

DECREE OF THE MINISTRY OF AGRICULTURE AND FORESTRY AMENDING THE DECREE OF THE MINISTRY OF AGRICULTURE AND FORESTRY ON FERTILISING PRODUCTS (964/2023)

Main content of the proposal

The proposed Decree would amend the Decree of the Ministry of Agriculture and Forestry on Fertilising Products (964/2023) issued under the Fertilisers Act (711/202).

Preparatory work

The draft Decree has been prepared by the officials of the Ministry of Agriculture and Forestry in cooperation with the Finnish Food Authority. Various cooperation partners have also been consulted in the preparation of the Decree.

The following parties have been consulted on the draft Regulation: The Ministry of the Environment, the Finnish Food Authority, Natural Resources Institute Finland, the Finnish Environment Institute, the Bioenergy Association, the Chemical Industry Federation of Finland/Fertiliser and Liming Working Group, the Central Union of Agricultural Producers and Forest Owners (MTK), the Finnish Forest Industries Federation, the ProAgria Centres Association, the Finnish Water Utilities Association, Suomen Kiertovoima Oy representing the waste management sector, the Finnish Biocycle and Biogas Association, the Finnish Forest Centre, the Swedish-speaking agricultural producers' federation Svenska Lantbruksproducenternas Centralförbund SLC, the Finnish Association of Landscape Industries and Finnish Environmental Industries and Services YTP. In addition, the draft Decree was available on the website of the Ministry of Agriculture and Forestry (<https://mmm.fi/lausunnolla>) from x.x.2024 to x.x.2024 and was also open for comments from parties other than the recipients of the invitation for opinions.

Main proposals

The proposed Decree would prohibit the use of fertilising products containing ammonium carbonate in accordance with Directive (EU) 2016/2284 of the European Parliament and of the Council on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC (*the NEC Directive*). In addition, the Decree would clarify when a component material is suitable for use as a forest fertiliser or as a component material of a forest fertiliser, amend the nutrient requirements for forest ash with regard to phosphorus, potassium and boron, and specify the labelling requirements for forest ash fertilisers. In addition, the requirements for the declaration of secondary macronutrients, i.e. calcium, magnesium, sulphur or sodium, would be specified with regard to compound inorganic macronutrient fertilisers. It is proposed to add alternative temperature-time profiles for composts, according to which post-maturation would not be required for the composted material. In the future, digestates would not be required to undergo further sanitation in certain cases if the input to the facility had been sanitised before being sent to the receiving party. Sanitation requirements for biostimulants would be added in the same way as for other fertilising products containing organic matter. Phosphorus should be declared for liming materials if the phosphorus content is at least 0.3 % by mass, as is required for other fertilising products containing phosphorus. In the future, the ash and slag component category could also include ash from gasification plants, provided it is suitable for fertiliser use in other respects. Arable land with a pH of at least 5.8 would not be required to undergo soil analysis prior to the use of a fertilising product containing sewage sludge. If lime-stabilised sewage sludge is used, the pH requirement would be 5.5.

Proposed changes

Principal impacts

The proposed changes do not have any significant impact on the functioning of the authorities. The changes would reduce the costs of handling fertiliser products to some extent. Easing regulations with regard to the analysis of arable land would reduce the costs for farmers using a fertiliser product containing sewage sludge. The proposed amendments do not have any significant adverse effects on the health or safety of humans, animals, or plants, or on the state of the environment.

Detailed rationale

Section 6 The proposed Decree would prohibit the use of fertilising products containing ammonium carbonate in Finland in accordance with Annex 3, Part 2 of the *NEC Directive*. The proposal would clarify the policies for allowing component materials in fertilising products used in the forest. The reference to 'end-of-waste' status for component materials used in the forest would be removed from the Decree. Instead, the suitability for forest use would be indicated in the list of ingredients maintained by the Finnish Food Authority. The change would not lead to significant changes to existing practices or to the approval criteria for component materials. The Finnish Food Authority is already responsible for deciding whether a fertilising product with end-of-waste status is allowed to be used in forest fertilisation, which means the amendment to the Decree is primarily technical and its purpose is to clarify policies and interpretations. As a rule, the spreading of waste without a separate environmental permit is also not allowed, so the change will not result in any changes to current practices from that point of view either.

The Forestry Incentive Scheme Act entered into force on 1 January 2024. According to the Act, state aid can be granted for fertilisation to maintain forest health when a bog forest is fertilised with ash fertiliser or a forest suffering from boron deficiency is fertilised with boron fertiliser. According to the law, the amount of boron fertiliser used must comply with the manufacturer's instructions. The maximum amount specified in the manufacturer's instructions may be used only on the basis of soil, needle, or leaf analysis. The draft Decree would determine the maximum amount of boron per hectare on which the manufacturer's instructions should be based. A higher application rate would only be permitted when a deficiency has been established on the basis of soil, needle, or leaf analysis. The maximum amount corresponds to the application rate under the previous legislation. In order to protect groundwater, the application of fertiliser with added boron in category 1 groundwater areas would be prohibited due to the adverse effects of boron on water courses.

