## Proposed Alternative Measures for The Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021

Report by the Alternative Measures Task & Finish Group of the Wales Land Management Forum (WLMF) Sub Group on Agricultural Pollution















30th September 2022

### **Foreword**

The Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021 were introduced because of the longstanding problem of agricultural pollution and the deleterious impact this was and is having on the quality of our rivers.

It is not in anyone's interest for this situation to persist, so it is critical that these Regulations are effective and as simple as possible to understand, comply with and to enforce.

Our Group which is a subset of the Wales Land Management Forum (WLMF) Sub Group on Agricultural Pollution, had representatives from farming (including a tenant farmer), the water industry as well as regulatory and environmental bodies. The Group worked extremely well, and I would like to thank them all for the considerable work that they have put in over the last year. In particular, I would like to thank Bronwen Martin from NRW for all her work in arranging and noting the meetings.

As might be expected, we did not agree on all issues, however, we were able to reach a consensus in many areas including the need for some alternative measures and modifications to certain Regulations which are presented in this report.

There is widespread and growing public concern about the state of our rivers. We therefore hope that Welsh Government will give due consideration to our suggestions as to how the current Regulations might be made even more effective to help achieve a healthier, cleaner water environment.

Chris Mills (Chair)

## **Executive Summary**

This submission recommends alternative measures and some modifications to existing measures to The Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021. It was produced by six organisations that are members of the Wales Land Management Forum (WLMF) Sub Group on Agricultural Pollution.

The Group was supportive of the need for these regulations in order to prevent agricultural pollution in Wales and most of the existing measures.

The Group reviewed the Regulations and guidance in full and sets out in this report:

- 1. Those regulations which are endorsed in full (Section 4).
- Proposed modifications to existing regulations and guidance (Section 6). The
  majority of these changes relate to clarifying and providing clearer definitions; the
  need to consider all nutrients for soil and crop need; to align record keeping with
  other existing annual data collection and for data to be held possibly in one central
  location.
- 3. Proposed Alternative Measures (detailed in Section 5) are summarised below:

Regulation & Brief Description	Proposed Alternative Measure
Regulation 32 – Notice of construction	The notice of construction to be extended from 14 days to 28 days before work constructing the new or improved store is to be begun.
Regulation 26 – Exemption to the storage requirements	A requirement for all storage structures to have regular inspections carried out by compliant certified engineers, regardless of construction age.
Regulation 12 – When to spread fertiliser	Apply to <u>all fertiliser</u> (not just nitrogen fertiliser) and lime land spreading activities. Include record keeping and encouragement of using available technology.
Regulation 22 – Times in which spreading manufactured nitrogen fertiliser is prohibited	A more flexible approach to include an option for farmers to use new approved technology (subject to spreading being recorded) but must be used in conjunction with any Nutrient Management Plan. Decision making must be recorded in a permanent form (e.g., written or digital format) to demonstrate an agronomic need for spreading and to reduce the risk to water quality. If technology is unavailable or a farmer chooses not to make use of it, then the current Regulation would apply.
Regulation 18 – Closed periods for spreading organic manure with high readily available nitrogen	As for Regulation 22.

Regulation 19 – Exemptions: crops sown before 15 September	As for Regulation 22.
Regulation 4 – Application of livestock manure	The Group recommended that Welsh Government should explore the possibility of reintroducing the former derogation from the Nitrates Directive for a higher livestock nitrogen loading limit subject to there being clear evidence that demonstrates no environmental harm. The previous derogation process and requirements which were complex and resource intensive would need to be reviewed.

The Group had divided opinions as to whether these regulations should be applied Pan-Wales or in a more targeted way.

The Group also considered the need to include phosphorus limits within these regulations but concluded that, on balance, if phosphorus was included within the Nutrient Management Planning requirement, this would be a simpler means of achieving the same aim. However, it was considered that all organic manure and manufactured fertiliser being applied to the land must take account of all available nutrient requirements for soil and crop need at time of application.

There were significant concerns around the ability of tenant farmers (Section 7) to fully comply with the Regulations. It was therefore recommended that Welsh Government should explore the issues outlined in this report and try to resolve these issues through a Tenancy Working Group.

Finally, the Group suggested further overarching recommendations to be considered by Welsh Government in addition to the proposed Alternative Measures. These included to:

- 1. Encourage the use of innovative technology and practices where this can help prevent agricultural pollution (e.g., precision spreading and a weather app)
- 2. Increase awareness and communication of the regulations with the agriculture industry
- 3. Provide NRW with adequate resources to enforce these regulations and require it to produce a robust regulation and enforcement strategy specific to these regulations
- 4. Establish effective mechanisms to regulate phosphate and soil which also cause agricultural pollution but are not covered by these regulations
- 5. Make adequate funding available for farmers to improve existing slurry storage structures.
- To develop technologies to convert excess animal slurry into a transportable product that can be exported to other parts of the UK where there are nutrient shortages.

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## 1.0 Introduction and background

In January 2021, The Minister for Environment, Energy and Rural Affairs, Lesley Griffiths, announced new Regulations to 'tackle agricultural pollution in Wales to protect the health of Wales' rivers, lakes and streams' <sup>1</sup>. In a written statement <sup>2</sup>, Lesley Griffiths MS introduced the new Regulations 'which apply to the whole of Wales, to address the significant and ongoing effect of agricultural pollution on the health and quality of our rivers, lakes and streams'.

The Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021<sup>3</sup> came into force on 1 April 2021, but are subject to transitional periods until 1 August 2024 when all measures are required. These transitional periods only apply to farms not previously in a designated Nitrate Vulnerable Zone (NVZ). Within these Regulations, there is an opportunity for an alternative set of measures to be proposed and submitted to Welsh Government for consideration. Regulation 45 'Alternative Measures' states the following:

- '(1) If proposals for an alternative suite of measures for delivering the outcomes in Regulation44(1) are received within 18 months of these Regulations coming into force, the Welsh Ministers must consider whether those measures would deliver the outcomes more effectively than the measures contained in these Regulations.
- (2) If the Welsh Ministers are satisfied that proposals submitted under paragraph (1) would be more effective in delivering the outcomes in Regulation44(1), they must publish a statement within two years of these Regulations coming into force, explaining what action will be taken.'

