



EEB Comments on the final reports of the working groups under the thematic strategy on soil protection, 30.04.2004

1. Working Group “Organic Matter”

- The EEB strongly supports any strategy which considers the **integration of various possible farming practices** (including **organic farming**, which gives wider environmental benefits; **conservation tillage** e.g. where erosion is to be tackled prominently; the **use of Exogenous Organic Matter (EOM)** where other sources are not available, nor are crop residues enough to restore depleted soils; etc.) all of which should have a common aim to restore levels of organic fertility and put Organic Matter again at the core of Good Agronomic Practices (GAPs).
- We reject, on the contrary, the simplified position that “keeping crop residues in farmlands is enough for a policy on OM across EU”; this is certainly a reasonable practice and should be supported/promoted, but the statement overlooks site-specific conditions (the real practicability of various options and related benefits and downsides), and the current status of widely depleted soils in many areas across Europe. Therefore, also the use of EOM should be promoted, and strategies to keep sources of EOM unpolluted (source separation, policing of waste waters, etc.) should be prioritised
- Equally, EEB rejects the recommendations put forth by WG Erosion, that the use of EOM is considered sort of “dangerous” by itself, irrespective of whether strategies have been put in place to prevent contamination. We strongly call for such statement to be changed into a statement which more clearly defines strategies to keep sources of EOM clean, along the lines singled out below.
- The final report of the working group on organic matter should therefore keep a **high profile on strategies to secure beneficial application of clean sources of EOM**, namely:
 - **Source separation of biowaste**; to promote this, drivers should be established in the forthcoming Biowaste Directive, by way of statutory obligations or targets (which may seem preferable, to give the system the needed “flexibility”)
 - **Programmes for the prevention of pollution of waste waters**; policing of wastewaters. This is aimed at avoiding the “end of the pipe” approach which was lately taken by Switzerland. According to which “sludge cannot be used anymore in farmlands”, whatever their actual quality and practicable strategies to improve it. This will lead to new massive incineration capacity to be installed in Switzerland; more P and N fertilisers to be produced and used.
 - **Reduction of some integrators (e.g. Cu, Zn) in feedingstuffs** adopted in animal husbandry
 - and, most importantly, **link up to the air protection strategy**, in order to prevent diffuse contamination of crop residues and food commodities; this would therefore improve further achievable quality of food scraps and of compost from source separation
- The EEB calls for the need to **refer to the outcomes of TWG “EOM” and of WG “Contamination” (TWG “Diffused contamination”)** for **any issue related to safe application of EOM**. This is required for a proper assessment of all implications and avoids the pitfalls of an undefined, poor evaluation of needed strategies.
- Another key issue, in such respect, is the need to **define a consistent approach for evaluation of “safe” conditions for the application of EOM**. Along the lines of detailed assessment carried out at WG Contamination (TWG Diffused Contamination) this can be neither the “risk based” approach – which barely focuses on ecotoxicology, and overlooks the need to

keep control on soil quality – nor the “no net accumulation” (NNA) approach, which is a typical “end of the pipe” approach – since, in spite of its environmental “appeal”, it neglects to tackle diffuse contamination at source, and runs the risk of banning application of EOM, thereby losing its benefits, whilst still suffering from the diffuse contamination (atmospheric fall-out, pesticides, etc.). **The practicable approach, for an optimised strategy is the “sustainable, long-term safe application”** which tackles, in the short term, the problem of reduction of pollutants at the source, i.e. diffuse contamination (whilst preventing AVOIDABLE contamination, e.g. through source separation of biowaste) and makes the “no net accumulation” approach feasible in the mid-term.

- The EEB calls for a **more balanced strategy for the management of organic matter**, which to date shows only drivers for its “energy recovery” (EC Directive 2001/77 on “Renewable Energy Sources”) and no driver for its agronomic application. This is in fact diverting a good deal of available organic feedstocks – suitable for organic fertilisation – towards incineration, regardless of their real calorific value and efficacy to produce energy (e.g. food waste and agroindustrial by-products may have around 80% moisture, but given the level of subsidies in many countries, they get incinerated to access the subsidy scheme)
- The EEB calls on the Commission to consider the following concepts, which have been proposed and accepted at the WG “Organic Matter”:

“throughout its work programme, the WG OM has adopted a science-based approach in order to pull together views, recommendations, outcomes of research which provides support to policy-making concerning strategies for the proper management of Soil Organic Matter. This has been a unique, unprecedented (at EU level) effort and its results should be properly taken into account. Therefore, the WG warmly calls on the Commission to build on results of the work carried out at WG OM and put in place a consistent set of provision for protection and management of soils and enhancement of their agro-environmental role.

*It is particularly recommended to finalise, **with no further delay, provisions concerning the use of EOM (namely, the Directive on Biowaste and the Revision of the Directive on Sludge), along the lines of the working documents which were already prepared, thoroughly discussed and widely agreed during past years.** Such Working Documents have raised lots of expectations which cannot be further disappointed. The general structure of such working documents looks consistent with the holistic approach undertaken by the WG, with particular reference to their provisions on strategies to be put in place in order to prevent contamination of organic sources, thereby preventing contamination of soils whilst benefiting from their use. This would be in line with the mandate of the EC Communication on the Soil Strategy, according to which “a Biowaste Directive should be prepared with the goal to prevent contamination and promote the use of certified compost.*

It is imperative that this is taken forward as a matter of priority so that existing member states and the new member states can strategically plan for the sustainable management of organic resources relate to Soil Protection. Without a clear policy framework from the Commission, we express deep concern that long-term national waste and renewable energy strategies seem likely to be implemented that will be counter productive in terms of soil protection, and the recommendations of the WG OM (with a decoupling of European policies).”

