|  |  |  |  |
| --- | --- | --- | --- |
|  | **Nitrates**  **Directive**  **Derogation**  **Fertilisation**  **Account** | | C:\Users\0856643\Desktop\Pic 2 - Amended.jpg |
| **Year:** |  |
| **Bus ID:** |  |
| For Northern Ireland farmers on the requirements of the Nitrates Directive Derogation from the livestock manure limit of 170 kg Nitrogen per hectare per year. | |
|  | | | |
| ::::::Work in Progress - Designers Resources: Logos:DAERA Logos:Sized Logos:A4 DAERA Sized Logos:Colour:A4 DAERA Logo process.jpg C:\Users\0856643\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\Z72H8XC1\DAERA -NIEA  Logo CMYK.jpg [Broadley Speaking Investors in People](http://broadley-speaking.com/wp-content/uploads/2014/01/iiplogo.jpg) | | | |

**This document may be made available in alternative formats; please contact us to discuss your requirements:-**

|  |  |
| --- | --- |
| DAERA Countryside Management Unit  Lindesay Hall, Loughry Campus  Loughry  Cookstown  Co Tyrone  BT80 9AA  Telephone: 0300 200 7842  Textphone: 0300 200 7851  Fax: 028 8675 7511  e-mail: [cmbenquiries@daera-ni.gov.uk](mailto:cmbenquiries@daera-ni.gov.uk) | DAERA Northern Ireland Environment Agency  Water Management Unit  17 Antrim Road  Tonagh  Lisburn  Co Antrim  BT28 3AL  Telephone: 028 9262 3188  e-mail: [WaterInfo@daera-ni.gov.uk](mailto:WaterInfo@daera-ni.gov.uk) |

You can download this Fertilisation Account from our website.

Follow this link: [www.daera-ni.gov.uk/publications/nitrates-directive-derogation-information-2015-2018](http://www.daera-ni.gov.uk/publications/nitrates-directive-derogation-information-2015-2018)

|  |
| --- |
| **Introduction** |

All farm businesses operating under **Derogation from the Nitrates Directive** must prepare a **fertilisation account** for each calendar year and submit it to the Northern Ireland Environment Agency (NIEA) by **1 March of the following year**.

This is an example format of a fertilisation account. The information can be presented in other formats if preferred; for example, a print out from the CAFRE farm nutrient management calculators, available at [www.dardni.gov.uk](http://www.dardni.gov.uk/onlineservices) (follow the link for ‘Online Services’), will supply most of the information required.

To assist in the completion of the fertilisation account, please refer to the **Derogation Guidance Booklet 2015-2018** and the **Nitrates Action Programme 2015-2018 Guidance Booklet and Workbook**. These booklets have been recently updated so there may be some differences in the layout of information between them and this fertilisation account booklet. Both Guidance booklets are available at: [www.daera-ni.gov.uk/articles/nitrates-action-programme-nap-and-phosphorus-regulations-2015-2018](http://www.daera-ni.gov.uk/articles/nitrates-action-programme-nap-and-phosphorus-regulations-2015-2018)

|  |
| --- |
| **Please note:**  Failure to submit an account by 1st March is a breach of Cross-Compliance conditions and will result in penalties being applied to Basic Payment Scheme (BPS) and invalidate an application for Derogation in that year. Inaccuracies or omissions could also lead to a breach of Cross-Compliance and financial penalties. |

**Contents:-**

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| 1 | **Area of crops (including grass)** |

Complete this table with the areas of crops (including grass) grown in 2015 and their nitrogen (N) requirement.

See **page 54** of the Derogation Guidance Booklet 2015-2018 for a completed example.

Refer to the farm map and list of fields in your fertilisation plan for 2015 noting crop areas.

|  |  |  |
| --- | --- | --- |
| **Crop grown** | **Area grown**  **(ha)** | **N requirement \***  **kg per ha** |
| Grassland |  |  |
| Spring barley |  |  |
| Winter barley |  |  |
| Spring wheat |  |  |
| Winter wheat |  |  |
| Maize |  |  |
| Potatoes |  |  |
| Spring oats |  |  |
| Winter oats |  |  |
| Winter oilseed rape |  |  |
| Spring oilseed rape |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

\* Nitrogen requirement can be found in the NAP 2015-2018 Guidance booklet, see **pages 42 & 43** for grassland and **pages 44-47** for crops.

|  |  |
| --- | --- |
| 2 | **Livestock numbers** |

Complete this table with the average livestock kept/produced in 2015

See **page 55** of the Derogation Guidance Booklet 2015-2018 for a completed example.

