

Spotlight

Far-reaching Changes in Fertiliser Legislation

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Photo: private

“We must protect our groundwater against excessive nitrate infiltration and reduce emissions of ammonia from agriculture. But we must also give our farmers the opportunity to provide their crops with adequate nutrients“, were the words of the Parliamentary Secretary of State, Dr Maria Flachsbarth, on the occasion of the reading of the draft Fertiliser Act in the Bundestag in February 2017.

The Federal Ministry of Food and Agriculture (BMEL) amended the legislation on fertilisers after several years of coordination with the Federal Ministry for the Environment (BMUB) and the German Länder. The amended Fertiliser Act has been in force since 16 May 2017 and the Fertiliser Ordinance since 2 June 2017. The planned ordinance on nutrient flow balance was approved by the Federal Cabinet in mid-June 2017 as a further component of the so-called “fertiliser package”.

How are the Fertiliser Act and the Fertiliser Ordinance related?

The Fertiliser Act forms the legal basis for the Fertiliser Ordinance and hence also for the transposition of the EC Nitrates Directive (91/676/EEC) concerning the protection of waters against pollution caused by nitrates from agricultural sources. The Nitrate Directive is implemented throughout Germany through the Fertiliser Ordinance. In order to monitor the effectiveness of the Fertiliser Ordinance, groundwater, surface waters and coastal waters are regularly tested to determine their state and the degree of their pollution. The Federal Government submits a nitrate report to the EU Commission every four years.

The EU Commission issued numerous requirements to Germany in 2014 to modify or tighten the Fertiliser Ordinance as no substantial changes regarding nitrate pollution were found in recent years, and the established nitrate and phosphor pollution in some regions is too high. At the end of October 2016, the EU Commission filed an action against Germany at the European Court of Justice concerning the inadequate transposition of the EC Nitrates Directive.

Amendment of the Fertiliser Act, Fertiliser Ordinance and planned nutrient flow balance ordinance

Substantial changes to the amended Fertiliser Act concern the introduction of site-specific upper limits for nitrogen fertilisation and the inclusion of biogas fermentation residue, compost and sewage sludge in the regulation on the so-called upper limit of 170 kg N ha⁻¹ a⁻¹ for nitrogen on farms. In addition, the enabling provision was created for the nutrient flow balance ordinance.

The provisions on fertilisation are stated more precisely in the amended Fertiliser Ordinance. The most important changes are

- the specification and uniform national regulation of the assessment of fertiliser requirements with yield-specific and site-specific upper limits for nitrogen input,
- the extension of periods during which no fertilisers may be spread,
- the limitation of N fertilisation in autumn to certain arable crops,
- the provisions concerning the storage of liquid and solid manure and
- a reduction of the control values for the nutrient comparison down to 50 kg N ha⁻¹ a⁻¹ as from 2020 and to 10 kg phosphate ha⁻¹ a⁻¹ as from 2023.

With regard to fertilising technology, low-emission spreading techniques are prescribed as from 2020 for liquid manure and fermentation residues on cultivated arable land and also for field forage cultivation and pasture land as from 2025. Furthermore, the intervals were extended for fertilisation in the vicinity of waters and on hilly land; exceptions exist for the use of fertiliser spreaders with boundary spreading devices.

The new Fertiliser Ordinance also provides for a stronger regionalisation in areas with nitrate-polluted bodies of groundwater or eutrophicated surface waters. Here the Federal Länder are obliged to issue further measures for the prevention of N and P input.

The planned nutrient flow balance ordinance is a new ordinance that obliges farms to capture and record the amounts of nitrogen and phosphorus input and the amounts provided by the farm. It is intended that as from 2018 livestock farms with more than 50 LUs or more than 30 ha of agricultural land will be obliged to draw up a nutrient flow balance if the animal population density exceeds 2.5 LUs/ha. As from 2023, this will apply to all farms with more than 20 ha or more than 2.5 LUs. Further provisions are to apply for livestock farms receiving farm manure from other farms as well as for biogas plants.

How are the changes in fertiliser legislation to be evaluated and what do they mean for agricultural practice?

The amendment to fertiliser legislation, particularly the Fertiliser Ordinance, contains numerous tightening clauses for the cultivation of agricultural land. The stricter requirements for fertilisation are particularly aimed at improving nitrogen efficiency and reducing ammonia emissions. Thus, they protect the environment against nitrogen inputs via atmospheric pathways and into the groundwater. In addition, the planned recording of nutrient flows (nutrient flow balance) can make an important contribution to improving the environmental effects and the nutrient efficiency of agricultural holdings. The Federal Government expects that a reduction in nitrate inputs into waters via the soil can be achieved in the medium term through the amendments to the Fertiliser Ordinance.

Besides securing the nutrition of crop plants and reducing nutrient losses, the Fertiliser Act also has the purpose of maintaining or sustainably improving the fertility of the soil, in particular the humus content typical to the location or type of use. Particularly regarding the last mentioned aspect, which is currently also under intensive discussion with the “four per 1000” initiative within the context of climate protection, conflicts of goals can arise as a “certain nitrogen surplus” is needed to increase the humus content.

Farmers now face the major challenge of translating the new technical requirements into their cultivation practice. In some regions in Germany and on some livestock farms, this will make it necessary to increase amounts of farm manure given to other farms or exported to regions with arable farming in order to meet the stipulations.

The Federal Government has now created the legal basis for dealing with nutrients in a sustainable and resource-efficient manner in agricultural production. However, the Federal Länder are now responsible for monitoring adherence to the provisions of fertiliser legislation! Some Länder have already declared their intention to tighten controls on the observance of agricultural law or have already created the necessary personnel capacities, e.g. Lower Saxony with its newly established fertiliser authority.

The coming months will show how successful the implementation of the new technical stipulations of fertiliser legislation is in practice.



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