EEB comments on the Draft Discussion document on

Biowastes and Sludges of January 2004

18 February 2004

Comments on Annex II - Biowaste

The Soil Strategy and its focus on Organic Matter

The EEB welcomes the initiative taken by the EC with this Document, which boosts again initiatives, discussion and activities in the field of biowaste management; it therefore may address the increasing concern on the lack of activity at the Commission on Biowaste, in the fairly long time elapsed since the release of last Working Document (issued in early 2001).

The EEB is however very concerned with the fact that the current document looks considerably more vague than the previous Working Document. Its key elements are given as "points for discussion" whereas they were already well structured by way of "bricks of the strategy" in the previous Working Document. This is surprising, since provisions of the 2nd Working Document were well structured, and had been thoroughly discussed and widely agreed during the consultation following both the 1st and the 2nd Working Document.

Although we understand this new Document has to consider the Biowaste Strategy in the broader context of the Soil Strategy, we do not see any major constraint to confirming the Strategic Approach of the previous Working Documents; they already fulfilled the mandate (included in the EC Communication on the Soil Strategy) to prepare a Directive on Biowaste to "prevent contamination and promote the use of certified compost". We are concerned, instead, about the unstructured discussion on key points of the Biowaste strategy, which may slow down and confuse the decision-making process.

Above all it is important to keep the focus on promotion of source separation, as a tool to guarantee the "prevention of contamination" which needs to be assumed as a goal by the Commission initiative according to the mandate included in the Commission Communication on the Soil Strategy; we wish to remark that:

- The Soil Strategy emphasises that Organic Matter (OM) is key to Soil Fertility – its recovery is considered as one of the cornerstones of actions to be taken and operational strategies to be promoted
- The role of Soil OM as a "sink" of Carbon is widely recognised
- Wider benefits have to be taken into account: improved tilth and workability, increase of buffer capacity, reduction of nutrient leaching, improved water retention, etc. all of which impinge upon savings of energy and sustainable management of croplands. Such effects are more difficult to account for (and are therefore widely neglected e.g. in LCAs), but they should be considered as essential elements in the policy-making process.

Bridging the gap to waste strategies

Despite the foregoing, EU waste legislation does not mirror the importance of soil organic matter – indeed, we rather have drivers for other options (such as support to energy recovery from organic waste, by virtue of provisions of Directive 2001/77 on Renewable Energy Sources) .

The lack of clear drivers for recycling of clean organic materials makes local strategies somewhat confused. In various Member States and Accession Countries NO EFFORT is being made to define conditions for the growth of source separation – as a tool to deliver clean organic feedstocks - and composting

The issue of "drivers" for the development of a common EU biowaste strategy is a key one. Stakeholders and local decision-makers need to work on the common perspective of a background long-term strategy. Drivers may steer local decisions (e.g. implementation of schemes for source separation), while concurrently driving investments and efforts of the recycling industry towards the needed installation of treatment capacities.

The "business as usual" situation, on the contrary, does not provide for common background drivers: pilot schemes in areas where biowaste management has been previously neglected, hardly find installed treatment capacities, whilst investors do not have any confidence about a consistent long-term pay-back of investments .

Remarkably, composting has become (or is becoming) a cornerstone of environmentally sound management of soils and wastes *only where drivers have been established,* be it through statutory obligations (Germany, Austria, the Netherlands…) be it through recycling targets (e.g. latest developments in Italy).

The biowaste Directive should therefore BRIDGE THIS CURRENT GAP between the importance of organic fertility of soils and the lack of any subsequent strategy as to management of biowaste

Targets for source separation

It is clear that the primary need is therefore to establish *targets for source separation of biowaste.* This is widely agreed by Associations and Stakeholders, and has been supported in most position papers issued so far. Targets, instead of a statutory obligation, have the same "driver" effect, while they show more flexible as to their implementation, since they leave up to Member States the possibility to define implementation programmes focusing on most suited situations for implementation of source separation

Failing to set targets, the approach for the implementation of the Landfill Directive in many Member States will be a confused combination of incineration, pre-treatment and some minor development of source separation. In many EU Countries (and particularly in Southern Member States and Accession Countries) is what combination of composting and incineration should be adopted to fulfil targets of the landfill directive.

The problem is, the increasing importance of organic matter for soil fertility will likely become a key planning factor at a later stage, *but decisions are being made NOW and waste management strategies show a rather "rigid" structure in the short and mid term* (pay-back periods of facilities may be in the region of 10-20 years) which means, once established, facilities such as incineration need to be used whatever new strategic approach comes up. Hence a common EU perspective – as already outlined in the 2nd working document, would be helpful to steer strategies being laid down now in the direction of compliance with principles of sustainability, the soil strategy, etc.

