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The Rt Hon Lord Boswell  
Chairman  
Select Committee on the European Union  
House of Lords  
London  
SW1A 0PW

3rd July 2018

Dear Tim

**EM 8693/18,COM(2018) 257 FINAL: REPORT FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT ON THE IMPLEMENTATION OF COUNCIL DIRECTIVE 91/676/EEC CONCERNING THE PROTECTION OF WATERS AGAINST POLLUTION CAUSED BY NITRATES FROM AGRICULTURAL SOURCES BASED ON MEMBER STATE REPORTS FOR THE PERIOD 2012-2015 (AND ADD 1-9)**

Thank you for your letter of 20 June 2018, and for your questions about the UK's performance in comparison with other Member States to address nitrate pollution from agriculture, your interest in the EU Pilot investigation by the EU Commission and whether any consideration has been given to amending nitrates legislation when the UK leaves the EU.

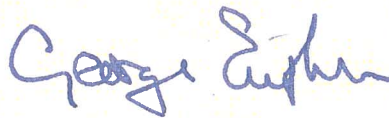
I recently gave evidence to the Environmental Audit Committee's Inquiry into Nitrate pollution, together with Helen Wakeham from the Environment Agency [21 March 2018, Oral Evidence Nitrate HC656]. The information and evidence provided to that Inquiry is also relevant to the Energy and Environment Sub-Committee's considerations. Answers to your questions are given in Annex A, and a copy of the written evidence provided to the EAC is in Annex B, attached to this letter.

While we remain in the EU we are committed to meeting our legal obligations. The UK considers that current legislation in all four countries meets the requirements of the Nitrates Directive.

You mentioned the proportion of surface water monitoring stations with increasing trends in nitrate pollution (including around a third in England). To put this in context, only around 6 per cent of monitoring points in England showed a strong increase in nitrate concentrations with around 10 % showing a weak increase. The areas with rising nitrate concentrations are those with ground waters or groundwater-fed rivers where in some cases (some geologies) nitrate is still moving through the system, which can take years. The UK's overall performance is showing improvement as nitrate levels are continuing to reduce over time in both surface waters and groundwater, but we recognise there is more to do.

The Government has committed through the 25 year Environment Plan, and through our future farming paper [Health and Harmony: the future for food, farming and the environment in a Green Brexit] to work with farmers to protect and enhance our environment and to use fertilisers more efficiently, putting in place a robust framework to limit inputs of nitrogen-rich fertilisers such as manures, slurries and chemicals. At this stage it is not possible to say exactly how nitrates legislation may change, but the aim in each country is to move to a more integrated approach to regulation and prevention of pollution from agriculture in future.

I am copying this letter to Sir William Cash MP, Chairman of the European Scrutiny Committee. I am also copying this letter to the Clerks of the Commons and Lords Committees, Lynn Gardner and Chris Johnson respectively; Les Saunders, Department for Exiting the European Union; and Craig White, Defra Scrutiny Co-ordinator.



**GEORGE EUSTICE MP**

## **Annex A: EM 8693/18 Questions from the Chair of the European Union Committee, 20 June**

- 1. We were concerned to note that the UK has one of the highest annual average nitrate concentrations for surface water in the EU. We also note that a significant number of monitoring stations across the UK (including around a third in England) reported increasing trends in nitrate pollution since the last reporting period. Please explain what steps you are taking to ensure the UK is complying with levels set by the Directive, particularly at drinking water sources. What assessment have you made of the reasons for the increases in nitrate pollution?**

Nitrate Action Programmes are required under the Nitrates Directive and form part of our wider work to reduce pollution and improve water quality. This work is set out in our River Basin Management Plans to meet the aims set in the Water Framework Directive (WFD), and includes providing advice to farmers through the Catchment Sensitive Farming Programme. The advice includes managing risks of water pollution, manure management, soil management, fertiliser management and improving farm infrastructure. Within Drinking Water Protected Areas, Safeguard Zone Action Plans set out additional voluntary measures to tackle local pollution pressures. Countryside Stewardship funding for measures to improve water quality have also played an important role in helping meet our WFD aims.