The Wales Land Management Forum (WLMF) Sub Group on Agricultural Pollution<sup>5</sup> was established in January 2017 to focus on eliminating agricultural pollution in Wales and identifying approaches to drive improvements. Membership of the WLMF Sub Group comprises the Welsh farming unions, environmental non-governmental organisations (NGOs), water industry representatives, agricultural supply chain representatives, agricultural support organisations and governmental and regulatory bodies.

Following the Minister's announcement of the new Regulations, the WLMF Sub Group set up a small time-limited Task & Finish Group to explore possible alternative measures. Membership of this Alternative Measures Task & Finish Group comprises representatives from:

- Country Land and Business Association (CLA)
- Dwr Cymru Welsh Water (DCWW)
- Tenant Farmers Association Cymru (TFA)
- Carmarthenshire Fishermen's Federation (CFF)

 $<sup>^1\</sup> https://gov.wales/welsh-government-tackles-agricultural-pollution-protect-wales-rivers$ 

<sup>&</sup>lt;sup>2</sup> https://gov.wales/written-statement-control-agricultural-pollution-regulations

<sup>&</sup>lt;sup>3</sup> https://www.legislation.gov.uk/wsi/2021/77/contents/made

<sup>&</sup>lt;sup>4</sup> https://www.legislation.gov.uk/wsi/2021/77/regulation/45/made

<sup>&</sup>lt;sup>5</sup> https://naturalresources.wales/guidance-and-advice/business-sectors/farming/wales-land-management-forum-subgroup-on-agricultural-pollution/?lang=en

- Farming Connect
- Wales Environment Link (WEL)
- Natural Resources Wales (NRW)

The main aim of the Task & Finish Group was to explore and collate possible alternative measures for the Regulations which were realistic and supported by evidence. The objective of this Group was to provide a report within the specified timescale that outlined alternative measures which satisfy Regulation 45 'Alternative Measures'. It is understood that any alternative proposals must be submitted to Welsh Government within 18-months following the introduction of the Regulations, therefore the deadline for this opportunity is 1 October 2022.

After reviewing the Welsh Government alternative measures conditions, the Task & Finish Group agreed that any alternative proposal would need to include or would benefit from providing the following:

- Be implemented via the Regulations (not through a voluntary scheme)
- Scientifically robust evidence that demonstrates an alternative measure would more effectively deliver outcomes than the existing measures
- A precautionary approach should be applied addressing risk
- A robust assurance and enforcement approach
- A mechanism which would enable farm businesses implementing the alternative measures to be identified
- A mechanism for farm businesses to select which option they would be implementing
- Consideration of any level playing field implications (e.g., trade implications)

## 2.0 Why alternative measures are required

Welsh Government have presented an opportunity for anyone to put forward alternative proposals for the current The Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021. Consequently, members of the Alternative Measures Task & Finish Group have committed to explore this challenge.

The main reasons for this Task & Finish Group to propose alternative measures include:

- The need for more efficient ways of achieving the same aims.
- The need to change certain Regulations and improve others.
- A recognition that there are things that are currently omitted (e.g., reference to phosphate and soils).
- Acknowledgement that some definitions could be made clearer. Clear definitions within the Regulations are important for implementation by farmers and land

managers. Industry feedback suggests that some aspects of the Regulations are currently seen as complicated/complex, therefore measures need to be clear and understandable for everyone.

- The need to make the measures more enforceable.
- The need to consider other key factors which might influence these Regulations (e.g., climate change, other legislation, schemes etc.).

## 3.0 Methodology

The Group reviewed the existing Regulations in full and provided feedback on each measure. Detailed comments were collated throughout this process demonstrating the systematic approach to the challenge.

During this task, the existing measures were listed in order of transition period introduction and then grouped into three main topic areas:

- Storage
- Spreading
- Carrying capacity / limits

Separating the measures into the three main topic areas helped the Group to:

- a) Systematically assess each one in depth
- b) Agree to accept certain elements
- c) Highlight aspects which should be challenged
- d) Establish which measures should be explored further by suggesting possible alternative measures

## 4.0 What this Group endorses

The Group recognises the need for necessary regulation to prevent agricultural pollution in Wales. However, there was divided opinion as to whether these Regulations should be applied Pan-Wales or in a more targeted way.

This section summarises the measures which the Task & Finish Group support and therefore do not require changes. Note that the measures in Table 1 below are listed in order of transition period introduction, not numerical order.

Regulation & Brief Description	Task & Finish Group Justification
Regulation 5 - Spreading organic manure –  Nitrogen limits per hectare – 250kg/ha maximum per hectare	Longstanding requirement under Code of Good Agricultural Practice (CoGAP) <sup>6</sup> . There needs to be a limit.
Regulation 23 - Storage of organic manure –  Storage other than slurry, includes free standing heaps on temporary field sites provided it does not drain liquids	Protecting the environment.
Regulation 30 - Notice requiring works  NRW 'reg 30' notice of required works	Helpful for tenant farmers and also helps from an enforcement point of view.
Regulation 20 - Exemptions for organic holdings	Organic certified farmers already need to record what nutrients are applied.
	Note – see comments in Section 5.5.

**Table 1.** This table summarises the measures which the Task & Finish Group support and therefore do not require changes.

## **5.0 Proposed Alternative Measures**

This section outlines the key Alternative Measures identified by the Task & Finish Group, summarises the issues, details proposed changes and provides subsequent evidence.

The Group considered the need to include phosphorus limits within these Regulations but concluded that on balance, if phosphorus was included within the Nutrient Management Planning requirement this would be a simpler means of achieving the same aim. All organic manure and manufactured fertiliser being applied to the land must take account of all available nutrient requirements for soil and crop need at time of application. Though in certain areas where excess Phosphorus is causing a specific problem, additional measures may be required.

