

Measure by Measure Review and Compliance

STAKEHOLDER MEETING & WORKSHOP
Nitrates Action Programme and Derogation
Regulations Review
AFBI Hillsborough

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Overview

- How controls are applied in NI;
- Measure by measure review-What have inspections shown to date; and
- Derogation controls.

NAP Regulation Controls

- NIEA is competent control authority
- Compliance assessed through inspections of farm records, facilities and fields
- At least 1% of farms claiming direct aid payments are inspected
- Reactive breaches.

NAP Regulation Controls

Approach to inspection and enforcement driven by legislation but must also include:

- practical challenges in assessing compliance;
- available resources;
- Cross Compliance requirements; and
- the NIEA policy on enforcement.

NAP Regulation Controls

NIEA :

- adopt a pragmatic approach which;
- focuses effort on the most critical Action Programme measures;
- minimises bureaucracy; and
- adopt a partnership approach to deliver wider environmental benefits.

Measure by Measure Review

What have inspections shown to date?

Overall Compliance

	2007	2008
No of planned inspections (1%)	402	378
No of reported breaches	20	88
Total no of breaches	59	209
No of farm businesses breached	46	153

Number of measures resulted in no breaches in 2007 or 2008:

- Closed periods for chemical N fertiliser;
- Sufficient livestock manure storage to avoid pollution/adverse weather conditions;
- Residues of crops harvested late left undisturbed & grass leys grown in rotation with arable crops 1st crop should be sown asap after the grass has been ploughed;
- Land application of chemical N fertiliser not within 1.5m of any waterway; and
- After harvesting a cereal crop (except maize), oil seeds or grain legumes certain conditions must be met from harvest to 1 March.

Also no breaches in 2008 based on 2007 records:

- Total N in organic manures and chemical fertiliser, excluding livestock manures, applied to grassland shall be in proportion to crop requirements



Number of measures resulted in very few breaches in 2007 or 2008:

- N (chemical & organic) fertiliser must not be applied to steeply sloping ground-1 breach in each year
- maximum land application of solid manures and slurry at any one time not to exceed 50t/ha or 50m³/ha & no less than 3 weeks between applications (Dirty water 2 weeks between applications) -2007-1 breach & 2008-no breaches
- Must not apply in a way likely to cause the entry of N fertiliser (chemical & organic) into any waterway or groundwater-1 breach in each year.

Some measures were transitional-

Livestock Manure Storage Capacity

Pigs & Poultry 26 weeks

Other livestock 22 weeks

- by 31 December 2008
- no assessment made of these requirements in 2007 or 2008



Closed period for Organic Manures (excl FYM & Dirty Water) -15 October to 31 January

- Had until 31 December 2008 for storage capacity
- If insufficient could still apply in closed period -must meet all other measures, eg environmental conditions
- No breaches in 2007 or 2008
- From 1 January 2009 all farmers must have sufficient slurry storage capacity in place & observe this closed period
- Also allows application at the time of year to gain maximum benefit as fertilisers
- NI agreed to undertake research into the impact of spreading organic manures in October and February.

Livestock manure storage & silage effluent facilities must be maintained free of structural defect and meet SSAFO where applicable

- 2007 & 2008 -1 & 12 breaches respectively
- Majority cracks in pre-existing structures
- No breaches in recently built structures



Middens for FYM adequate effluent collection facilities & location requirements

- 2007 & 2008 -19 & 31 breaches respectively
- Middens with deficient or absent effluent collection
- 1 case led to pollution incident (medium severity) in 2008
- This is an area which would benefit from raising awareness and further advice



Poultry litter

-middens -adequate effluent collection facilities

-field heaps location requirements & covered

- NAP Regulations amended 2009 -extend use of field heaps to 31 December 2010 & allowing farmers to deduct quantity of litter in field heaps or middens prior to land application from the overall storage capacity requirement
- 2007 & 2008 -7 & 14 breaches respectively
- Failure to cover most common (3 in 2007 and 8 in 2008)
- 2 cases led to pollution incident (low severity) in 2008.

Safe storage of dirty water should be available for periods when weather & ground conditions prevent land application

- 2007 & 2008 - 1 & 8 breaches respectively
- Most breaches of this regulation were detected in conjunction with other breaches related to application, in particular under reg 7.2 eg water logged ground.

N fertiliser (chemical & organic) not be applied when land is flooded or likely to flood or snow covered, soil is waterlogged or frozen, or heavy rain is forecast

- 2007 & 2008 -5 & 16 breaches respectively
- Most cases spreading on waterlogged ground
- 1 incident in 2008 associated with medium severity pollution incident due to slurry entering a waterway.
- Needs to be addressed through increased awareness of requirements and training.



Total N applied to crops other than grassland shall not exceed the crop requirement for nitrogen

- Inspection of 2007 records in 2008 showed 2 breaches.
- Both assessed as high severity as requirement exceeded by 30%
- Failed to take account of N in organic manure applications

170 kg N/ha/year Livestock Manure Application Limit

- Assessment of the 2007 records in 2008 showed 4 breaches.
- 2 breaches up to 20% excess
- 2 breaches > 30% excess

Land application of organic manures and dirty water not permitted within certain distances of different waterways & water features

- 2007 & 2008 -6 & 30 breaches respectively
- Mostly within 10 metres of a watercourse.



The land application of N fertilisers (chemical & organic) shall be done in an accurate and uniform manner

- 2007 -no breaches
- 2008- 8 breaches
 - No attempt to spread most common.

Land application of slurry & dirty close to the ground using certain techniques only

- 2007 & 2008 -6 & 7 breaches respectively
- Upward-facing splash-plates most common
- Agreed to undertake research into minimising phosphorus losses.



Record Keeping

- No assessment in 2007 as records not required to be made available until 1 July in following year
- In 2008 -28 breaches
- 8 breaches high severity, 9 medium severity & 11 low severity

Prevention of Water Pollution

- 2007 & 2008 -11 & 46 breaches respectively - usually associated with other breaches
- 2008 -12 breaches -medium severity
- Increase probably due to increased awareness of field staff



Derogation Controls

Checked in 3 ways:

1. administrative checks of applications;
2. on-farm inspections of records from previous years, current fertilisation plans, farm facilities and fields; and
3. administrative inspections of fertilisation accounts.

Derogation Controls

- 2008- 322 approved derogations
- 2009- 169 approved derogations
- At least 3% of derogated farms must be inspected
- 2008=10 farms.

On-farm Inspections 2008

- 7 breaches on 6 of 10 farms
- N fertiliser allowed into water-1
- Total N grazing livestock > 250 kg/ha/year-1
- No or partial records-2
- Fertilisation plan incomplete-3

2008 Fertilisation Accounts

- 110 farmers below the 170 kg N/ha/year limit
- 172 out of 212 were received by deadline
- P balance -70 breaches
- No or partial records-9 breaches
- Total N grazing livestock up to 250 kg N/ha/year-6 breaches
- Total N livestock manure loading (170 kg N/ha/year non-grazing+250 kg N/ha/year grazing)-8 breaches
- Total chemical N fertiliser usage-2 breaches.

Conclusions

Many measures compliance is high

Main areas of concern

- Inappropriate storage of FYM & poultry litter
- Inadequate recording keeping
- P Balances on derogated farms-particularly with associated poultry enterprises

A few other areas of less concern

Should be addressed through increased awareness & training.