Further, in England we have also introduced new legislation to reduce water pollution from a number of different pollutants including nitrates. The Reduction and Prevention of Agricultural Diffuse Pollution (England) Regulations 2018 require land managers to identify and manage risks to water on or near their land, reducing pollution and improving resource efficiency. This legislation came into force in April 2018.

Use of fertilisers, especially in the second half of the 20th century, has led to a large increase in biologically available nitrogen. This has given rise to increased nitrate concentrations in air and water, globally. These pollutants can transform to other forms of nitrogen and move between land, water and air.

The proportions by sector and by region vary but agriculture is estimated to account for 50 per cent of nitrate lost to the water environment. Farming occupies over 70 per cent of England and its health is vital to our national interest but we know that this brings with it a number of environmental challenges.

In general, nitrate concentrations are greatest in the drier, arable-dominated southern and eastern areas of England, where we are most dependent on groundwater for public drinking water supply and base flow to rivers. Further information is in Annex B.

**Is there any geographical trend in the stations reporting increases (are they clustered in particular areas of the country or particular types of site)? What assessment have you done of the harm caused by nitrates being at higher than prescribed levels?**

Nitrate movement to the water table is often slow, taking years or even decades to filter down through the overlying unsaturated zone. For most British aquifers nitrate will travel down and reach the water table within 20 years. In some places it can take much longer, and groundwater nitrate levels in those locations are predicted to continue to rise for up to 60 years as the 1980-90 peak in land nitrate applications reaches the water table.



Borehole monitoring data in Nitrate Vulnerable Zones (NVZ) also suggest that nitrate concentrations are generally improving (very slowly) over large parts of England (large hydrological areas) although in parts of southern England concentrations are increasing because of legacy issues. In Part 9 of the Commission's report (p 205 onwards) charts for each country show the percentage of stations with decreasing, stable or increasing trends in fresh surface water nitrate concentrations between the reporting periods 2008-2011 and 2012-2015. The map in Annex C shows how the mean nitrate concentrations (NO<sub>3</sub>) in surface waters are distributed in England.

Waters used for drinking water abstraction, either surface freshwaters or groundwater, are monitored and if found to be at risk from nitrates e.g. if nitrate concentrations are found to be rising, action plans are developed aimed at reducing the source of nitrates [Safeguard Zone Action Plans].

More generally loads and concentrations of nitrate/nitrogen continue to be monitored across our river, lake and coastal water body network and in groundwater, to assess the effectiveness of measures and the need for further action. Ecological monitoring of waters subject to eutrophication is also undertaken on an ongoing basis.

**2. We note that the four nations of the UK have taken very different approaches to designating nitrate vulnerable zones (NVZs). The Commission's Report raises concerns that in some Member States there are areas with potential pollution that have not been included in NVZs. Are all four UK administrations confident this would not apply to them?**

The UK considers that current legislation in all four countries meet the requirements of the Nitrates Directive, and that areas where there are nitrates pressures are suitably identified through our designation methods. Action programmes and designation of NVZS are reviewed every 4 years to ensure that changing pressures are accounted for.

**The Report also highlights that, where Member States have adopted a whole territory approach, there can be challenges in adequately targeting measures to different regional pressures. Is this a concern in Northern Ireland? Given the scale of NVZs in England, is this also a challenge in England?**

Northern Ireland has adopted a whole territory approach and therefore its Nitrates Action Programme applies to all farms. Monitoring in Northern Ireland indicates the current approach is working well. The Welsh Government is reviewing its approach for nitrates regulation and is working with stakeholders to develop this approach. Scotland has a holistic approach which integrates the Water Framework Directive and Nitrates Directive monitoring data along with data from nitrates risk assessment mapping, private water supplies and public water supplies gives the correct set of parameters to ensure designated areas are properly mapped. In England monitoring evidence is kept under review to ensure that NVZ designations and measures are applied to address nitrate pressures.