The Group recommends that Welsh Government considers the inclusion of appropriate measures from *Good Agricultural and Environmental Condition 5 (GAEC 5):* Soil and

 $<sup>^6\</sup> https://gov.wales/sites/default/files/publications/2019-04/code-of-good-agricultural-practice-guidance-on-reducing-ammonia-emissions.pdf$ 

Carbon stock – Minimum land management site specific conditions to limit erosion<sup>7</sup>, to ensure that soil is not lost from individual field parcels from erosion and run off as phosphorus binds to soil particles.

Soil is a key vector for many harmful pollutants and contaminants such as nutrients, heavy metals and pesticides. These can result in degradation of water quality and the deposit of silt on riverbeds which can smother the early life stages of many species including salmon and trout, and various forms of aquatic fly life. Much more attention needs to be given to excess soil erosion and its harmful impacts.

### 5.1 Regulation 32 - Notice of construction

#### Regulation:

Notice of construction etc.

- 32.—(1) This regulation applies to any silo or slurry storage system whose construction is to be begun on or after 28 April 2021 ("a new or improved store").
- (2) A person who proposes to have custody or control of silage or slurry that is to be kept in a new or improved store must give Natural Resources Body of Wales (NRBW) notice specifying the type of silo or storage system and its location, at least 14 days before work constructing the new or improved store is to be begun.
- (3) In this regulation, "construction" includes substantial enlargement and reconstruction.

#### Issue:

This regulation currently does not give the Regulator (NRW) sufficient time to attend a site.

#### **Proposed Change:**

It is proposed that the notice of construction is extended from 14 days to 28 days before work constructing the new or improved store is to be begun.

#### **Evidence:**

Currently, the pre-constructed notification is undertaken online and submitted to NRW at least 14 days before construction starts.

The NRW enquiries policy is to acknowledge emails within 2 working days and will be responded in full within 10 working days. The Pre-construction Notification online forms are logged centrally and then sent to the local Environment Team to assess. This gives NRW staff limited time to review, contact and possibly attend sites within the 14 days prior to construction, particularly if there is insufficient detail of design and construction to assess any potential concerns with the location that could have a significant risk to the environment. Extending the pre-construction notice will provide NRW staff time to review and request for information before landowners invests in significant amount of money and resources.

<sup>&</sup>lt;sup>7</sup> https://gov.wales/cross-compliance-managing-land-limit-soil-erosion-gaec-5-2015

# **5.2 Regulation 26 - Exemptions to the storage requirements** Regulation:

Exemptions to the storage requirements

26.—(1) Regulations 24(1) and 25(1) do not apply to a silo or slurry storage system—

(a)which, before 1 March 1991, was being used for the purpose of making silage or storing slurry,

(b)where it was not used before 1 March 1991 for that purpose, it was constructed before that date for such use, or

(c)in relation to which—

(i)a contract for its construction, substantial enlargement or substantial reconstruction was entered into before 1 March 1991, or

(ii) such work was commenced before that date, and in either case the work was completed before 1 September 1991.

#### Issue:

It seems illogical that infrastructure constructed more than 30 years ago (pre-1991) should be exempt from this Regulation, when they are potentially more likely to pose a higher risk to the environment than structures built to regulatory construction standards. These are structures which also pose a potential Health and Safety risk should they fail.

#### **Proposed Change:**

Consideration should be given to including a requirement for all storage structures to have regular inspections carried out by compliant certified engineers, regardless of construction age. It is also suggested that priority for available grant funding should be given to improving older more higher risk structures (e.g., structures constructed pre-1991) and to stores in locations where improvements would deliver the biggest benefit i.e., within a Drinking Water Protected Area (including Safeguard Zones), SAC, SSSI etc.

The Group suggests that NRW should record the age of structures during site visits, inspections or when responding to pollution incidents.

#### **Evidence:**

Since 2017, there have been 8 substantiated pollution incidents related to a slurry or farmyard manure store collapsing causing pollution to water, 7 of which were pre-1991 exempt structures. There have also been 4 substantiated pollution incidents related to pre-1991 slurry stores that have leaked since 2019 causing pollution to water. These figures are from the NRW Wales Incident Recording System (WIRS) that records all incidents reported to NRW.

There have been 7 substantiated pollution incidents to water related to issues with the silage clamp, since 2017. These include no perimeter drains, cracks or leaking walls, and

no impermeable floor. Three of the pollution incidents were linked to an exempt silage structure with the others related to structures constructed or reconstructed post-1991. These figures are from the NRW Wales Incident Recording System (WIRS) that records all incidents reported to NRW.

In the Plant Protection Products (Sustainable Use) Regulations 2012<sup>8</sup> there is a requirement to carry out a MOT style check on professional pesticide application equipment (e.g., agricultural) to ensure they are in working order (e.g., not leaking or over applying causing pesticide losses to environment). The frequency varies between 3-6 years depending on the size and type of equipment. The National Sprayer Testing Scheme (NSTS)<sup>9</sup> provides testing for all types of Pesticide Application Equipment (PAE) and fertiliser spreaders in the UK.

### 5.3 Regulation 12 - When to spread fertiliser

#### Regulation:

When to spread fertiliser.

- 12.—(1) An occupier who intends to spread nitrogen fertiliser must first undertake a field inspection to consider the risk of nitrogen getting into surface water.
- (2) No person may spread nitrogen fertiliser on that land if there is a significant risk of nitrogen getting into surface water, taking into account in particular—
- (a)the slope of the land, particularly if the slope is more than 12°,
- (b)any ground cover,
- (c)the proximity to surface water,
- (d)the weather conditions,
- (e)the soil type, and
- (f)the presence of land drains.
- (3) No person may spread nitrogen fertiliser if the soil is waterlogged, flooded, snow covered, frozen or has been frozen for more than 12 hours in the previous 24 hours.

