Draft ESPP input to the EU consultation on the Urban Waste Water Treatment Directive

The European Sustainable Phosphorus Platform (ESPP) brings together a range of industry sectors and stakeholders concerned with sustainable phosphorus management, for which core aspects are reducing phosphorus losses to the environment (eutrophication) and developing phosphorus recycling.

We consider that the UWWTD is a key piece of EU environment policy, and has largely contributed to reducing phosphorus levels in rivers and lakes, and to improving surface water quality, with considerable benefits for biodiversity and for users. Considerable further work is however needed to reduce phosphorus emissions, both from municipal wastewater and from agricultural losses, because very many water bodies are still today not achieving phosphorus levels required by Good Quality Status. In many ecosystems, eutrophication impacts occur even with very low water phosphorus levels, and this is accentuated by climate change and by the presence of legacy stocks of phosphorus in both soils and aquatic sediments.

We therefore consider that the UWWTD requirements should be fully maintained, and that – as at present - these should be extended and reinforced locally by catchment management plans under the WFD (Water Framework Directive) where this is necessary to achieve status objectives.

In particular, it should be clarified that "appropriate" treatment (agglomerations < 2000 p.e.) should ensure phosphorus removal in eutrophication sensitive areas, subject to catchment permitting (see below).

We note that addressing eutrophication will in many cases require further reductions in phosphorus emissions beyond current UWWTD requirements, both to reduce water-body phosphorus concentrations, and also to avoid accumulation in sediments. In order to optimize cost-effectiveness and minimize environmental impacts (energy consumption, chemicals inputs) catchment permitting or catchment level nutrient emissions trading should be implemented, subject to ensuring that quality objectives are achieved at all points in the catchment.

We support the EU Court of Auditors recommendations (special report n°2, 2015) to tighten discharge limits to take account of technological progress, and to improve cost-recovery to ensure sustainable financing of wastewater infrastructure.

Achieving lower phosphorus emissions, and phosphorus removal in smaller sewage works, will imply energy consumption, materials and chemicals, and will both increase and modify the nature of sewage biosolids (dewaterability, nutrient content, chemical content such as polymers, flocculants, reactants). This should be considered when defining phosphorus discharge consents, in particular implications of valorization of sewage biosolids (methane production, return of stabilized organic carbon to soil, nutrient recycling).

Phosphorus consents for small sewage works may in some places be necessary (discharge into small, sensitive water courses) but in other cases may be disproportionately expensive (economic, energy and resource costs) and catchment nutrient permitting may be preferable.

We support the EU Court of Auditors recommendations (special report n°2, 2015) call to require appropriate valorization of sewage biosolids, including energy recovery, return of stabilized organic

carbon to agricultural soils (important for soil productivity, crop drought resistance and climate resilience, and for the Paris 3/1000 soil carbon objective) and nutrient recovery and recycling (phosphorus and nitrogen). This should be included into the UWWTD and Sewage Sludge Directive objectives, and implemented through conditionality of EU subsidies (as suggested by the Court of Auditors).

We emphasise that further data collection and research is necessary into:

- phosphorus and nitrogen flows in sewage / sewage treatment / biosolids
- cost-effective and sustainable removal of phosphorus down to very low discharge limits (including reliability in varying sewage works operation conditions, storm flows) and removal of phosphorus in small sewage works, taking account impacts on biosolids production and valorisation
- levels of, risks, fate in treatment and in soils of organic contaminants in sewage biosolids valorization (pharmaceuticals, perfluoralkyl substances, household chemicals ...). See the joint position between ESPP EEB Eureau and others attached.
- Catchment permitting / nutrient emissions trading, including both point and diffuse emissions