the need for prudence. The trend towards pre-packaged meals will contribute to waste reduction, but the retail policy of 'buy one – get one free' has unintended consequences of more wastage from plates and unused food which passes 'eat by dates' is often wasted. Unnecessarily onerous 'eat by 'dates also contribute to food wastage, but this has to be balanced with food safety criteria. It seems reasonable that these retail policies should be tested for their genuine welfare value as opposed to the retail value. Once more issues like this should be pursued by the Commission with European organisations representing food retailers

#### Q2 Further restrictions on organic wastes to landfill at EU or Member State level

<sup>15</sup> Yes further restrictions but with existing legislation at Member State level.

#### Q3 Preferred options for treatment. Use of life cycle assessment studies

<sup>16</sup> The EWA would like to draw the attention of the Commission to the large body of data and experience in the water sector for rendering biodegradable organic matter suitable for recycling and for energy recovery. There have been great strides in recent years in increasing the effectiveness and efficiency of anaerobic digestion and composting and these benefits should be migrated to the bio waste sector. Life cycle assessment studies should apply to the use of all organic resources.

#### Q4 Energy recovery contribution to sustainable resources

- <sup>17</sup> The EWA favours recycling as the first rung in a ladder of hierarchies of options. As has been stated before, incineration has its place particularly in large conurbations, but this must always be designed, built and operated to be as energy efficient as possible.
- <sup>18</sup> Yes, bio waste can contribute to renewable energy targets. Anaerobic digestion releases energy from bio waste via the creation and use of biogas. Bio waste can be used to grow biomass such as willows and as a direct source of energy or to generate biofuel by pyrolysis and gasification techniques

### Q5 Promotion of bio waste recycling. Synergies between bio waste recycling and energy recovery

- <sup>19</sup> There need to be national promotional campaigns and partnerships, as exist in the UK, established between producers and users of bio waste products. Indeed there is advantage in having framework partnerships, which promote the safe, sustainable and welcome recycling of all resources. Policy makers and regulators must use more helpful/positive language in the communication of the benefits of these materials. It should be left to the local suppliers of products and services to compete on the basis of cost and customer focus.
- <sup>20</sup> The most obvious synergy with energy is the use of advanced digestion such as that involving hydrolysis, and the creation of digester gas.

## Q6 Should the standards be set for compost as a product only or for compost of lower quality still covered by the waste regime (e.g. for application not linked to food production)?

- <sup>20</sup> It is important to distinguish between compost destined to be used as a commercial product on a small scale, in which there is no involvement of the producer in product use, and that provided as part of a bulk service to agriculture, in which the producer has some interface with the user. In the latter case the user and producer/supplier have a clear understanding of the objectives of product use. That use should be controlled by agreed good practice and by supervision of the producer/supplier and regulator, which should have responsibly for monitoring the procedure. The smaller commercial scale product operations do not have the opportunities for supervision and so need much more extensive and demanding product quality prescriptions. The distinction is more relevant than that of food/non-food production. It is wrong to describe the bulk service approach as pertaining to a lower quality product for applications not linked to food. Indeed it is likely that the bulk service approach for agriculture will produce more food that the extensive quality control approach.
- <sup>21</sup> The EWA draws the attention of the Commission to the extensive experience gained using biosolids on land for the parallel uses of soil and product criteria. Care should be exercised in migrating criteria relating to human, plant and animal health to make sure that they are relevant.
- <sup>22</sup> The EWA is not clear on what is meant by mixed waste. In principle there is nothing wrong about the use of mixed waste and there a lot of experience of this. But the criteria used to control the recycling practices should always reflect the risks presented by the origins of a waste. So for example the uses of mixed green and food processing food bio wastes will be driven primarily by the food bio waste risks.
- <sup>23</sup> Digestate, subject to the same criteria, can be used safely
- On the whole the EWA is of the opinion that if kitchen waste is disposed via the general household waste (from which other recyclables such as paper, glass, tins, plastics have been separated), the biodegradable fraction may also contain other biodegradable wastes as explained earlier. This may even result in that combined fraction not being classified as bio waste. It seems less risky if kitchen waste was to be disposed with domestic green wastes. The EWA suggests that these options should be compared by environmental risk assessment. If the option of co-disposal, as suggested above, is favoured, the Commission might consider how guidance could be given to the waste collection authorities on this matter.
- <sup>25</sup> There is a particular issue of the co-disposal of waste water and kitchen waters via sink disposal units. These add biodegradable loads to municipal wastewater. The wastewater utilities have, in general, been against these because of the operational problems they cause and the additional cost burden of treatment which cannot be recovered by conventional utility charges. Once again the EWA recommends that this

matter should be resolved finally by environmental risk assessment, and if sink disposal units are favoured, Member States will, at the very least, need to consider whether ownership and use of the units should be licensed by water utilities and subject to tariffs.

### Q7 Gaps in the regulatory framework concerning plants which do not fall in the IPPC scope and how should these be addressed.

26 All plants producing effluents and waste should be regulated. If by virtue of sub sector or size they are exempt from the IPPC regulations they should still be subject to parallel national regulations. Equally all commercial and utility compost plants should be subject to regulation – but home and small communal plants and their products may be exempt.

# Q8 Advantages/disadvantages of treatment and use of alternative bio waste management techniques. Obstacles preventing further developments and introduction of techniques

27 The EWA is pleased to see that recycling of organic wastes is recognised as being good for soil fertility and that it contributes to the mitigation of climate change. It must be recognised that good utility operations need to be founded on robust reliable processes. There is always risk in being a forerunner in introducing new processes and uses, so there is a need for supported European and national demonstration plants to gain data and increase confidence. Availability of funds is always problem – so European research funds should continue to treat these matters as a priority. Legislation and regulatory practice should always encourage innovation.

#### **FINAL REMARKS**

28 The EWA would be pleased to elaborate on any of its answers at the discretion of the Commission

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