Accurate average cattle numbers can be calculated from herd records, a computer recording system or Aphis online.

\* If keeping calves or lambs for a part year use **either** the 0-6 and 6-12 month categories **OR** the 0-1 year category

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Stock type** | **Average number for 2015** |  | **Stock type** | **Average number for 2015** |  | **Stock type** | **Number produced in 2015** | |
| Dairy cows |  |  | **For pig breeding farms only** |  |  | Broilers (1,000s) |  | |
| Dairy heifer (over 2 years) |  |  | Boars |  |  | Male turkeys (1,000s) |  | |
| Dairy heifer (1 – 2 years) |  |  | Maiden gilts |  |  | Female turkeys (1,000s) |  | |
| Dairy breeding bull |  |  | Lactating sows, dry sows, Served gilts |  |  | Fattening ducks (1,000s) |  | |
| Dairy cattle (0-1 year) \* |  |  |  |  | **Unit capacity** | **No. of weeks occupancy** |
| Heifer calves (6-12 months)\* |  |  | Sale/transfer weight-18 kg |  |  |  |
| Heifer calves (0-6 months)\* |  |  | Sale/transfer weight-35 kg |  |  |  |
|  |  |  | Sale/transfer weight–105 kg |  |  | Broiler breeders (0-18 wks) |  |  |
| Suckler cows |  |  | **For pig growing and**  **finishing farms only** |  |  | Broiler breeders (18-60 wks) |  |  |
| Cattle (over 2 years) |  |  |  | Broiler breeders (0-60 wks) |  |  |
| Cattle (1-2 years) |  |  | Pigs (7-18 kg) |  |  | Pullets (1,000s) |  |  |
| Beef breeding bull |  |  | Pigs (7-35 kg) |  |  | Layers (1,000s) |  |  |
| Bull beef (0-13 months) |  |  | Pigs (7-105 kg) |  |  |  |  |  |
| Beef cattle (0-1 year) \* |  |  | Pigs (18-35 kg) |  |  |  |  |  |
| Bull beef (6-13 months) |  |  | Pigs (18-105 kg) |  |  |  |  |  |
| Calves (6-12 months) \* |  |  | Pigs (35-105 kg) |  |  |  |  |  |
| Calves (0-6 months) \* |  |  |  |  |  |  |  |  |
|  |  |  | Other |  |  |  |  |  |
| Ewe over 1 year |  |  |  |  |  |  |  |  |
| Ram over 1 year |  |  |  |  |  |  |  |  |
| Lamb (0-1 year)\* |  |  |  |  |  |  |  |  |
| Lamb (6-12 months)\* |  |  |  |  |  |  |  |  |
| Lamb (0-6 months)\* |  |  |  |  |  |  |  |  |

|  |  |
| --- | --- |
| 3 | **Imported and exported organic manures (from fertilisation plan for 2015)** |

Only complete this table if you have imported or exported any organic manure during 2015.

Remember that administrative details of manure exports must also be completed on **page 7.**

See **page 56** of the Derogation Guidance Booklet 2015-2018 for a completed example.

**1 cubic metre (m3) = 220 gallons**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Slurry type** | **Nitrogen (N) content** | **Phosphorus (P) content** | **Imported**  **Volume**  **(m³)** | **Exported**  **Volume**  **(m³)** |
|  |  |  |  |  |
| Cattle slurry – 2% DM | 1.6 | 0.26 |  |  |
| **Cattle slurry – 6% DM** | 2.6 | 0.52 |  |  |
| Cattle slurry – 10% DM | 3.6 | 0.79 |  |  |
| Pig slurry – 2% DM | 3.0 | 0.44 |  |  |
| **Pig slurry – 4% DM** | 3.6 | 0.79 |  |  |
| Pig slurry – 6% DM | 4.4 | 1.13 |  |  |
| Separated cattle slurry (liquid portion):- |  |  |  |  |
| - Strainer box | 1.5 | 0.13 |  |  |
| - Weeping wall | 2.0 | 0.22 |  |  |
| - Mechanical separator | 3.0 | 0.52 |  |  |
| Separated pig slurry (liquid portion) | 3.6 | 0.70 |  |  |
| Other (e.g. digestate) (including N and P content)\*\* |  |  |  |  |