#### Issue:

This Regulation specifically refers to <u>nitrogen fertiliser</u>.

#### **Proposed Change:**

Apply this Regulation to <u>all fertiliser</u> (not just nitrogen fertiliser) and lime spreading activities.

<sup>&</sup>lt;sup>8</sup> https://www.legislation.gov.uk/uksi/2012/1657/contents/made

<sup>9</sup> https://www.nsts.org.uk/

Consider including record keeping and encouragement of using available technology (see details included in Regulation 22).

#### Evidence:

This widens the scope of the Regulation and helps to prevent water pollution and damage to soil. It also has advantages to ensure consistency with current Regulations for other land spreading activities.

## 5.4 Regulation 22 - Times in which spreading manufactured nitrogen fertiliser is prohibited

#### Regulation:

Times in which spreading manufactured nitrogen fertiliser is prohibited

22.—(1) No person may spread manufactured nitrogen fertiliser on land during the following periods (all dates inclusive)—

(a)in the case of grassland, from 15 September to 15 January, or

(b)in the case of tillage land, from 1 September to 15 January.

- (2) Spreading fertiliser during these periods is permitted on the crops specified in the Table in Schedule 4, provided that the maximum rate in column 2 is not exceeded.
- (3) Spreading during those periods on crops not in Schedule 4 is permitted on the basis of written advice from a person who is a member of the Fertiliser Advisers Certification and Training Scheme.

#### Issue:

This measure is too prohibitive as it does not take into consideration the change in climate and does not take advantage of available modern technology.

#### **Proposed Change:**

The Group proposes a more flexible approach to include an option for farmers to use new approved technology (subject to spreading being recorded) but must be used in conjunction with any Nutrient Management Plan. Decision making must be recorded in a permanent form (e.g., written or digital format) to demonstrate an agronomic need for spreading and to reduce the risk to water quality. If technology is unavailable or a farmer chooses not to make use of it, then the current Regulation would apply.

#### **Evidence:**

There are a number of relevant apps and technology in development including the Tywydd Tywi Weather App<sup>10</sup> and the 'Internet of Things' (IoT)<sup>11</sup> technology using a LoRaWAN (Low Power Long Range Wide Area Access Network) gateway system<sup>12</sup>.

The Tywydd Tywi Weather App project has installed six weather stations. These weather stations include sensor capabilities to measure soil temperature, leaf moisture and soil moisture on strategically placed farms within the Tywi catchment.

The data from the six stations are gathered by telemetry to a central database to be analysed and displayed via a portal and phone app. As a result, farmers can base their nutrient management and pesticide application decision making on the information they receive. The front-end data is displayed very simply in the form of a traffic light format. The format is appropriate to the operation that farmers intend to carry out. Farmers are encouraged to have an up-to-date nutrient management plan that will identify high, medium and low-risk areas on the farm as regards the application of nutrients. The guidance can be easily captured and recorded by the farmer as a record of how they based their decision making.

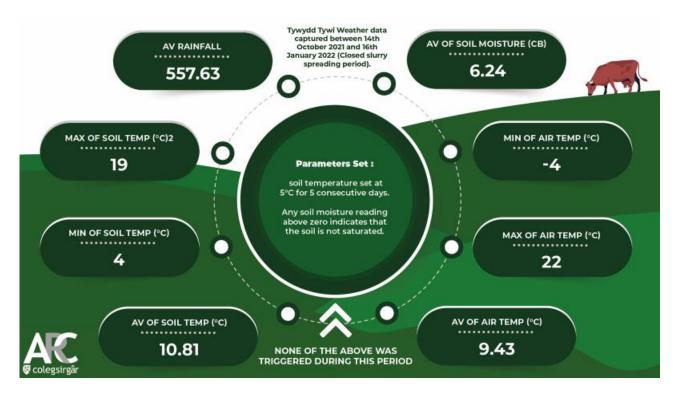
As of mid-August, there were 208 registrations on the portal for the Tywi catchment, with many farmers and landowners using the app to make decisions on spreading activities and to record the evidence.

Figure 1 below shows the average data captured from the Tywydd Tywi Weather App portal during the proposed closed period timeframe (14th October 2021 to 16th January 2022). During this period there were no red traffic light warnings being triggered. However, after the closed period ended there was a prolonged period of rainfall resulting in the red light indicator on soil moisture being active for two weeks.

<sup>&</sup>lt;sup>10</sup> https://arc-csg.cymru/tywydd-tywi-weather-app/

<sup>&</sup>lt;sup>11</sup> https://businesswales.gov.wales/farmingconnect/business/european-innovation-partnership-eip-wales/approved-eip-wales-projects/using-internet

<sup>&</sup>lt;sup>12</sup> https://businesswales.gov.wales/farmingconnect/news-and-events/news/sensor-trial-informing-slurry-application-policy-welsh-dairy-farm



**Figure 1.** The average data captured from the Tywydd Tywi Weather App portal during the proposed closed period timeframe (14th October 2021 to 16th January 2022).

## 5.5 Regulation 18 - Closed periods for spreading organic manure with high readily available nitrogen

#### Regulation:

Closed periods for spreading organic manure with high readily available nitrogen.

18. Subject to regulations 19 and 20, no person may spread organic manure with high readily available nitrogen on land between the following dates, all inclusive ("the closed period") —

#### The closed period:

Soil Type	Grassland	Tillage land
Sandy or shallow soil	1 September to 31 December	1 August to 31 December
All other soils	15 October to 15 January	1 October to 31 January

#### Issue:

This measure is too prohibitive as it does not take into consideration the change in climate and does not take advantage of available modern technology.

#### **Proposed Change:**

The Group proposes a more flexible approach to include an option for farmers to use new approved technology (subject to spreading being recorded) but must be used in conjunction with any Nutrient Management Plan. Decision making must be recorded in a permanent form (e.g., written or digital format) to demonstrate an agronomic need for spreading and to reduce the risk to water quality. If technology is unavailable or a farmer chooses not to make use of it, then the current Regulation would apply.