**Please explain why the area covered by NVZs in England has fallen by 8 per cent, given that the level of pollution has not significantly decreased.**

In England the change in the overall area of land designated in 2013 to 2016, compared with the previous period, 2009 to 2012, was due to new evidence, improved monitoring and

methodology for designation of nitrate vulnerable zones being applied so some areas were added and others were removed from the designation. The NVZ designation has since been reviewed as part of the next 4 year cycle.

**3. We note that compliance levels amongst farmers varies across the UK and that in England it has fallen from 95 per cent to 77 per cent. What assessment have you made of the reason for this decrease? What are the main areas of non-compliance in each nation of the UK? What steps are being taken to improve compliance?**

The main area of non-compliance in England and Wales is record keeping. Some farmers view the requirement as burdensome and fail to recognise its value in terms of planning and good business management. The increase in non-compliance with record keeping (in England) in this reporting period, is due to better targeting of farms for inspection and the increased number of cross-compliance recordkeeping-only checks undertaken by the RPA. In terms of improving non-compliance generally, the cross compliance penalty continues to be a deterrent. A Farming Advice Service in England provides free advice to farmers to help them understand their legal obligations and how best to comply. The regulators continue to raise awareness with farmers and provide advice where non-compliance is found.

In Scotland compliance rates are very high.

In Northern Ireland the main causes of breaches relate to pollution arising from poor management of slurry and effluent storage facilities in the farmyard, and slurry spreading practice in the field. Record keeping breaches had also been an issue but these have reduced following regular advisory messages and support. Advice and awareness raising through newsletters to farmers, press articles and training courses continues to focus on the main causes of non-compliance.

**4. We note that, in 2015, the UK had a derogation on the maximum amount of nitrogen per hectare from livestock manure allowed in vulnerable zones. Is this still in place?**

Yes. The derogation is managed on an annual basis in each country.

**5. We note that there was an EU Pilot investigation addressed to the UK in 2016-17, in relation to your action plan. We note that you responded in April 2017 and that you are continuing to engage with the Commission about their concerns. Please explain what their initial concerns were, that prompted the Pilot investigation, and also what concerns (if any) remain.**

The Pilot investigation letter raised concerns relating to the Nitrates Action Programme in England, in which the EU Commission had questioned whether certain measures set out in legislation were sufficient to meet the objectives of the Nitrates Directive, pointing to the slow improvement in reducing nitrate concentrations in surface water and groundwater bodies as evidence. As mentioned above, slow movement of nitrate through different types of aquifer systems means it takes some time to realise improvements in water quality. In response to the Commission, we provided information further explaining the measures in England, drawing to its attention recent scientific studies which

investigated the efficiency of the measures in England. We are continuing to engage with them on this matter.

- 6. We note that you expect nitrate regulations to become retained law when the UK leaves the EU. We are aware, however, that the regulations can cause difficulties to some UK farmers in periods of heavy rainfall as they are prohibited from spreading slurry on their land but their tanks can be at risk of overflowing into watercourses. Has any consideration been given to amending the regulations when the UK leaves the EU?**

In NVZs the Nitrates Action Programme set additional rules with which farmers have to comply. These include restrictions on the spreading of slurry during the winter, when rainfall increases the risk of runoff and pollution from nitrate. We recognise the difficulties these requirements can pose for farmers and the importance of having adequate slurry storage on holdings. This is one of the areas where we intend to work with the industry to increase resilience to changing weather patterns.

The Government has committed through the 25 year Environment Plan, and through our future farming paper [Health and Harmony: the future for food, farming and the environment in a Green Brexit] to work with farmers to protect and enhance our environment and to use fertilisers more efficiently, putting in place a robust framework to limit inputs of nitrogen-rich fertilisers such as manures, slurries and chemicals. At this stage it is not possible to say exactly how nitrates legislation may change, but the aim in each country is to move to a more integrated approach to regulation and prevention of pollution from agriculture in future.

**Annex B: EM 8693/18 Evidence provided to the EAC Nitrate Inquiry (accompanies this letter separately)**

**Annex C: EM 6693/18 England: Mean nitrate concentrations (mg NO<sub>3</sub>/L) in rivers and lakes sampling points, 2011 to 2015 (accompanies this letter separately)**