

Introduction;

The Fertiliser Association of Ireland (FAI) is a voluntary organisation made up of members who are involved in retail, manufacture, advisory, regulatory and distribution of fertiliser and lime products across the island of Ireland. Our mission is to promote the efficient use of fertilisers to produce quality food in an economically and environmentally sustainable manner. The association has been in existence since 1968 promoting the best practice in fertilisers and nutrient management through public seminars, bulletins, and through our code of practice and website.

As an organisation who represent a broad facet of the agricultural industry we are well placed to reflect and give our opinion on the current nitrates action programme (NAP) and this current consultation document. However, there are a few considerations that the association wishes to initially make;

- a) There is a significant emphasis put on the reduction in nitrogen (N) fertiliser use that has taken place over the last number of years. While fertiliser price is an important factor, the industry has modified its fertiliser use and we feel that not enough importance is put on this.
- b) Since this latest nitrate action programme has been implemented (SI 113 of 2022) there has been many new measures put in place to improve water quality. Such measures as the fertiliser register have been only implemented this year and as such any positive effect on water quality won't be evident until 2025 at the earliest.
- c) We need to be cognisant of the biological systems that we are trying to influence. Changes made today will not result in changes tomorrow. Effects will take weeks, months or years depending on weather and climatic conditions.
- d) We are also in danger of overregulating the industry as fertiliser is an expensive input and not wasted lightly and the FAI have been advocating and helping all our stakeholders improve nutrient management, we should not lose sight of this we feel we need more of the carrot and less of the stick approach.
- e) Above all we need to remember what we are trying to protect. Our agricultural industry is built on grass, crop, animals and farmers. The soil and proper nutrient management is the bedrock to how this all functions. If we limit nutrient input to such an extent that growth is compromised, farmers will be forced to look for alternatives such as imported feed which then starts to dilute our competitive advantage.

2.1 Proposed Measures in the GAP regulations

2.11 <u>The reduction in maximum stocking rate</u>

We have already recently reduced the stocking rate limit from 250kg Org N/ha to 220 kg Org N/ha in derogation farms. We expect it is too early to determine the successfulness or otherwise of this measure. More work needs to be done on lag times and its impact on water quality.

2.12 <u>Reducing the allowance on chemical fertiliser</u> 5% Proposed Reduction



There is already a 10% reduction implemented and now a proposed 5%. Note a reduction has taken place of 29.7% in N use over the past two years (399,164 tonnes nutrient N in 2021 and 280,569 tonnes in 2023).

We need to be conscience that the advantage in our agricultural industry is our grass growth and by limiting chemical nitrogen we are reducing the potential of grass. Nitrogen use efficiency is high on Irish farms and should be promoted. If grass growth is limited this will have a knock-on effect on native feed availability and will have to be replaced by imported concentrated feed.

Lack of nitrogen in the sward can be attributed to the reduced grass yield of 1 tonne DM/ha in 2024.

We need to be flexible to account for the variability in the response to N which will vary throughout the year due to weather and climate conditions.

90kg/ha chemical fertiliser limit on farms with a stocking rate less that 85kg/ha.

This measure penalises lowly stocked farmers by limiting their crop production potential. This limit may restrict silage yield and quality, much needed for winter fodder, particularly in the case of a fodder shortage.

Our fear is, if this measure was implemented without a flexible approach that lowly stocked farmers would be unable to produce buffer feed.

2.1.3 <u>Reporting on Organic Manure Movements</u>

The FAI favoured increased monitoring of slurry in principle. We do have concern on the increased workload that this will put on farm advisors and farmers themselves due to time constraints and normal farming activities.

2.1.4 <u>To mitigate overstocking of land areas</u>

Agree with the general premise but the FAI note that organic manures are an important nutrient source for agriculture and should be applied where there is a requirement as per the farm nutrient management plan.

Nutrients should not be applied in excess of crop demand as earlier highlighted in our code of practice.

2.1.5 <u>Nutrient excretion rates of the young bovines up to two years of age.</u>

The FAI support the accurate recording of nutrient excreta for all livestock based on most recent Teagasc research.

