

Nitrates Action Programme



Department of Agriculture, Environment and Rural Affairs (DAERA)



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Summary of Proposed New Measures

1. Water Protection
2. Phosphorus reduction and efficiency
3. Nitrogen efficiency
4. Slurry and Manure storage
5. Controls on Digestate from AD plants

1. Water Protection

- 1.1 Additional restrictions on manure/slurry applications in February and October.
- i. Increased non-spread zones beside waterways
 - ii. Reduced maximum application limit

Rationale

- Further reduces the risk of nutrient runoff and losses
- Additional to closed period 15 October – 31 January

1. Water Protection

- 1.2 Supplementary Feeding Sites to be situated minimum 20m from watercourses
- 1.3 Livestock drinking points to be minimum of 10m from watercourses, where there is a significant risk of water pollution arising from their use.

Rationale

- Reduces risk of poaching, soil erosion and sediment loss to water
- Reduces risk of manure nutrients being transferred to water

2. Phosphorus (P) Reduction and Efficiency

2.1 Feed Suppliers to provide declaration of P content of livestock feeds

Rationale

- Specific measurement of P content of feed will enable more precise nutrient management by farmers
- Will need co-operation of feed suppliers to implement
- Need to reduce inputs of P from feed – this will require further work and co-operation during NAP 4

2. Phosphorus (P) Reduction and Efficiency

2.2 Phosphorus Regulations to be included under Cross Compliance

Rationale

- Need to further reduce P in inputs from chemical/mineral fertilisers
- Some farmers using chemical P fertiliser where not needed
- Bringing P Regulations under CC will help improve compliance



2. Phosphorus (P) Reduction and Efficiency

2.3 Fertilisation plan required for all farms using chemical/mineral P fertiliser, P rich manure and anaerobic digestate

Rationale

- Need to ensure more efficient use of P
- Greater controls on fertilisers higher in P
- Drive behavioural change and ensure balanced fertilisation through soil analysis and planning
- Re-enforces the message that P loss to water must be tackled

3. Nitrogen Efficiency

3.1 Mandatory use of Low Emission Slurry Spreading Equipment (LESSE)

Will apply to:

1. Cattle and pig farms with 100 Livestock Units or more and pig farms with N loading > 10t N per year.
2. Slurry spreading contractors
3. Digestate from AD plants

Phased introduction up to 01 February 2022

Long term aim: LESSE for all farms



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3. Nitrogen Efficiency

3.1 LESSE

Rationale

- Significant increase in manure nutrient efficiency
- Reduced environmental losses of nutrients
- Less odour and disease risk from spreading of slurry

- Agronomic benefits:
 - grass yield increase of up to 25% compared to using splash plate method (AFBI research)
 - saving on chemical/mineral fertiliser use

3. Nitrogen Efficiency

3.2 Prohibit use of chemical UREA fertiliser unless it contains ammonia (urease) inhibitors

Rationale

- Improved Nitrogen efficiency
- Reduced gaseous losses of Nitrogen as Ammonia
- Ammonia reduction of up to 78% compared to straight UREA
- No impact on agronomic yields



3. Nitrogen Efficiency

3.3 Revised Nitrogen excretion rates for cattle



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3. Nitrogen Efficiency

3.3 Revised Nitrogen excretion rates for cattle

Rationale

- Changes in dairy cow milk yields and dietary compositions have had an effect on N excretion rates
- Milk yields have increased.
- Dietary protein levels have decreased
- Net result is an overall increase in N excretion rates for dairy cows
- Excretion rates for most other cattle decrease

4. Slurry and Manure Storage

- 4.1 Covering of new above ground stores and lagoons.
- 4.2 Existing above ground stores to be fitted with fixed or floating covers.

Rationale

- Improved manure nutrient efficiency
- Reduced gaseous losses of Nitrogen as Ammonia
- Increased storage capacity due to less rainwater entering tanks



4. Slurry and Manure Storage

4.3 New slurry tanks to be sited at least 50m from water courses

Rationale

- Reduced risk of water pollution from leaks, spills or tank failure



5. Controls on farms applying Digestate from Anaerobic Digestion (AD) Plants

Farms applying Digestate as Fertiliser

1. Retention of import records and analysis of digestate
2. Fertilisation planning based on soil analysis
3. Digestate to be spread by LESSE
4. Covering of stored fibre digestate
5. Restrictions to spreading where there is potential for impact on environmentally designated/protected sites



5. Controls on farms applying Digestate from Anaerobic Digestion (AD) Plants

Rationale

- The vast majority of digestate/compost is spread on agricultural land as a 'fertiliser'
- Greater transparency is needed over the quantity, location and nutrient content of digestate/compost being supplied to farms
- Records of exports and analysis of the digestate will allow for improved administrative control



Controls on Anaerobic Digestion Plants and Digestate

AD Operators

1. Records of digestate exports to be submitted to NIEA.
2. Analysis of digestate to be provided to importing farms
3. Introduction of fixed penalties for non-compliance



Future Controls

Improved practice – slurry spreading

Licencing of slurry spreading contractors

Rationale

- Contractors need to act responsibly and only spread in suitable conditions in accordance with NAP
- Improve practice and standards of compliance
- Training required to obtain licence

Longer term measure - to be developed during NAP 4

NAP 4 – 2019 to 2022

A single comprehensive regulation covering:-

- Nitrogen and Phosphorus
- Standards for manure/slurry storage facilities
- Standards for manure/slurry spreading
- Measures to increase Nitrogen efficiency

New name: Nutrients Action Programme



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Thank you.



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