This all points towards a greater emphasis on the urgent need for a strategic approach[1] establishing DRIVERS for source separation and proper management of clean sources of organic matter. The interested volume of materials potentially covered by such provisions (60 Mt, EU-15) cannot be neglected.

Further points on the need for targets:

- A key point is the need for strategies and drivers to develop source separation - strategies have been developed only where specific provisions have been set on source separation (Germany, Austria, Netherlands, Flanders etc.), which emphasises the importance to have common EU drivers. In the absence of specific EU drivers for source separation and composting, various Countries will show no

[1] For more details on the importance of such a Strategic approach see "*The Importance of a Strategic Approach for Biowaste Management – EEB comments towards forthcoming working document on the Biowaste Directive*, 5 December 2003".

meaningful development of composting, therefore coming short of goals of both the Soil Strategy and the Thematic Strategy on Prevention and Recycling.

- When it comes to assessing possible tools, targets for source separation are a more flexible tool, to be preferred over a duty on source separation everywhere; in fact, targets may be implemented by MSs through specific "implementation programmes" with provisions addressing specifically most suited areas for source separation / composting and, in a different way, areas where the structure of existing collection schemes and/or the capacity installed for other waste treatment options are not favourable to implementation of intensive source separation.

- The targets for diversion of biodegradable waste from landfilling, set out by the Landfill Directive, have not proved, by themselves, to be enough to foster recovery of clean sources of organic matter, if not complemented by statutory obligations (German, Austrian, Dutch approach) specific targets on composting (which is the recent Swedish approach) or on recycling (Italy and future effects of the UK recent Waste Strategy)

Extended Impact Assessment and source separation

In relationship to the above, the Extended Impact Assessment, whose broad structure was presented at the ad hoc meeting, should be focused much more on the *effect that specific provisions on source segregation have caused to the growth of source separation of biowaste, recovered as a clean feedstock for the improvement of soil*. The combined effect of "composting + incineration", which seemed to be considered in some tables shown at the meeting, is not so meaningful – from the standpoint of the real contribution to recovery of clean organic matter - as an assessment of actual split contributions of the 2 strategies.

Mechanical-biological treatment (MBT)

The EEB supports the actions envisaged on MBT and the approach considered in the Discussion Document. Although not directly connected to the Soil Strategy, Mechanical-Biological Treatment has to be kept within the scope of the forthcoming Biowaste Directive. It is important to remark that the Biowaste Strategy *was preliminarily drafted independently from the Soil Strategy, and has been merged at a later time* into the Soil Strategy given its wide and beneficial connections to the Soil Strategy itself. Some important aspects of Biowaste Management - in particular, as far as consistent strategies and treatment options to fulfil the goals of the Landfill Directive are concerned – are not within the scope of the Soil Strategy, but should complement anyway concepts for the management of biowaste.

Remarkably, MBT is a key tool to keep the system "flexible" as long as source separation (and namely that of biowaste) still grows, which implies variation of volume and properties of residual waste. Therefore, we need to stress that *MBT (for residual waste) is a primary tool to allow for the mid- and long-term growth of source separation (of biowaste); it is important to remark that MBT may be coupled with both landfilling and with energy recovery from high-calorific value fractions produced thereby.*

Similarly, we also support the definition of concepts pertaining to the evaluation of performances of MBT in terms of reduction of biodegradability of treated materials. This is needed in order to complement provisions of the Landfill Directive, which does not define when a treated material has to be considered not "biodegradable" any more. Plenty of scientific evidence on the positive effects of MBT is available, and it has widely informed specific legislation in some Member States. Failing to include such provisions, the risk is that only incineration is considered as suitable to reduce biodegradability of residual waste.

Quality requirements

- concepts for the definition of limit values (both in the text and in the technical annex) are in line with scientific evidence and the primary focus of the Soil Strategy on long-term preservation of soil as a limited resource.

- In particular, we support the concept for definition of limit values for the safe use of compost , which is focused on the control of long-term quality of soils ("*long-term safe application*" in the own words of the Document), instead of simply considering a risk assessment of *immediate* effects on the food chain. The long-term soil safety is to be prioritised – in line with the basic concepts of the Soil Strategy itself - so that integrity of the soil as a primary resource and its multi-functionality be kept in the long run. This is designed to address the mandate in the EC Communication on the Soil Strategy, which calls for a Directive on Biowaste to "*prevent contamination and promote the use of certified compost*". Ongoing work at the WG Contamination should provide sound basis for this.

- The list of parameters covered by quality standards should primarily address potential pollutants, whereas agronomic properties (e.g. organic matter, hydrological properties, salinity, NPK content, etc.) should be defined by market-oriented forces, according to sector-specific requirements.