2.1.6 <u>Managing crude protein in concentrate fed to dairy cow.</u> The FAI support the accurate recording of nutrient excreta for all livestock but the health and welfare of livestock should not be impacted. We suggest a three-year average should be used to calculate feed usage on farm.

2.1.7 <u>Concentrate feed during the grazing season</u>



We note the continued required reduction of CP in feedstuffs, now from 15% down to 14% and the voluntary reduction below 14%. We are concerned on this continuous reduction and is there science to merit this reduction for bovines apart from to drive down nitrogen excretion rates. The general dietary crude protein should be determined by milk records and nutritionist advice on overall dietary crude protein to allow for stress in a particular year.

2.1.8 Increase clover use

Soil fertility (P, K and lime, especially for establishments) needs to be optimum to ensure clover growth is optimised. Additionally N fertiliser advice for clover swards needs to be refined, to allow for changing sward composition with more structured training and advice to be provided for farmers to increase their uptake. The success of clover retention in the sward can be quite variable at farm level and allowances must be made for this. Financial supports for lime would be helpful to sustain the growth and persistence of clover in swards.

2.1.9 Restriction of unprotected urea

This is less of a nitrates or water quality issue and more clearly an emissions related issue. Replacing all urea with protected urea would be a win for our national inventory and climate action plan but it has limitations. This proposal would only impact on ammonia emissions but would increase direct emissions of N₂O which is a more potent GHG if alternatives are used. Further to this, unprotected urea applied during the year can be associated with zero emissions (incorporation, after rain, etc) but this is not captured in our national inventory. Importantly, the FAI disagree that an outright ban on urea is the correct direction to take and there are a number of critical points that need to be made

- This action will Increase the cost of nitrogen to farmers of €50 per tonne at present day prices which would be an overall cost of 5 million euro to the farmer. This would be in excess of 10 million euro if all urea was to be protected.
- The urea market in Ireland is relatively stable which suggests that applications are being made when nitrogen recovery is consistently high and there is no agronomic benefit of protected urea and as such, farmers are confident in its use at the correct times of year. Protected urea has allowed urea to be used throughout the grazing season and therefore the reason why the urea market has increased with the addition of protected urea.
- Protected urea is a relatively new addition to the fertiliser market. There is still work to be done to refine the product offering and formulation. Protected urea has a useby date and an inhibitor that will degrade over time. When protected urea is part of a blend there are further issues around granules spreadability and integrity.
- Further complicating matters is the impending CBAM carbon border which will have significant impact on the price of urea. This will be a further impact on urea and the urea market in EU. This could potentially lead to significant increased tariffs on urea in Europe, making it uncompetitive against calcium ammonium nitrate (CAN). Mandating only protected urea will further disadvantage farmers and result in significant increases in production costs.



- Work is currently being undertaken to assign emission factors to fertiliser straights and blends. As this work is being carried out it may impact the formulations that are available on the market.
- Seasonal restriction of urea would be an appropriate measure to adopt and would benefit the national ammonia and GHG inventory. However, the UK evidence of a seasonal restriction on unprotected urea has seen an increase in the use of alternatives such as CAN.
- Practices such as incorporation (ploughing) of unprotected urea into the soil has no emissions associated with it but under the current proposal would be prohibited.
- In Ireland some existing dairy Co-ops and merchants are subsidising protected urea use to increase sales. Should the state look to this model to increase the adoption of protected urea?
- The FAI is totally opposed to the proposed restriction on granular urea while allowing for liquid urea application. The emissions associated from urea will be the same whether in a granule or as melted urea or in liquid form as urea ammonium nitrate (UAN). The proposal suggests an agronomic advantage of liquid versus granular fertiliser which has not been scientifically verified in Ireland. We need to prove the science and therefore this needs proper research in Ireland and especially on grassland and therefore the association can't stand over this proposal and should not become part of nutrient regulation without rigorous scientific evaluation.
- The FAI want to stress that with modern fertiliser spreaders, border restrictions and dust free product, there is no issue with even application of urea by a competent operator. Boundary and borders mechanism ensure that buffers and set back distances can be observed. Farmers and contractors have invested heavily in GPS systems and modern twin disc application methods due to generous TAMS grants in recent years.
- The FAI believe that liquid urea as in UAN has a greater risk of water contamination from on farm storage due to the quantities been stored.
- We object to the increased cost changes of using sprayer type systems and more complicated storage systems and bunding requirements. Promoting UAN as a straight N product will result in the reduction of P and K, and corresponding soil fertility.
- The successful transition from CAN based products and urea to protected urea is modest since its inception in 2017. Total product related urea sales went from 112,279 tonnes (2017) to 189,859 tonnes (2023). During this period the overall market dropped 400,000 tonnes, (1,553,000 tonnes to 1,136,000 tonnes). We favour a carrot rather than a stick approach in this continued transition. We fear there is a risk of slippage back to CAN based products due to poor grass growth mid-season in 2024 along with the spreading difficulties encountered by farmers. We fear the farmer will react negatively to a stick approach.
- The association suggest that if the approach is to increase the adoption of protected urea, then the focus needs to be on the CAN users. The majority of N that is applied in this country is as CAN.