\*\* Manure type and N and P content of organic manures, excluding livestock manure, must also be provided in accordance with the Waste Management Licensing Regulations (NI) 2003.

|  |  |
| --- | --- |
| 3 | **Imported and exported organic manures (from fertilisation plan for 2015)** (continued) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Manure type** | **Nitrogen (N) content** | **Phosphorus (P) content** | **Imported**  **quantity**  **(tonnes)** | **Exported**  **quantity**  **(tonnes)** |
|  |  |  |  |  |
| Cattle FYM – 25% DM | 6.0 | 1.4 |  |  |
| Sheep manure FYM – 25% DM | 7.0 | 1.4 |  |  |
| Pig FYM – 25% DM | 7.0 | 2.6 |  |  |
| Broiler litter – 66% DM | 33 | 7.0 |  |  |
| Layer manure – 30% DM | 16 | 5.7 |  |  |
| Turkey litter – 60% DM | 30 | 11 |  |  |
| Duck manure – 25% DM | 6.5 | 2.4 |  |  |
| Horse manure FYM – 30% DM | 7.0 | 2.2 |  |  |
| Goat manure FYM – 25% DM | 6.0 | 1.2 |  |  |
| Spent mushroom compost | 8.0 | 1.5 |  |  |
| Separated cattle slurry (solid portion) | 4.0 | 0.87 |  |  |
| Separated pig slurry (solid portion | 5.0 | 2.0 |  |  |
| Other (including N and P content)\*\* |  |  |  |  |

\*\* Manure type and N and P content of organic manures, excluding livestock manure, must also be provided in accordance with the Waste Management Licensing Regulations (NI) 2003.

The information provided in **pages 2-5** will be used by the NIEA to calculate the livestock nitrogen loading for your farm for 2015. You can check compliance with the limit of 250 kg N per ha per year by using the Livestock Manure Nitrogen Loading Calculator which is available at [www.eservices.ruralni.gov.uk/onlineservices/secure/NLoading.asp](http://eservices.ruralni.gov.uk/onlineservices/secure/NLoading.asp) or you can use the worksheets in the NAP 2015-2018 and Phosphorus Regulations Workbook from **pages 8-21**.

|  |  |
| --- | --- |
| 4 | **Exported organic manures – administrative record details** |

Only complete this table if you have exported any organic manure during 2015.

(the form can also be downloaded at [www.daera-ni.gov.uk/publications/nitrates-action-programme-nap-organic-manure-export-form](http://www.doeni.gov.uk/publications/nitrates-action-programme-nap-organic-manure-export-form)

**Notes:-**

* For derogated farms, a record of all exports in a calendar year, containing all the required information set out in the example below, must be submitted to NIEA by 1 March of the following year. (Non-derogated farms must submit records by 31 January for the previous calendar year). You will also need to keep a copy of the record on the farm as it may be required during an inspection.
* Under the NAP Regulations and Cross-Compliance it is an offence to provide false or misleading information and penalties can apply, i.e., a fine under NAP or reduced Area-Based Scheme payments under Cross-Compliance.
* Any total nitrogen (kg) exported should be subtracted from the total nitrogen excretion value for the livestock manure nitrogen loading calculation.
* For organic manures other than livestock manure (for example, anaerobic digestate), it is normally the producer’s responsibility to provide the user with a nutrient analysis, so that they can calculate nutrient loadings. However, this depends on the type of manure and the rules controlling its use. If you are exporting organic manures other than livestock manures (for example, sewage sludge or anaerobic digestate), contact NIEA to discuss whether you are required to provide a nutrient analysis and at what frequency.

