European Sustainable Phosphorus Platform

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To representatives of Council, European Parliament, European Commission - 25th October 2023
Object: Trilogue on the Urban Waste Water Treatment Directive (UWWTD) revision

The European Sustainable Phosphorus Platform **welcomes that both Council and Parliament positions on the UWWTD maintain overall objectives of resource recovery from wastewater, and specifically maintain the principle of defining minimum reuse and recycling rates for phosphorus (art. 20).** This will forward the Nutrient Circular Economy, improve EU supply security for the critical raw material 'Phosphate Rock', and so EU food security. Processes for technical recovery of phosphorus from sewage sludge or wastewater or from sludge incineration ash are today available and operational and can offer synergies with reducing phosphorus losses (eutrophication).

We note with concern the proposal from Council to delete the minimum reuse and recycling rates for nitrogen in art. 20 and recitals 35/36. **In the context of increasing pressure on mineral nitrogen fertilisers (natural gas supply and prices, climate emissions), we suggest that the objective of nitrogen reuse and recycling from wastewater should not be abandoned**. European municipal wastewaters contain around 3 MtN/y, that is nearly 30% of mineral fertiliser nitrogen consumption (ESPP Scope 147). Nitrogen reuse and recovery are in synergy with objectives to reduce losses of N_2O (the largest climate contribution from wastewater treatment), ammonia losses to air (National Emissions Ceilings Directive) and nitrogen emissions to water from sewage biosolids use in agriculture. It is true that nitrogen recovery is less advanced than phosphorus recovery. Some processes for nitrogen recovery do already exist, are operational for decades in industry, and are today implemented in some sewage works, for example ammonia stripping / recovery of ammonia salts (e.g. Circular Values, Colsen, Detricon, RVT, Nijhuis, PureGreen, Membratec, Mezt, Lenntech see ESPP Scope 145). Other promising technologies are at experimental stage.

We suggest that an appropriate compromise would therefore be to specify assessment by the Commission of feasibility and cost/benefits of possible definition of reuse and recycling recovery rates for nitrogen.

ESPP welcomes the widening of art. 20 to **cover reuse and recycling from the wastewater itself, and not from sludge only** (change "from sludge" to "from wastewater and sludge" in both of two occurrences in art. 20 and also in recitals 28 and 35). This is important to avoid excluding existing or new Circular Economy routes and processes [both Council and Parliament, recital 28, art. 20].

ESPP supports Parliament's proposal to specify **measures to develop a functional market and support uptake of recovered nutrients** [Parliament, recital 28, art. 20].

ESPP welcomes the proposals to take into account (safe and appropriate) **reuse of nutrients in wastewater where this is used for fertigation**, according to crop nutrient needs [both Council and Parliament, recitals 10a, 28a, art. 2, 11, 15, 22].

ESPP also supports proposals to clarify that **reused or recycled nutrients should replace consumption of primary nutrients** (in fertilisers or in other industry applications where used as a functional chemical, e.g. phosphorus in flame retardants, batteries, catalysts …) [Council, recital 28].

ESPP also welcomes proposals to **include N_2O (nitrous oxide) in monitoring requirements for greenhouse gases**, because N_2O is today identified as one of the most significant climate emissions from wastewater treatment. Routes do exist to reduce emissions (biological process adjustments, N_2O catalytical removal technologies) [both Council and Parliament, recitals 16, 29art. 21].

ESPP is a not-for-profit association funded entirely by our 50+ members, brings together a range of industries (waste and water, chemicals, recycling, fertilisers), research institutes and regional authorities.

We would be happy to meet you at your convenience to discuss these questions or to answer any questions you may have.

Robert Van Spingelen, ESPP President