

Climate Change and Bioenergy Policy Division
Department of Agriculture, Food & the Marine
Pavilion A
Grattan Business Centre
Portlaoise
Co Laois

Sent by Post & Email

21st June 2019

Re: Code of Good Agricultural Practice for reducing Ammonia Emissions from Agriculture

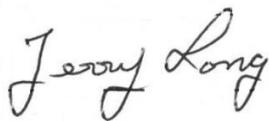
To whom it may concern,

The Irish Co-operative Organisation Society (ICOS) is pleased to respond to the public consultation on a Code of Good Agricultural Practice for reducing Ammonia Emissions from Agriculture.

ICOS represents over 130 co-operatives in Ireland – including the Irish dairy processing co-operatives, milk purchasing co-ops, livestock marts, rural enterprise co-ops and animal health and breeding co-ops – whose associated businesses have a combined turnover in the region of €14 billion, with some 150,000 individual members, employing 12,000 people in Ireland, and a further 24,000 people overseas.

Please find enclosed a copy of our comments and observations on the draft code of good practice and we welcome the opportunity to discuss and progress the implementation of the code of good practice through the work of the Dairy Sustainability Forum.

Yours sincerely,



Jerry Long
President

Comments & Observations by ICOS

(This is a joint submission by Dairy Sustainability Ireland on behalf of ICOS and Dairy Industry Ireland)

Grass Based System:

We welcome the credit given to Ireland's grass-based system of farming in the draft code. Grass based systems produce 50% less ammonia emissions from farming activities compared to confined systems of production. Ireland's sustainable, grass fed model of production, with cows at grass for up to 300 days a year, underpins the cost competitiveness and sustainable credentials of Irish agriculture and food production.

Economic Benefit:

The draft code correctly emphasises the importance of N-use efficiency and the economic loss to the farmer due to inefficient utilisation of nitrogen. It is estimated that 15% of the nitrogen in animal manures and 2% from chemical fertilizers is lost to the atmosphere as ammonia. It is important to quantify and communicate the economic benefit of improved N-use efficiency, so as to encourage the widespread use of the measures contained in the code of good practice, mindful that many of the ammonia abatement measures open to farmers are not cost neutral.

Communicating Simple Messages:

We believe in highlighting simple take-away messages that every farmer can take on-board and implement on their farm. For example, knowledge transfer messages based on the 4 R principles is critical: using the right nutrient source, at the right rate, at the right time and in the right place. Additionally, Teagasc recently published practical tools for farmers called "Improving Farm Sustainability". The Teagasc document includes 7 steps to improving farm sustainability and sets out clearly the most important measures every farmer can undertake to farm in a more sustainable manner. These measures also have cross cutting benefits for greenhouse gas emissions, water quality, biodiversity and ammonia emissions. It is important that every farmer is aware of the most effective ammonia emission reduction measures such as the preparation and effective use of a Nutrient Management Plan, limiting ammonia emissions from urea fertilizers, using low emission manure spreading techniques (LESS) and participation in Knowledge Transfer Groups and training courses to enhance agricultural knowledge and improve environmental awareness. As a suggestion, the 5-7 most cost-effective ammonia reduction measures should be summarised at the end of the document, this would allow the reader to see which actions he/she could do to have the most effect.

Existing actions and programmes:

It is correct to highlight the existing actions and programmes currently in place to limit ammonia emissions including the terms and conditions in the Nitrates Derogation, the Targeted Agricultural Modernisation Scheme, Nutrient Management Planning Online, Pasture Base Ireland, the Carbon Navigator Tool, the Agricultural Catchments Programme, the Smart Farming Programme and the Agricultural Sustainability Support and Advisory Programme.

The continuation of the Nitrates Derogation is critical to the future of the Irish dairy sector. Derogation farms, as is highlighted in the draft code from 2018, must apply at least 50% of their slurry by the 15th

of June and after that it must be applied by using LESS equipment. While acknowledging the premise that the practices contained in the code of good practice can be adopted, in conjunction with the actions required under the Nitrates Directive, it is important to comment that the recommendation to apply 70% of slurry by the end of April would be very difficult on many farms due to early grass utilisation and natural wet conditions in Ireland and in some areas younger stock are housed until April/May.