**Example:-**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Exporter’s name:** | | | Robert Jones | | | **Exporter’s Business ID:** | | | 456789 | |
| **Exporter’s signature** | | |  | | |  | | |  | |
| **Required** | | | | | | | **Optional** | | | |
| **Date moved** | **Type of livestock manure** | **Quantity (tonnes or m3)(1)**  **(A)** | | **Transporter’s name and address** | **Importer’s name and Business ID(2)** | | **Signature of importer(3)** | **Nitrogen content of manure kg/m3 or kg/t (see Annex G)**  **(B)** | | **Total nitrogen kg(4)**  **(AxB)** |
| 14/9/15 | Pig Slurry | 50 | | John Smith, 1 Farmview Rd, BT90 1XY | John Smith, Bus ID 123456 | | John Smith | 3.6 | | 180 |
| 20/9/15 | Anaerobic digestate | 50 | | John Smith, 1 Farmview Rd, BT90 1XY | John Smith, Bus ID 123456 | | John Smith | 4.5 | | 225 |

|  |  |
| --- | --- |
| 4 | **Exported organic manures – administrative record details** (continued) |

**Table for completion:-**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Exporter’s name:** | | |  | | | **Exporter’s Business ID:** | | |  | |
| **Exporter’s signature** | | |  | | |  | | |  | |
| **Required** | | | | | | | **Optional** | | | |
| **Date moved** | **Type of livestock manure** | **Quantity (tonnes or m3)(1)**  **(A)** | | **Transporter’s name and address** | **Importer’s name and Business ID(2)** | | **Signature of importer(3)** | **Nitrogen content of manure kg/m3 or kg/t (see Annex G)**  **(B)** | | **Total nitrogen kg(4)**  **(AxB)** |
|  |  |  | |  |  | |  |  | |  |
|  |  |  | |  |  | |  |  | |  |
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(1) (m3 = 220 gallons).

(2) For exports to RoI, importer’s Herd No. should be included instead of Business ID.

(3) There is currently no requirement for the manure importer to sign this record, but it is recommended practice.

(4) There is no requirement to make this calculation, but it may help you assess your nitrogen loading status.

|  |  |
| --- | --- |
| 5 | **Chemical fertiliser stock details** |

Complete this table with details of chemical fertiliser stocks, purchases and sales for 2015.

See **page 57** of the Derogation Guidance Booklet 2015-2018 for a completed example.

Record the tonnage and N and P content of all chemical fertiliser stocks on 1 January and 31 December and the tonnage and N and P content of chemical fertiliser imported in and exported off the farm during 2015. This will allow NIEA to determine if you have complied with the chemical nitrogen restrictions. You can check compliance with this limit by using the N Max for Grassland Calculator for grass and the Crop Nutrient Recommendation Calculator for crops other than grass which are available at [www.daera-ni.gov.uk/onlineservices](http://www.dardni.gov.uk/onlineservices). Alternatively you can check the limits in the NAP Guidance booklet 2015-2018 **Section 6** for grassland and crops and use the worksheets in the NAP 2015-2018 and Phosphorus Regulations Workbook from **page 40**.

This fertiliser record will also be used by the NIEA to check compliance with the P Balance.

**Chemical fertilisers held on 1 January 2015 (held from previous year)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fertiliser type for example 25:5:5** | | | **Quantity (tonnes)** |
| **N** | **P (P2O5)** | **K** |
|  |  |  |  |
|  |  |  |  |
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|  |  |  |  |
|  |  |  |  |

|  |  |
| --- | --- |
| 5 | **Chemical fertiliser stock details** (continued) |

**Chemical fertilisers (purchased/imported and sold/exported) in 1 January to 31 December 2015**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date** | **N** | **P (P2O5)** | **K** | **Amount purchased or imported on to farm (tonnes)** | **Amount sold or exported off farm (tonnes)** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
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|  |  |  |  |  |  |

**Chemical fertilisers held on 31 December 2015 (not used during year and held for following year)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fertiliser type for example 25:5:5** | | | **Quantity (tonnes)** |
| **N** | **P (P2O5)** | **K** |
|  |  |  |  |
|  |  |  |  |
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|  |  |  |  |
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|  |  |
| --- | --- |
| 6 | **Dirty water management** |

Complete this page with details of how you manage and store dirty water.

See **page 62** of the Derogation Guidance Booklet 2015-2018 for a completed example.

How is your dirty water managed?

Stored with slurry

Stored separately

If other please specify

|  |  |
| --- | --- |
| 7 | **Agricultural products that contain phosphorus imported on (inputs) and exported off (outputs) the farm (P Balance)** |

Complete this section to allow NIEA to calculate the P balance for your holding and check if you have complied with the **10 kg P per ha per year limit** for 2015.