2. Working group on monitoring

- In the final report it is not well documented why the DPSIR model should be used as a basis for the choice and selection of adequate parameters / indicators to make developments and the reasons for changes in soils visible.
- Clarification is needed how the monitoring system will be developed and financed in the EU members with poor experience on the matter. There are only few examples in the EU of fully operational monitoring systems. Monitoring will have to be based on existing sites and information.

The EU should provide financial and technical assistance to member states with poor experience to develop their monitoring system.

- The proposed indicators / parameters do not give any information related to the biological functions of the soil ecosystem. Most of the proposed parameters are related to physico-chemical properties and / or the structure of soils. The EEB thinks that bio-indicators (e.g. the number and diversity of organisms) are needed to give information about the biological functions of soils.
- The EEB also calls also the need to monitor the spread of recombinant DNA by soil microfauna and microflora of transgenic plants. Research exists that indicates the effects of these plants on soil. The soil protection strategy has to take this issue into consideration.
- The recommended parameters for biodiversity are not relevant to biodiversity decline estimations. Indicators such as microflora, microfauna and organisms' respirations are more appropriate measures.
- Radionuclides (Cs-137 and Sr – 90) must be also monitored, both for diffuse and local soil contamination, because of the long half-life (ca 30 years).
As a result of the Chernobyl accident radiopollution is significant especially in the Southern and Eastern member countries of EU25. Problems arise with regards to soil via the transference of these pollutants from soil, to plant, to animal. This is more marked in semi-natural ecosystems when combined with the increase in external dosage (exposure)

3. Working group on contamination

- The EEB supports the need for a long-term policy of “no increase of contamination” to prevent further contamination by industry and requires that soil assessments be carried in advance of any potentially soil polluting activities.
- **The EEB therefore rejects the risk-based approach for the new diffuse sources of contamination** because it does not ensure safety of soils and human health in the long term and is an end-chain solution. We support instead a precautionary approach, i.e. designed to keep long-term quality of soils: 1. stopping contamination from diffuse sources with preventive measures. 2. substituting hazardous substances with safer alternatives (e.g. substitute mineral fertilizer with clean EOM, and decreasing the use of pesticides thanks to the soil-borne suppressive power of clean compost from source separated materials). The risk based approach should only be used for historically contaminated land. The overall aim should instead be to conserve the multi-functionality of soils in the long run. **It is imperative to tackle diffuse contamination at the source**, and in this respect, we strongly recommend to adopt the concepts for the safe use of EOM (“sustainable, long-term safe application”) which have been described in section 1.
- Therefore the EEB suggests that a generation target for soils needs to be established, similar to the objectives related to marine waters (OSPAR Convention) and freshwaters (Water Framework Directive). Similar substance criteria (persistence, bioaccumulativity, toxicity, hormone disruption etc...) to those used for water can be employed for soils. **The emission, release or discharge of such substances into soils should be phased out by 2020.**

In order to achieve this objective the main measures needed for soil protection must be incorporated into the EU's agricultural, waste, air and chemicals policies. Waste prevention, the phase-out of toxic components (chemicals, heavy metals, dioxins, PCBs, PAHs, pesticides), and the increased separate collection of wastes (with particular reference to the use of the biodegradable fraction as high quality compost) are among the main measures designated to achieve the objective of protecting European soils from pollution through waste disposal. An effective new EU chemicals policy should be based on the precautionary approach to keep

soils unpolluted in the long run. This would allow contamination problems to be tackled at source, and contribute substantially to the achievement of the above-mentioned objective.

A Directive on the sustainable use of pesticides is needed. This would contribute to a high level of protection of human health and the environment through reduction of dependency on and, wherever possible, elimination of the use of pesticides. Again, the use of clean compost from source separated biowaste can help reducing the use of pesticides thanks to the soil-borne suppression.

Additional recommendations:

- Install a tax system : for real application of the polluter-payer principle, the external costs (water contamination, clean-up operation...) should be integrated in the price of the substances polluting soils and groundwater;
- Implement extended producer responsibility whereby producers are fully responsible for the costs of collection and treatment of waste;
- an effective environmental liability system;
- more support for agricultural practices like organic agriculture and integrated agriculture;
- The European Commission should develop an EU framework for the definition of Good Agricultural Practice. Member states should develop more detailed criteria adapted to regional, climatic and other conditions subject to approval by the Commission. This should include provisions on fertilizers, pesticides, etc.
- Research and collection of data at EU level about the toxicology and ecotoxicology of man-made substances (pesticides, fertiliser; heavy metals, POPS and other chemicals, air deposition elements) which accumulate on soils and in groundwater.
There is a lack of knowledge about the interaction of substances, e.g. heavy metals and pesticides and their effects on human health and the environment.
We should not endow future generations with risky soils and limit their freedom to use the land differently.
- The EEB calls for the end to the unauthorised sale of hazardous, toxic substances (like pesticides, solvents...). These substances should be handled by specialists trained on how to use them, the risk they pose on health and the availability of safer substitutes.
- Limit drastically or ban the use of chemical substances in sensitive area and protected area like Natura 2000 sites and national parks;

4. Working group on research

- The report on soil contamination should take into account the long-term effects of GMOs on the environment, the effects of GMOs on soil biodiversity and the contamination by GMOs via soils. It is necessary to choose indicators and have research on the consequences that those GMO plants will have on the soil (soil biodiversity - microorganism). If this aspect is not considered now, we will not have evidence about the consequence or non effects of those plants/ new technology in the near future;
- The research group should also take into account new substances like hormones and antibiotics and their effects on the soil system. These substances are currently only considered where water is concerned. Their long-term effects on soils have to be investigated.