The Agricultural Sustainability Support and Advisory Programme:

As referenced in the draft code, the ASSAP programme is a new government-industry collaborative initiative running from 2018 to 2021. The programme offers a free support and advisory service (from 20 Teagasc and 10 dairy co-op advisors) and participation is voluntary. The programme is designed to work closely with the farming community across 190 priority areas for action, providing them with a free and confidential advisory service. In general, an advisor will assess a farmer's farmyard, nutrient management plan and nutrient management practices and his general farmland management. At the end of a visit, the advisor and farmer will agree on where the farmer should focus improvements or actions, if any are required, on his farm. The practical advice will be designed to 'break the pathway' and prevent nutrients entering water. The programme will also have wider benefits for the environment including reduced ammonia emissions. The final code of good practice should include an information link to readers who wish to learn more about the programme and its objectives.

Protected Urea:

We acknowledge the importance of limiting ammonia and greenhouse gas emissions from N fertilizers. The replacement of CAN fertilizer with protected urea from 1% of the straight N market to 50% by 2030 is a key target in the All of Government Climate Action Plan. The draft code explains that a urease inhibitor coated or incorporated into the fertilizer granule can protect against ammonia loss and also reduce greenhouse gases compared with CAN, while delivering similar grass growth performance. There is research taking place into the milk residue impact of the active ingredient known as nBTPT, which is very important from a food safety and milk processing position. In terms of communicating to farmers, it is preferable to use a common and consistent term for urea with a urease inhibitor such as protected urea.

Milk Urea Levels & Animal Feed Strategies:

Many dairy co-ops are testing for milk urea levels in milk. High levels of milk urea (MU) levels can affect the processability of milk. However, the main benefits to managing MU are from improved animal health and productivity. The draft code points out that the levels of MU indicates the balance between energy and protein in the cow's diet, with the optimal urea content in milk is between 20-35 mg/100 ml. While many co-ops test for MU levels, not all farmers are utilising the benefit of the results. Furthermore, the test and control seem to work better in an indoor system where the diet is fully managed but in Ireland with cows out on grass the diet is more variable. Further work is required involving Teagasc to assess how MU information is utilised most effectively in an Irish context.

Abatement Potential, Measurement and Cost:

In December 2015, Teagasc published an analysis of the cost of the abatement of ammonia emissions in Irish Agriculture to 2030. The maximum technical abatement potential was estimated to be between 10.6 and 12.05 kT NH₃. This will result in 2030 emissions of 101.8-103.2 kT NH₃, representing a 5.1% reduction relative to the 2005 agricultural ammonia emissions. The Teagasc analysis is clear

that realising this level of abatement in practice would be extremely challenging, with the cost of abatement estimated at €29-35.8 million. The analysis suggested that there are few very cheap or cost-effective mitigation options. It is therefore vitally important to ensure that the most cost-effective measures are prioritised such as extending the grazing season and the use of protected urea. The availability of grant aid and supports under the Common Agricultural Policy should be used to support the most effective measures e.g. LESS equipment, while measures such as covering manure heaps may be less cost effective and more challenging.

The draft code does not specify how the abatement from the adoption of these ammonia reduction measures will be captured and measured. Many farmers are currently using LESS equipment and it is critically important to measure the abatement achieved and provide assurance to farmers that their efforts to reduce ammonia emissions will be fully recorded.

Farm Safety:

The draft code rightly highlights the importance of farm safety in relation to slurry and manure storage. Regrettably, 10% of farm fatalities between 2006-15 were caused by gas poisoning from slurry gases and drowning in slurry or water. The utmost caution should be exercised before recommending measures that may increase the possibility of farm accidents or fatalities.

All of Government Climate Action Plan:

We note with interest that the All of Government Climate Action Plan includes several recommendations relative to ammonia emissions including the commitment to establish an industry group to promote new 'environmentally friendly' branding and standards on low emissions fertilizers to improve awareness and a new Animal Feed Network stakeholder group to review the environmental standards in all livestock rations, to engage the whole industry in using feed supplements and altered crude protein levels to reduce methane and ammonia emission. Dairy Sustainability Ireland, ICOS and our members look forward to making a positive and constructive contribution to the work of these working groups.

ENDS

21st June 2019