See **page 63** of the Derogation Guidance Booklet 2015-2018 for a completed example.

|  |
| --- |
| If you want to calculate the P balance yourself (to assist you in ensuring that you have complied with the limit), you can complete the P Balance worksheet at Annex B and submit it with the rest of the Fertilisation Account. **You then do not have to complete this P Balance section**.  Alternatively, you can use the P Balance Calculator at [www.dardni.gov.uk/onlineservices](http://www.dardni.gov.uk/onlineservices). if you use this Calculator you can print the “**Detailed Balance Summary”** and submit it with the rest of your Fertilisation Account. Again, **you then do not have to complete this P Balance section**. |

P Balance is the difference in kg per ha in agricultural products containing phosphorus (P) that are purchased/imported onto the farm (inputs) and those sold/exported off the farm (outputs):-

|  |  |  |  |
| --- | --- | --- | --- |
| **P balance** | = | Inputs – Outputs |  |
| for the calendar year | Eligible agricultural area controlled |  |

|  |  |
| --- | --- |
| 7 | **Agricultural products that contain phosphorus imported on (inputs) and exported off (outputs) the farm (P Balance)** (continued) |

**Step 1 – P INPUTS**

**Inputs include:-**

- P in chemical fertiliser purchased/imported (quantity and P content) (already entered in table at **page 8)**.

- P in any organic manure imported onto farm (quantity and P content) (already entered in table at **page 4).**

- P in feedstuffs (including concentrates/straights/silage/straw/hay) purchased/imported onto farm (quantity and P content) (enter into table on **page 13**).

- P in livestock bought in (enter into table on **page 15**).

**Step 2 – P OUTPUTS**

**Outputs include:-**

- P exported in organic manures (quantity and P content) (already entered in table at **page 4)**.

- P in produce sold/exported off the farm, e.g. meat, milk or crops (enter into table on **page 16**).

- P in livestock sold/exported off the farm (enter into table on **page 17**).

**Please note:-**

Standard P contents of common agricultural feedstuffs and products are shown in **Annex A, pages 20-21**.

For concentrates, if you wish to use lower P contents than those shown you must submit documentation from your feed supplier with your fertilisation account showing the P content of the feeds used. Failure to submit will mean that the standard value will be used. Evidence should include a letter/invoice from the meal supplier containing:-

- your name and address;

- the P content and tonnage of the feed;

- date supplied; and

- in the absence of a letterhead the note should be signed by the supplier together with their contact details. (See example note, **page 14**).

|  |  |
| --- | --- |
| 7 | **Agricultural products that contain phosphorus imported on (inputs) and exported off (outputs) the farm (P Balance)** (continued) |

**P INPUTS – Purchased feedstuffs including concentrates/straights/silage/straw/hay**

Complete this table with all feedstuffs purchased during 2015 (do not include home grown feedstuffs).

|  |  |  |
| --- | --- | --- |
| **Feedstuff type\*** | **Amount purchased per year**  **(t)** | **Phosphorus (P) content\*\***  **(kg per t)\*\*\*** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
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|  |  |  |
|  |  |  |
|  |  |  |

\* The P content of feedstuffs, including different types of concentrates are listed in **Annex A, pages 20-21.**

\*\* If you purchased a concentrate with a lower P content you must submit documentation from your feed supplier with your fertilisation account to show the P content in the feed.

\*\*\* To convert from % P to kg per t multiply the % by 10.

|  |  |
| --- | --- |
| 7 | **Agricultural products that contain phosphorus imported on (inputs) and exported off (outputs) the farm (P Balance)** (continued) |

**P INPUTS - An example of a note from a meal supplier if you are deviating from the standard phosphorus (P) figures per tonne of concentrates.**

|  |
| --- |
| Inshalleen Mills  Ballymills  Co. Tyrone BT2 9ZZ  4/1/2016  **John Smith**  **1 Bigfarm Road**  **Ballyhome**  **BT2 7AG**  **Deliveries for the period 1 January 2015 to 31 December 2015**  250 tonnes of supreme dairy mix feed with a P content of 0.55%  30 tonnes of heifer concentrates with a P content of 0.53%  475 tonnes of broiler concentrates with a P content of 0.47% |

(To convert from % P to kg per t multiply the % by 10)

|  |  |
| --- | --- |
| 7 | **Agricultural products that contain phosphorus imported on (inputs) and exported off (outputs) the farm (P Balance)** (continued) |