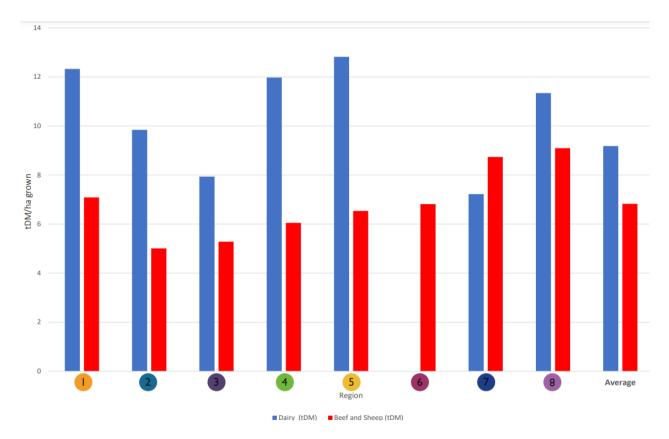
#### **Evidence:**

Same as Regulation 22 evidence above (Tywydd Tywi Weather App).

Different regions and farms within Wales grow grass at different rates. The graph illustrated in Figure 2 is taken from the Welsh Pasture Project<sup>13</sup> which shows the variability in grass growth on dairy and sheep/beef farms across eight different regions in Wales. If farmers can demonstrate using the aforementioned app that conditions and soil reserves still warrant the addition of nutrients to the ground, then flexibility with the Regulations should be considered.

Farmers would also need to ensure that even if the grass is growing there is an agricultural benefit for the nutrients being applied to the land, i.e. that the soil reserves were not sufficient.

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**Figure 2.** A graph showing the average growth rates in tonne/dry matter per hectare on dairy and sheep/beef farms per year from eight different regions across Wales in 2021. The full report can be accessed here - <u>Business Wales: Farming Connect - Welsh Pasture Project 2021</u>.

# 5.6 Regulation 19 - Exemptions: crops sown before 15 September

Exemptions: crops sown before 15 September

19. Spreading organic manure with high readily available nitrogen on tillage land with sandy or shallow soil is permitted between 1 August and 15 September inclusive provided that the crop is sown on or before 15 September.

#### Issue:

This measure is too prohibitive as it does not take into consideration the change in climate and does not take advantage of available modern technology.

#### **Proposed change:**

The Group proposes a more flexible approach to include an option for farmers to use new approved technology (subject to spreading being recorded) but must be used in conjunction with any Nutrient Management Plan. Decision making must be recorded in a permanent form (e.g., written or digital format) to demonstrate an agronomic need for

spreading and to reduce the risk to water quality. If technology is unavailable or a farmer chooses not to make use of it, then the current Regulation would apply.

#### Evidence:

Same as Regulation 22 evidence above (Tywydd Tywi Weather App).

### 5.7 Regulation 4 - Application of livestock manure

#### Regulation:

Application of livestock manure - total nitrogen limit for the whole holding

- 4.—(1) The occupier of a holding must ensure that, in any year beginning 1 January, the total amount of nitrogen in livestock manure applied to the holding, whether directly by an animal or by spreading, does not exceed 170 kg multiplied by the area of the holding in hectares.
- (2) The amount of nitrogen produced by livestock must be calculated in accordance with Schedule 1.
- (3) In calculating the area of the holding for the purposes of ascertaining the amount of nitrogen permitted to be spread on the holding, no account is taken of surface waters, any hardstanding, buildings, roads or any woodland unless that woodland is used for grazing.

#### Issue:

There was divided opinion regarding the 170kg/ha limit. Some of the group considered that this could cause future food security issues. However, others believed that without such a limit this Regulation would not be enforceable.

A further issue was that the definition of 'whole holding' creates difficulties for record keeping with respect to tenant farmers (see Section 7.0 of this report). This can also create a challenge with the enforceability of this Regulation.

#### **Proposed Change:**

The Group recommended that Welsh Government should explore the possibility of reintroducing the former derogation from the Nitrates Directive for a higher livestock nitrogen loading limit subject to there being clear evidence that demonstrates no environmental harm. The previous derogation process and requirements which were complex and resource intensive would need to be reviewed.

Further clarification of the definition of 'whole holding' is required.

#### Evidence:

Evidence for the proposed change is not applicable in this case. However, in reviewing the derogation process a methodology will need to be developed to ensure that if a higher limit was adopted no environmental harm would be caused.

# 6.0 Proposed modifications to existing Regulations and guidance

This section outlines the measures which require changes, provides justification of why changes are necessary and gives recommendations based on the Task & Finish Group discussions. Recommendations in red refer to modifications of Regulations and recommendations in blue are linked to updating the guidance.

Regulation & Brief Description	Task & Finish Group Justification	Task & Finish Group Recommendation
Regulation 24 - Making or storage of silage – Silage storage requirements including 10m buffers for watercourses	Greater clarity of definition in the guidance (e.g., controlled waters) to include ponds, lakes groundwater and coastal waters etc.  This would be an important extension of the definition of Controlled Waters contained in S104 of the Water Resources Act 1991 <sup>14</sup> . This would provide protection for standing water and groundwater.	Clarify definitions in Regulations. Update guidance.
Regulation 27 - Temporary field sites –  Restrictions on locations, 50/10m buffer zones, additional requirements for poultry	Greater clarity and could be simplified. A need to reword the Regulation to reflect that.  Any organic manure without bedding needs to be contained (no slumping).  What is meant by 'Field heaps' need to be clearer in the guidance.  During discussions it was pointed out that this Regulation could be inconsistent with advice on control of disease.	Welsh Government to reword the Regulation for greater clarity.  Welsh Government to review/align this Regulation and the advice on control of disease.  Update guidance regarding 'field heaps'.
Regulation 28 - Separation of slurry –	Liquid fraction after mechanical slurry separation is still defined as slurry and must be contained as per Schedule 6.	Include clearer definitions for 'slurry'.  This Regulation needs to be reviewed and updated