- The list of pollutants covered should allow for the specific nature of input materials, considering in particular a limited range of parameters when kitchen waste is composted, relative to mixtures including sludge.

Relationship with the Animal By-Products Regulation

The EEB particularly welcomes the initiative taken by the Commission to address the need for EU common requirements according to provisions of art. 6(2)g of EC Regulation 1774 (2002). This shows to be particularly urgent, since extremely varied approaches have been adopted in various Member States in order to implement temporary requirements (which shall be in force until common EU rules are defined). Since in many Member States and Accession Countries a particularly prescriptive approach, seeking compliance with requirements of Annex VI, Ch. II, has been adopted (or is underway) it is important to remark again that the requirements set out in Annex VI, Chapter II do not apply to Category III Catering Waste, pursuant the clear sentencing of art. 6(2)g. Unfortunately, the misleading point 14 of Annex VI, Chapter II has affected in a misguided way some Country-specific enforcements of the Regulation; as a consequence, many Member States have defined requirements aiming at achieving the "equivalent effect", in spite of the overruling sentencing of art. 6(2)g and of the clear remarks[2] at point 21 of the EC Guidance on enforcement of the ABP Regulation issued in November 2002.

The EEB particularly recommends that the EU common process requirements to ensure sanitisation take into account also non-thermal effects of sanitisation, which seem to be a major missing point of the technical provisions of the ABPR

Home and Community Composting

The EEB particularly supports home composting

- as a tool for waste prevention at source
- as an activity fully in line with the proximity principle
- as a strategy with a highly educational appeal

Home composting shall not be subject to any licensing procedure. What is most important, is to establish information and promotional campaigns, and in such respect we call on the Directive to set a mandate for Member States to provide for programmes to promote it.

[2] "*The processing standards in Chapter II(C), Annex VI of the Regulation relate to the approval requirements pertaining to biogas and composting plants set out in Article 15. These processing standards do not affect the provision in Article 6(2)(g), which specifically exempts catering waste (other than from means of transport operating internationally), when it is the only ABP used as raw material for a biogas or composting plant (…). The Commission will consider modifying the wording in paragraph 14 of Chapter II(c) of Annex VI in order to avoid possible confusion."*

In certain EU member states community composting is playing a significant part in sustainably managing organic resources. It can ensure composting is carried out properly while still being carried out at a local level in accordance with the proximity principle.

There is a wide range and scale of projects in countries such as the UK that fit under the community composting banner. These involve the source-separated collection of both kitchen waste and garden waste. This experience should form the basis for how community composting can be developed across the EU and we would recommend that the following points on community composting should be dealt with by the directive :

- A clear but secure system of exemptions from waste management licensing.
- The provision of support networks for community composters.
- Recognition of the necessity of funding provisions for the development of community composting projects.
- Provisions for the payment to community composting groups for waste management service provision.
- Standardised procedures for monitoring and quantifying (harmonising guidelines)

Other issues

- An important point which is missing from the Document (whilst it was covered by the 2nd Working Document) should be the preference for clean recovery of source segregated biowaste through source separation, over application of Food Waste Disposers (FWD). FWDs typically imply a much higher contamination of biowaste, once it's sent for treatment at WWTPs. The increasing concern on organic pollutants and heavy metals in sludge – although it should imply preferably an *improved monitoring and control system* rather than a *ban* on their application – draws the attention to the need to keep potential sources of organic matter as clean as possible; in this respect, the application of FWDs typically implies a much worse quality of organic resources, and therefore cannot be considered otherwise than a "*poor management of valuable resources*". It therefore fails to fulfil the goals of the Soil Strategy to "prevent contamination".

- We therefore think the issue of FWD should be addressed, to discourage their application (a ban would probably go against the freedom of choice).

- In case a ban on FWDs may not be considered – due to issues pertaining to "freedom of choice among purchasers" (which anyway should be blended to our opinion with scientific evidence of environmental risks/burden of any choice) - ancillary provisions may be considered in the frame of the Biowaste Directive, such as:
    - a clear, sharp statement about the environmental preference for source separation, relative to FWDs and the "environmental burden" of strategies linked to such appliances
    - a clear ban on the use of public funds/grants/subsidies for the installation of such appliances – local provisions including grants/subsidies are proving to be a main driver for the diffusion of such tools, and divert relevant budget resources from proper implementation of effective, sustainable strategies for biowaste through source separation

Comments on Annex I - Sludges

EEB broadly welcomes and supports points raised for the revision of the sludge directive (Dir. 86/278/EEC). The EEB would like to emphasis that it is important that both initiatives, sludge and biowaste, have separate legislative initiatives as they have very different requirements and mechanisms.