**P INPUTS - Livestock bought in**.

Complete this table with all livestock bought in during 2015 (all columns must be completed).

|  |  |  |  |
| --- | --- | --- | --- |
| **Livestock type** | **Number bought in year** | **Average live weight of livestock**  **(kg)** | **Total live weight of livestock**  **(kg)** |
| **Dropped calves (50 kg)** |  | Weight not required | |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Sheep/lambs** |  |  |  |
| **Sheep/lambs** |  |  |  |
| **Sheep/lambs** |  |  |  |
| **Sheep/lambs** |  |  |  |
| **Sheep/lambs** |  |  |  |
| **Pigs** |  |  |  |
| **Pigs** |  |  |  |
| **Pigs** |  |  |  |
| **Pigs** |  |  |  |
| **Other please specify** |  |  |  |

|  |  |
| --- | --- |
| 7 | **Agricultural products that contain phosphorus imported on (inputs) and exported off (outputs) the farm (P Balance)** (continued) |

**P OUTPUTS – Crop produce sold/exported off farm.**

Complete this table with all crop products sold/exported during 2015

|  |  |
| --- | --- |
| **Crop produce type** | **Amount sold per year**  **(t)** |
| Silage |  |
| Hay |  |
| Straw |  |
| Barley |  |
| Potatoes |  |
| Wheat |  |
| Oats |  |
| Other – please specify |  |

**P OUTPUTs – Livestock produce sold/exported off farm**

Complete this table with all livestock products sold/exported during 2015

|  |  |
| --- | --- |
| **Livestock produce type** | **Amount/number sold** |
| Milk (litres) |  |
| Wool (tonnes) |  |
| 1,000 broilers |  |
| 1,000 broiler breeders 0-18 weeks |  |
| 1,000 broiler breeders 18-60 weeks (including eggs) |  |
| 1,000 broiler breeders 0-60 weeks (including eggs) |  |
| 1,000 layers (including eggs) |  |
| 1,000 pullets |  |
| 1,000 turkeys male |  |
| 1,00 turkeys female |  |
| 1,000 ducks |  |
| Other |  |

|  |  |
| --- | --- |
| 7 | **Agricultural products that contain phosphorus imported on (inputs) and exported off (outputs) the farm (P Balance)** (continued) |

**P OUTPUTS – Livestock leaving the farm**

Complete this table with all livestock sold/removed during 2015 (all columns must be completed).

|  |  |  |  |
| --- | --- | --- | --- |
| **Livestock type** | **Number sold in year** | **Average live weight of livestock**  **(kg)** | **Total live weight of livestock**  **(kg)** |
| **Dropped calves (50 kg)** |  | Weight not required | |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Cattle** |  |  |  |
| **Sheep/lambs** |  |  |  |
| **Sheep/lambs** |  |  |  |
| **Sheep/lambs** |  |  |  |
| **Sheep/lambs** |  |  |  |
| **Sheep/lambs** |  |  |  |
| **Pigs** |  |  |  |
| **Pigs** |  |  |  |
| **Pigs** |  |  |  |
| **Pigs** |  |  |  |
| **Other please specify** |  |  |  |

\*Include fallen animals

|  |  |
| --- | --- |
| 7 | **Agricultural products that contain phosphorus imported on (inputs) and exported off (outputs) the farm (P Balance)** (continued) |

**Recommended record sources of agricultural products**

|  |  |
| --- | --- |
| **Agricultural product** | **Recommended record source** |
| Milk | Milk cheque details. |
| Livestock cattle | Herd record details. |
| Livestock sheep | Flock record details. |
| Livestock pig | Herd register/management records. |
| Livestock poultry | Industry flock records. |
| Fertiliser | Fertiliser invoices/fertiliser account. |
| Concentrates | Invoices.  (Documentation showing phosphorus (P) content if deviating from standard figures must be submitted with your fertiliser account). |
| Imported/exported manures | Amounts and P content of manures imported and exported. |
| Crop products such as hay, straw or potatoes | Invoices from seller or purchaser. |

A list of agricultural products and their P contents may be found in **Annex A, pages 20-21**.

A P balance does not have to be calculated but doing so will help you ensure you have complied with the limit. A worked example of how a P balance is calculated is outlined on **page 19** and a blank P balance worksheet is included at **Annex B**.