<sup>&</sup>lt;sup>14</sup> https://www.legislation.gov.uk/ukpga/1991/57/contents

Separation of liquids and solids	Development of new technology and innovation should be considered.	with any new technological developments on the separation of slurry.
Regulation 34 - Records relating to storage of manure during the storage period	Records are needed but it could be covered in one requirement (e.g., holistic view linking to other documentary requirements etc).  Record keeping and timescales for updating the records should be clarified/simplified for farmers.  Records should be maintained throughout the year, not just during the storage period.  The guidance should also reference 'handling of manure' as well.  Consider what tools are available to help farmers (e.g., workbook, proforma documents etc.).	Bring methodologies all together into one recording system, Welsh Government to review and drive forward.  Could provide farmers with a flow diagram in published guidance to help them with this record keeping process.
Regulation 35 - Before 30 April each year, records relating to livestock on the holding during the storage period –  Records of the sites used for field heaps and the dates of use	Change date to a more memorable one (e.g., 1st Jan or 31st Dec). Alternatively, this could be recorded by farmers in line with the annual submission of the livestock inventory (an opportunity to record data all at once).	Change the date of when the records are to be made.
Regulation 25 - Storage of slurry –	Guidance needs to be more farmer friendly and clearer.	Review and update guidance.
Reference to Schedule 6 requirements	Review Schedule 6 <sup>15</sup> with current requirements in Construction Industry Research and Information Association (CIRIA) <sup>16</sup> .	Schedule 6 needs to be improved and clarified – Welsh Government, NRW and farming industry to work together to update this.

https://www.legislation.gov.uk/wsi/2021/77/schedule/6/made
 https://www.ciria.org/ItemDetail?iProductCode=C759F&Category=FREEPUBS

#### Regulation 29 -Storage capacity -

Capacity requirement to cover the storage period. Must be calculated in line with Schedule 1. Storage period accounts for 1 Oct to 1 March other than pigs and poultry which is 1 April

Farmers should have sufficient capacity for all slurry produced to meet all measures in the Regulations (spreading requirements, crop need etc.) and not just during the storage period.

Regulation to be reworded and clarified.

Tenant farmer issue to be considered – see Section 7.0 of this report.

## **Regulation 11 -** Risk maps –

Development of risk maps of the holding including, surface waters, boreholes, springs and wells, slopes greater than 12 degrees and shallow or sandy soils. Risk maps are a fundamental tool to inform decisions and actions.

Guidance needs to be better so that risk maps are seen as an efficient tool (e.g., farmer can provide a copy to contractor).

Risk maps are a key requirement of Quality Assurance Schemes, can there be one integrated process of producing them (e.g., help efficiency by preventing duplication).

Risk maps can help with enforcement.

Where can this type of data be stored (e.g., RPW online as a one-stop-shop).

Creating risk maps could be a challenge for those who do not have access to digital platforms.

Consider innovation and technology to create an efficient Risk Map tool which would inform decisions and actions. This could be online or paper format, using pre-layered information on the map such as slope, controlled waters, designated sites etc.

Update guidance.

Provide farmers with an example proforma document and training.

Encourage the use of innovation and technology to develop an App or online interactive tool to create risk maps.

Consider aligning risk maps with the requirements of Quality Assurance Schemes. Suggestion for a Welsh Government approved template be made available.

Consider where this information will be stored/saved.

Regulation 13 - Spreading manufactured nitrogen fertiliser near surface water – 2m of surface water buffer zone	Consider including Drinking Water Safeguard Zones on Risk Maps.  Increase buffer zone distance if not using precision spreading such as a header plate.  Encourage the use of buffer strips in line with the findings of the Rothamsted research project on riparian buffer strips <sup>17</sup> .  Instead of just surface water, include reference to break of the slope to protect controlled waters.	Consider linking the size of buffer strip to factors identified within the Risk Map such as proximity to Drinking Water abstraction or borehole, designated/sensitive habitats and sites, slopes etc.
Regulation 14 - Spreading organic manure near surface water, boreholes, springs, or wells – 10m buffer with 6m precision spreading, borehole/spring/well 50m buffer	Introduce additional measures to protect private and public water supplies.  Instead of using the distance from surface water, consider the distance from the break of slope to protect the controlled waters	Reconsider distances outlined in the Regulation in order to protect private and public water supplies along with controlled waters.
Regulation 16 - Incorporating organic manure into the ground – 24hr soil incorporation	Needs to be made clear in Regulation that this is about reducing ammonia emissions and run off.  Clear definition of 'incorporated' should be included.  Any organic manures as defined in regulations on bare soil and stubble needs to be 'incorporated'	Welsh Government to reword Regulation with reference to reducing ammonia emissions.  Regulation should include clear definitions.
Regulation 6 - Planning the spreading of nitrogen fertiliser — Nitrogen management planning, nitrogen uptake by crops/grass	Include all fertilisers and soil conditioners (e.g., lime).  Establish a clear process for farmers, such as:	Regulation should include all nutrient sources and soil conditioners (e.g., Lime).  Update guidance.

<sup>17</sup> https://gtr.ukri.org/projects?ref=BB%2FN004248%2F1

	Residual in soil = testing or for nitrogen use appropriate calculation (e.g., RB209)	
	2. Know what crop need is	
	3. Account for nutrients in organic manure before applying manufactured fertiliser	
	Overall reduction of losses to environment	
	Clear guidance is needed for Nutrient Management Planning.	
Regulation 7 - Additional information	Further to Regulation 6 include phosphorus.	Consider including phosphorus.
to Regulation 6 to be recorded during the year – calculation and record keeping of nitrogen application.	Include in Nutrient Management Plan and account for residual nutrients through record keeping (spreading for soil and crop need)	Guidance and support for manure sampling and analysis
Regulation 15 - Controlling how nitrogen fertiliser is spread – spreading requirement of below 4m	Precision spreading should be encouraged to reduce the risk of ammonia emissions.  This could have implications for future ammonia reduction measures.	Consider reducing the spreading height to decrease ammonia emissions.
Regulation 21 - Restrictions following the closed period	To include all readily available nitrogen organic sources (e.g., digestate) and should be made clear that all other requirements in the Regulations must be complied with throughout the year and not just the closed period (e.g., spreading conditions, soil and crop need).	Rewrite Regulation to include all readily available nitrogen organic sources (e.g., digestate).
Regulation 40 - Records of spreading nitrogen fertiliser – Includes dates and area spread, both organic and N fertiliser.	A need for clarity in the guidance. The guidance does not clearly define Regulation 40 (3) regarding the 80% grassland and keeping records exemption element.	Update guidance.