Section 7, subsection 3 The requirement to analyse arable land would be reduced so that the obligation to analyse soil when using a fertilising product containing sewage sludge would apply to arable land with a pH less than 5.8, and to land with a pH less than 5.5 when applying lime-stabilised sewage sludge. This would primarily reduce the financial costs for farmers. The solubility of harmful metals decreases as the soil pH increases. Although the solubility of metals is also influenced by other factors, such as concentrations of organic matter, the chosen model has been adopted for the sake of simplicity. This issue will be reviewed when the Council Directive on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture (86/278/EEC) is revised. The concentrations of harmful metals in sewage sludge are relatively low in Finland. The risk to the environment is also managed by limiting the total amount of sludge applied.

Annex 1. Product categories of fertilising products.

1C1.2. COMPOUND INORGANIC MACRONUTRIENT FERTILISER The declared minimum content of secondary macronutrients, i.e. calcium, magnesium, sodium and sulphur, would be 1.0 % by mass. The minimum requirement applies to an individual nutrient. The minimum content would be in line with other requirements for macronutrient fertilisers and would prevent misleading marketing.

1C3. forest ash fertiliser and Annex 3, forest ash labelling requirements. Forest ash fertiliser would refer to ash used in forestry in accordance with component material category 8, where the combined content of phosphorus and potassium is at least 2.4 % by mass. The nutrient requirement would be lowered slightly from the previous requirement, which means more ash would be suitable for use as a fertilising product. It is expected that, as the burning of peat decreases, the nutrient content of ash will increase and, after a certain period of time, ash will, as a rule, already contain enough nutrients without separate nutrient supplementation.

In terms of tree growth, the need for potassium is 100 kilograms per hectare. At normal application rates of approx. 3 to 5 tonnes per hectare, the ash should contain at least 2 to 3.3 % potassium. It should also be noted that the ash to be applied contains a variable amount of water. In terms of forest growth, the optimal ratio between potassium and phosphorus is about 2.3-2.5. When the ratio is lower than this, the risk of phosphorus leaching increases. If necessary, it would be possible to enrich the ash so that the correct ratio of nutrients can be adjusted and boron fertilisation can be carried out at the same time. However, ash should, by definition, contain sufficient phosphorus and potassium to ensure that it does not constitute waste disposal in accordance with environmental legislation.

A reference to the minimum application rate of potassium should be added to the label, so that potassium would not be a limiting factor for growth and the ash would have a sufficient fertilising effect. In a peatland forest where ash is used, potassium is the primary limiting factor for growth. The label of a forest ash fertiliser should indicate the total concentrations of potassium, phosphorus, and boron added to the ash fertiliser, expressed as a percentage by mass, and the moisture content. In addition, for added boron, the labelling of forest fertilisers should include the statement "To be used only for the identified need. The appropriate application rate must not be exceeded."

3A. ORGANIC SOIL IMPROVER

in section 3A, the table heading 'Quantities of pathogens in an organic soil improver' is corrected.

5. BIOSTIMULANT

Maximum quantities of pathogens for biostimulants would be laid down in line with those for other fertilising products containing organic matter.

Annex 2. Component material categories of fertilising products.

COMPONENT MATERIAL CATEGORY 3. COMPOST

An alternative temperature-time profile would be added, after which after-ripening would not be required. This would reduce the production time of the compost, but the hygienic level of the compost would remain good.

Component material category 4: digestate.

Where the component material to be treated has been sanitised immediately prior to the arrival of the component material for treatment, no further sanitation by the receiving establishment would be required. The Decree would not define the exact time, as it may be influenced, for example, by input materials and storage conditions. This would provide the necessary flexibility under the Decree and a more precise time limit would be defined in the self-monitoring plans of the facilities.

The unit of residual biogas potential is corrected. Component material category 4: digestate, residue biogas potential criterion (in table): not more than 0.25 l of biogas/g VS

COMPONENT MATERIAL CATEGORY 8: ASHES AND SLAGS

The fertilising product could contain ash formed by thermal oxidation of input materials included in the Finnish Food Authority's list of ingredients, as well as slags formed by metallurgical processes which are included in the list of ingredients maintained by the Finnish Food Authority. The change would also enable the utilisation of ashes formed in the gasification process.

COMPONENT MATERIAL CATEGORY 9: PYROLYSIS

The requirements for pyrolysis carbon would be clarified. The molar ratio of materials formed in pyrolysis and gasification should be such that the ratio of hydrogen to organic carbon is less than 0.7. They shall have no more than 6 mg/kg dry matter of PAH 16.

Annex 5 MAXIMUM PERMISSIBLE CONCENTRATIONS OF TOXIC METALS IN ARABLE LAND DUE TO THE USE OF SEWAGE SLUDGE

The table in Annex 5 shows the maximum permissible concentrations of contaminants in arable land to which a fertilising product containing sewage sludge may be applied. The conditions for soil analysis are laid down in section 7 of the Decree.

Entry into force

The Regulation would enter into force on [day] [month] 202[year].