In addition a Phosphate Balance Calculator is available on the website [www.daera-ni.gov.uk/onlineservices](http://www.dardni.gov.uk/onlineservices)

|  |  |
| --- | --- |
| 8 | **Example of a calculated P Balance (for a 64 ha, 100 cow dairy farm with 132,000 broilers per year)** |

This is a worked example of a P balance calculation. To calculate the P balance yourself you can complete the P Balance worksheet at Annex B, or use the P Balance Calculator at [www.daera-ni.gov.uk/onlineservices](http://www.dardni.gov.uk/onlineservices) and print the “**Detailed Balance Summary”,** and submit this with the rest of the Fertilisation Account. **You then do not have to complete Section 7**.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Amount** | **Phosphorus (P) content**  **(kg per unit)** | **Kg P in**  **(P bought or imported)** | **Kg P out**  **(P sold or exported)** |
| Chemical fertiliser type\* |  |  |  |  |
| Fertiliser 27:6\*:12 | **1.9 t** | (6 x 4.36)  **26.16** | (1.9 x 26.16) = **49.7 kg** | **-** |
| Concentrates\*\* |  |  |  |  |
| Concentrates dairy cow | **250 t** | **5.5** | (250 x 5.5 ) = **1,375 kg** | **-** |
| Concentrates heifer | **30 t** | **5.3** | (30 x 5.3 ) = **159 kg** | **-** |
| Concentrates broilers | **475 t** | **4.7** | (475 x 4.7 ) = **2,232.5 kg** | **-** |
| Other products |  |  |  |  |
| Litres of milk sold | **650,000** | **0.001** | **-** | (650,000 x 0.001) = **650 kg** |
| Dropped calves sold | **50** | **0.33** | **-** | (50 x 0.33) = **16.5 kg** |
| Cattle sold | **15,000** | **0.0066** | **-** | = **99 kg** |
| Cattle bought | **3,000** | **0.0066** | **= 19.8 kg** | **-** |
| Broilers (1,000) | **132** | **12** | **-** | (132 x 12)= **1,584 kg** |
| Exported broiler litter | **141 t** | **7** | **-** | (141 x 7) = **987 kg** |
|  | | **Totals** | **3,836 kg A** | **3,336.5 kg B** |
| **P balance ( A-B)** | (3,836 kg – 3,336.5 kg) = **+ 499.5 kg** | |
| **P balance/(eligible agricultural area)** | | | (499.5 kg per 64 ha ) = **+ 7.80 kg per ha** | |

\* (multiply P2O5 % level on fertiliser bag by 4.36 to convert to kg P in 1 tonne)

This is below the P balance limit of + 10 kg per ha per year, therefore, compliant with this aspect of the derogation.

\*\* (every 0.1% P in a ration equates to 1 kg P per t)

|  |  |
| --- | --- |
| **Annex A** | **Phosphorus (P) content for common agricultural products and feedstuffs** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Product** | **Phosphorus (P) content (kg per unit)** |  | **Product** | **Phosphorus (P) content (kg per unit)** |
| **Concentrates** |  |  | **Produce from livestock** (continued) |  |
| 1 t poultry concentrate (or use actual declared  figures) | 5 |  | Wool per tonne | 0.4 |
| **Crop products** |  |
| 1 t pig concentrate (or use actual declared figures) | 4.8 |  | 1 t straw | 1.0 |
| 1 t ruminant concentrate (or use actual declared  figures) | 5.5 |  | 1 t silage | 0.6 |
|  | 1 t hay | 3.0 |
| 1 t other concentrates (or use actual declared  figures) | 5.8 |  | 1 t potatoes | 0.4 |
|  | 1 t oats | 2.9 |
| **Livestock** |  |  | 1 t barley | 3.0 |
| Dropped calf (50 kg) | 0.33 |  | 1 t wheat | 2.6 |
| Cattle 1 kg | 0.0066 |  | 1 t maize | 2.5 |
| Pigs/sows per 100 kg | 0.5 |  | 1 t full fat soya | 4.5 |
| Lambs/sheep per 100 kg | 0.54 |  | 1 t linseed | 8.1 |
| Kids/goats per 100 kg | 0.54 |  | 1 t rape | 11.0 |
| \*1,000 broilers | 12.0 |  | 1 t soya | 6.8 |
| \*1,000 broiler breeders 0-18 weeks | 11.4 |  | 1 t sunflower | 9.3 |
| \*1,000 broiler breeders 18-60 weeks (eggs  included) | 33.5 |  | 1 t gluten | 9.6 |
|  | 1 t citrus | 1.0 |
| \*1,000 broiler breeders 0-60 weeks (eggs  Included) | 44.9 |  | 1 t wheat distillers | 7.7 |
|  | 1 t corn distillers | 7.7 |
| \*1,000 turkeys male | 34.6 |  | 1 t peas | 4.4 |
| \*1,000 turkeys female | 31.7 |  | 1 t palm kernel | 6.3 |
| \*1,000 ducks | 11.4 |  | 1 t pollard | 10.0 |
| \*1,000 pullets | 7.9 |  | 1 t soya hulls | 1.4 |
| **Produce from livestock** |  |  | 1 t sugar beet | 1.0 |
| Eggs from 1,000 layers (including eggs) | 42.48 |  | 1 t grass fresh | 0.6 |
| 1 litre milk | 0.001 |  | 1 t whole crop wheat fresh | 0.9 |