For the second		7
Includes exemption for holdings with 80% area sown as grass and less than 100kg/ha N from organic manures spread or directly deposited by animal, less than 90kg/ha of manufactured N and no organic manure brought onto the land.		
Regulation 8 - Total nitrogen spread on a holding –  Nitrogen do not exceed limits set out in Regulation 10 in any 12-month period	All nutrients (organic and inorganic) for crop and soil need not just nitrogen.	Consider including all nutrients spread for soil and crop need.
Regulation 9 - Calculating the amount of nitrogen available for crop uptake from organic manure – Includes available nitrogen by manure type	All nutrients for crop and soil need not just nitrogen.  Regulation 9(2) states percentage available in Regulations rather than using latest published reviewed data.	Consider including all nutrients spread for soil and crop need.
Regulation 10 - Maximum nitrogen limits by crop – Max nitrogen by crop type	All nutrients for crop and soil need not just nitrogen.	Consider including all nutrients spread for soil and crop need.
Regulation 33 - Recording the size of the holding – maintain records for total size of holding  The occupier of a holding must maintain a record of the total size of the holding calculated in	The definition of 'occupier of a holding' should include reference to 'tenants'. There are concerns that unless clearly defined, this could be manipulated.  Whether or not grazing licences are included needs to be determined.	Clarify the definition of 'occupier of a holding'.  Have one place to store/record data on an annual basis, such as the RPW Online account.

accordance with Regulation 4(3).  (2) If the size of the holding changes this record must be updated within one month."		
Regulation 36 - Record of nitrogen produced by animals on the holding — Includes time spent on the holding and N produced during that duration. Before 30 April every year	Tie in with the livestock inventory annually - harmonise dates with other regulatory requirements.  Make the Regulation clearer to include the size and ages of livestock etc.	Clarify the definition of 'occupier' and 'holding'.  Have one place to store/record data on an annual basis, such as the RPW Online account.  Regulation to include clarification of required records (e.g., information about the size and ages of livestock etc.).
Regulation 37 - Livestock manure brought on to or sent off the holding — Recording of import/export of manure on/off the holding	All organic manure imported or exported for consistency with current Waste Legislation.	Clarify the definition of 'holding'.  Have one place to store/record data on an annual basis, such as the RPW Online account.  Regulation to be in line with current Waste Legislation.

## 7.0 Tenancy Issues

Significant concerns have been raised about the ability of tenant farmers to always be able to comply with The Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021.

The primary concern is regarding the ability of some tenant farmers to meet the requirements in relation to slurry storage. Given that over half of tenancies are on average just over three years duration, it is unlikely that tenant farmers will be motivated or able to invest in new infrastructure.

A further issue is whether the landlord or tenant will be responsible for keeping the required records. Under certain circumstances, it is unclear who will be designated the "occupier", how records are to be kept and how these records will be transferred as tenants change.

Finally, tenancy agreements may forbid the tenant to remove or alter the landlord's fixed equipment or install new structures without permission. This may prevent or restrict the tenant's ability to comply with the Regulations.

The ability to resolve these issues between landlords and tenants in order to comply with the Regulations is exacerbated further by the current lengthy and costly arbitration process in Wales.

Suggested actions to help resolve these issues include:

- 1. A survey to investigate and quantify the current extent of tenant farmer's ability to meet the slurry storage requirements.
- 2. Greater clarity as to how a tenant farmer would be treated by the Regulator if they are unable to meet a regulation which is demonstrated to be outside their control.
- 3. To develop and implement a simpler, cheaper and speedier process for dispute resolution to resolve issues between tenants and landlords in the context of ensuring that tenanted holdings are compliant with The Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021.
- 4. For Welsh Government to set up the Tenancy Working Group to look at all issues facing tenants including the ability to comply with these Regulations.

A detailed summary of the issues facing tenant farmers in meeting the Regulations has been provided by the Tenant Farmers Association (TFA) Cymru and is included in the Appendix.

## 8.0 Overarching recommendations

The Alternative Measures Task & Finish Group suggest that the following recommendations are also considered by Welsh Government:

- Adopt the proposed alternative measures and clarifications outlined in this report
- Encourage the agricultural industry to use innovative technology and practices to prevent pollution (e.g., precision spreading and a weather app)
- Increase awareness and communication of the regulations with the agriculture industry

- Provide NRW with adequate resources to enforce these regulations and require it to produce a robust regulation and enforcement strategy specific to these regulations (linked to Recommendations 4 & 5 of the Senedd Review Report<sup>18</sup>)
- Establish effective mechanisms to regulate phosphate and soil which also cause agricultural pollution but are not covered by these regulations by perhaps incorporating control measures into the proposed National Minimum Standards
- Resolve tenanted land issues as soon as possible (linked to Recommendation 6 of the Senedd Review Report)
- Make adequate funding and support available for farmers to improve existing slurry storage structures (linked to Recommendation 2 of the Senedd Review Report)
- To develop technologies to convert excess animal slurry into a transportable product that can be exported to other parts of the UK where there are nutrient shortages (linked to Recommendation 8 of the Senedd Review Report).

<sup>&</sup>lt;sup>18</sup> https://senedd.wales/media/ja3hy2qt/cr-ld15135-e.pdf

## **Appendix**

Written statement from the Tenant Farmers Association (TFA) Cymru regarding the issues facing tenant farmers in Wales.