The EEB would however, like to emphasise the following aspects:

A Sludge Quality policy

A Sludge Quality policy should be promoted, this must include:

- ✓ identification of the sources of input of hazardous substances
- ✓ establishing, as soon as feasible, a separate collection and treatment system for the sources of highest concern
- ✓ implementation of methods, whenever and as soon as feasible, to collect household faecal matter separately from other wastewaters so as to ensure no contamination at all
- ✓ development of other source reduction strategies – including bans on sink grinders (food waste should be tackled by source separation systems, already widespread across Europe and able to yield a high-quality input feedstock for composting)
- ✓ organise and promote exchange of views, cross-information about best practice on the above.

Limit values

Two points are most important when it comes to defining limit values for sludge eligible for landspreading: the principles according to which such limit values ought to be set , and the comprehensiveness of the list thereof.

Concerning the principles for setting limits, our request is that the aim of limit values *be not setting values, which a certain percentage of sludges complies with - but ensuring safe recovery of a high quality input*. While we are aware there are agri-ecological benefits of use of sludge on soils, in particular compared to industrial fertilisers, the long-term goal of *ensuring safety of soils and crops* should be leading the strategy.

The "no-adverse effect" or risk based approach (implemented through the "risk assessment"), led limit values in Northern America at levels 1 order of magnitude higher than the ones we're debating in Europe (see EPA CoR, Part 503); such approach is not ensuring safety of soils in the long run, as it only aims at detecting or foreseeing effects on the food chain and human health in the short run; we ask to refrain from considering such an approach.

We think instead that a sustainable strategy should be based on *conservation of soils in the long run*. In such respect, 2 approaches are possible:

- a "no net accumulation" approach: this poses some problems; firstly, it leads to debatable issues, e.g. the plant uptake which can vary widely across Europe (climate, soil)[3] and would lead to diversified calculations; more importantly, this neglects the background diffused contamination, may therefore end up with an end-of-pipe approach, stopping or widely restricting

[3] This is particularly true for those Potentially Toxic Elements needed by soil and vegetation, such as Cu, Zn, B. Many of us are aware that, from an agronomical standpoint, banning the reuse of organic matter, would imply the need to use then chemical fertilisers to give Zn, Cu, B to the soil.

recycling of organic matter, whilst setting no driver for the improvement of its quality. Therefore, *the principle of a no-net accumulation is not fit to definition of limit values in current conditions, although it should be targeted in the long run*

- we rather recommend *a very long accumulation time* (even longer than the one coming from limit values set in the EC Directive 278/86 and proposed so far in previous Working Documents), so we can meanwhile address in a balanced way the issue of heavy metals used/emitted in industrial processes and coming from other sources[4], and ask for lower and lower concentrations with time.

The latter is actually the strategy aimed at by the "programmes on prevention of pollution" included in the previous 3rd Working Document (released April, 27th 2000) for the revision of the Directive on Sludge. The EEB considers this to be the most appropriate approach to allow for a driving effect for improvement over time of the sludge management across the EU; we therefore ask for it to be made and kept particularly stringent and effective.

We want to remark further that, since we know that a vast part of pollution comes onto farmlands through atmospheric deposition, we cannot just put a legal and operational burden on the application of sludge, without asking at the same time for a thorough improvement of emissions from other sources (industry, transports). A sound link should therefore also be established with targets of the Daughter Directives on "Air Quality".

Another key point is to consider *extending the number of substances covered by limit values*: i.e. more metals of concern and persistent organic pollutants, according to the outlets of research programs being carried out. **We therefore think that the tables on limit values should be kept "flexible" and subject to easy updating**. We do not consider guideline values for persistent, toxic and/or bioaccumulative organic compounds sufficient – limit values should be established.

Composting of Sludge

The points raised do not sufficiently stress the importance of proper treatment, and namely biological treatment, in order to ensure the following:

- ✓ change of biochemical features of the composted material, that permanently prevents re-growth of pathogens on it
- ✓ stabilisation of organic matter, that ensures no side-effect to soil and vegetation (such as phytotoxicity, progressive lack of oxygen in lower layers of the soil, etc)
- ✓ binding of nitrogen in organic form, that prevents leaching and ensures a most effective release of that during the vegetative period (therefore allowing a lower use of chemical fertilisers).

In our views, biological treatment should be promoted, e.g. setting a wider range of opportunities of application for composted sludge than for thermally or chemically treated sludge; application of materials which underwent these latter treatments should be further restricted. It might be noteworthy to mention the fact that in many countries a regulatory development is forecast whereby only composted sludge will be allowed land application.

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[4] Thus it has been calculated in France that 76% of copper and 89% of cadmium come from fertilisers and pesticides, while 97% of lead comes from the atmosphere. A chemically fertilised plot receives 4.5 g cadmium/ha/yr, while using sludge plus a smaller amount of fertiliser can bring only 2.7 g/ha/yr.