2.2 Proposed Non-regulatory measures



2.2.1 Teagasc-led "Better Farming for Water" Campaign.

The FAI fully support this campaign. Concern in the use of "surplus" in the case of N. and concern that this is listed as Point 1 in the "8 – Actions for Change"

Reduction in N balance from national fertiliser survey over the last numbers of years. This is a positive for water quality.

Nutrient balances/surplus comes back to nutrient management planning and if done correctly there should little concern about surpluses. Nutrient balances are useful to drive discussion and dialogue but should not be used as a regulatory tool.

2.2.2 Inspections and other enforcement activity to build compliance.

Compliance is important and the FAI fully support checks and balances. The FAI supports the smoother decision-making process in granting planning permission for slurry storage

2.2.3 Improving organic manure storage capacity

The FAI fully supports farmers to build and upgrade adequate nutrient storage facilities. Financial incentives are necessary to support farmers. Barriers to grant aiding slurry storage should be remove where present. This will increase compliance and capacity on farm.

2.2.4 <u>Nutrient surpluses and animal feed sale/import database</u>

There is a concern over nutrient balances and how this would be incorporated into nutrientuse legislation. Fertiliser database was originally deemed to be for DAFM use only. Using this data to calculate nutrient surpluses is outside the scope of the original fertiliser database.

2.2.5 <u>Multispecies</u>

Research needs to be carried out before the adoption of multispecies into regulation. The FAI support the soil sampling programme as part of proper nutrient management planning.

- 2.2.6 <u>Modelling the impacts of agriculture on water quality</u> The FAI support a science first policy.
- 2.2.7 <u>Pilot project to inform development of sixth NAP</u> The FAI support a science first policy.



Concluding comments and recommendations

- a. Protected urea subvention the association believes that a subvention on protected urea (a policy which is already in place in some Co-ops and merchants) would be a positive step to increase the adoption of protected urea. The association sees this as the only method that will lead to the significant uptake of protected urea that the climate roadmap has laid out. This would narrow the price differential between urea and protected urea and allow the gap between CAN and urea to be managed. This would be seen as a positive step in the adoption of protected urea. This can also be used in future years to mitigate the negative effect of the CBAM carbon border will have on urea.
 - i. Proper assessment of the emissions associated with unprotected urea should be reviewed urgently. It is the FAI's assertion that the vast majority of urea that is applied will not have significant emissions apportioned to it (time of year when urea is spread, incorporation etc), however our national inventory assumes that there is.
- b. A science review body needs to be set-up to evaluate new science and investigate its impact on water quality. If new technologies become available, we need a pathway to ensure their quick adoption at farm level.
- c. Future research funding should be prioritised on fertiliser research especially focusing on protected urea and other mitigation technologies. The FAI will fully support new science and promote new technologies in the use of protected urea.
- d. The FAI have concerns on the timelines for farm planning and nutrient management planning. Current N and P statements need to move from the spring back to the autumn to avoid the spring bottleneck for farmers and advisors. Nutrient management planning has become the victim in the spring with a large on-farm workload. The FAI advocate that fertiliser and nutrient management planning should start following the closed period for fertiliser application.