The particular problem that tenant farmers might encounter in complying with The Water Resources (Control Agricultural Pollution) (Wales) Regulations 2021 by virtue of barriers in their tenancy agreements has been at the heart of debate of the Wales Land Management Forum (WLMF) Sub Group on Agricultural Pollution since its formation at the request of the Minister in 2017. The concerns were well documented in the WLMF Sub Group's 'Interim Report' which was submitted to the Welsh Government in April 2018. Unfortunately, in spite of acknowledging that there are problems for tenants, to date, no meaningful solutions have been forthcoming. A 'Frequently Asked Questions' document specifically for tenants is still in draft form some 18-months after the new Regulations came into force. Specific suggestions as to a way forward submitted by the Tenant Farmers Association in response to the first draft have not been taken on board.

Areas of particular concern are capacity or lack of slurry storage. Whether or not the landlord is responsible for ensuring that the Regulations are complied with depends on individual circumstances and the particular agreement.

Farm Business Tenancies (FBTs) which now constitute half of all tenancies now have an average length of just over three years with 90% less than five years.

It would be understandable in these circumstances that a landlord would not want to invest large sums of money into a new slurry store if the tenancy was shortly to come to an end. Nor would a tenant wish to invest for the same reason, especially if the structure was treated as so called 'tenants fixture' meaning that there would be no end of tenancy compensation.

The Regulations indicate that it is the 'active farmer' who would be responsible for keeping the records and compliance. However, if the tenancy is a short-term FBT, the records would clearly need to be made available to any incoming tenant. To ensure this, it might be necessary for the Landlord to retain the records. For land let under a Grazing Licence, usually less than 12-months in length, the designated 'Occupier' is usually the Landlord and not the grazier, who would be limited in what they can use the land for to grazing with livestock and the taking of hay/silage. In theory, the Landlord would be the record keeper, but would they know the stocking numbers at all times and whether the grazier has applied any fertiliser? The Landlord might well have let the land to multiple graziers the records from which would have to be aggregated to arrive at figures for his whole holding.

Better clarification of how records are to be kept and who exactly is the 'occupier' need to be set out in the regulations.

The extent of the problems for tenants is not known. There are insufficient statistics as to how many tenants have slurry stores and how many of these are or will be compliant. While clearly there will be some tenants who will be able to reach agreement with their landlord, there will be many who will not and whose only recourse is arbitration to decide the issue – a lengthy and costly process. Had NRW' Dairy Project been completed the data would have been available to answer questions.

It is unfortunate that the recent Tenancy Reform Industry Group (TRIG) recommendations to create a simplified and cheaper dispute mechanism to that of Arbitration which was passed into English Law in the Agriculture Bill in 2020 and endorsed by the Welsh Government has not yet been incorporated into Welsh Law via the Legislative Consent Memorandum as was initially planned. It would appear that Welsh Government may not now enact this until the introduction of the Welsh Agriculture Bill probably in 2025., clearly too late to help tenants comply with the Regulations which will be in full forces by August 2024.

The alternative dispute mechanism when eventually incorporated will certainly help in resolving disagreements, it should however be expanded to encompass FBTs as well as Agricultural Holdings Act (AHA) tenancies. Something which is at present in contention.

While complying with slurry storage requirements is probably the most contentious issue for Landlord/tenants to address, there are other problem areas which tenants might be up against. Most tenancy agreements forbid a tenant to remove or alter Landlords fixed equipment or install new structures without permission. Installing underground tanks or pipework needs permission. Erecting or taking down gates, planting of all existing trees remain the property of the landlord at the end of the tenancy without compensation.

A sufficient number of livestock must be kept on the holding to properly make use of the land. All manures produced must be spread over the whole holding in the same year and cannot be exported off the holding.

Breeches of any of these conditions could result in a landlord serving the tenant with a 'Notice to remedy' within a certain timeframe. The tenant has either to reverse the breech or refer the matter to arbitration. If neither course were to be taken the tenant could be served with a 'Notice to quit' and would thereby loose the tenancy.

It is highly unfortunate that the Welsh Government did not take heed of the points the Sub Group raised concerning tenants' ability to comply with the Regulations before they were introduced in April 2021. That the issues are still unresolved some 18-months later, is disappointing.

#### TFA Cymru Recommendations

- 1. There is a substantial ramping up of NRW's Dairy Project to cover the whole of Wales both dairy and beef units so the full extent of the problems for tenants can be collated. Adequate funding to recruit and train a team to complete the project instead of only in 12-monthly increments must be provided.
- 2. If the current timeframe for implementation of the Regulations is to stand, then the Regulator (NRW) must be empowered to withhold the enforcement of any sanctions on a tenant who has been prevented from complying with any of the Regulations by virtue of the clauses in their tenancy agreement provided that they have taken all reasonable steps to comply and is not actually causing a pollution incident. If there is to be a derogation, then clearly there would also have to be derogation from the closed spreading period rules. A way must be found to implement this interpretation of the rules that is fair to non-tenant farmers who might be unable to comply because of for instance lack of funds, planning constraints etc.

- Better clarification on how records are kept and who exactly is the occupier needs to be set out in the Regulations or guidance. This is a particular relevance to graziers and commoners.
- Long-term solutions to all the issues raised must be found. The
  recommendations of TRIG should be implemented without delay. Other
  recommendations should be considered and implemented, if appropriate.
- 5. The decision by Welsh Government to follow England's lead and set up a tenant 'working group' to look at all issues facing tenants, must obviously include compliance with the Pollution Regulations as well as access to the Sustainable Farming Scheme. The Group not yet up and running, must come up with solutions as a matter of urgency so that recommendations can be considered for inclusion in the Wales Agriculture Bill.

#### **Conclusion**

The Welsh Government must accept the seriousness of the situation for tenants and implement these recommendations without delay if permanent long-term damage to the Landlord/tenant system in Wales is to be avoided.