\* Figures take into consideration the P in stock entering and leaving the farm

|  |  |
| --- | --- |
| **Annex A** | **Phosphorus (P) content for common agricultural products and feedstuffs** (continued) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Product** | **Phosphorus (P) content (kg per unit)** |  | **Product** | **Phosphorus (P) content (kg per unit)** |
| **Crop products** (continued) |  |  | **Solid manures** |  |
| 1 t whole crop wheat silage | 0.9 |  | 1 t broiler litter | 7.0 |
| 1 t forage maize fresh | 0.7 |  | 1 t layer manure | 5.7 |
| 1 t forage maize silage | 0.7 |  | 1 t turkey litter | 11 |
| **Slurries** |  |  | 1 t duck manure | 2.4 |
| 1 m3 cattle slurry 2% DM | 0.26 |  | 1 t cattle FYM | 1.4 |
| 1 m3 cattle slurry 6% DM (typical) | 0.52 |  | 1 t sheep FYM | 1.4 |
| 1 m3 cattle slurry 10% DM | 0.79 |  | 1 t goat manure | 1.2 |
| 1 m3 pig slurry 2% DM | 0.44 |  | 1 t pig FYM | 2.6 |
| 1 m3 pig slurry 4% DM (typical ) | 0.79 |  | 1 t horse manure | 2.2 |
| 1 m3 pig slurry 6% DM | 1.13 |  | Spent mushroom compost | 1.5 |
| Separated pig slurry (liquid portion) | 0.70 |  | Separated cattle slurry (solid portion) | 0.87 |
| **Separated cattle slurries (liquid portion)** |  |  | Separated pig slurry (solid portion) | 2.0 |
| Strainer box | 0.13 |  | **Chemical fertiliser** |  |
| Weeping wall | 0.22 |  | 1 t fertiliser | Multiply the  %P2O5 content  by 4.36 |
| Mechanical separator | 0.52 |  |
|  |  |  |

|  |  |
| --- | --- |
| **Annex B** | **P Balance Worksheet** |

For 1st January 2015 to 31st December 2015

This worksheet will assist you to comply with the P Balance limit of 10 kg P/ha/year. You do not have to complete this worksheet. However, if you do this worksheet can be submitted with the rest of the Fertilisation Account and you do not have to complete the P Balance section of the Fertilisation Account on **pages 11-18**.

Alternatively you can use the P Balance Calculator at [www.daera-ni.gov.uk/onlineservices](http://www.dardni.gov.uk/onlineservices). If you use the P Balance Calculator print the “Detailed Balance Summary” and this can be submitted with the rest of your Fertilisation Account and you do not have to complete the P Balance section of the Fertilisation Account.

|  |  |
| --- | --- |
| **Annex B** | **P Balance Worksheet** (continued) |

**Calculating P Balance - Step 1 – P Inputs**

**P INPUTS – Chemical Fertilisers**

1. Enter the fertiliser type and the amount purchased per year.

2. Multiply the amount purchased per year by the P2O5% and then by 4.36 (to convert to kg P in 1 tonne).

3. Total the P content of fertilisers purchased and insert in **Box A.**

**Example:-**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Fertiliser type** | | | **Amount purchased or imported**  **(t)** | x | **%**  **P2O5** | X 4.36 | = | **Quantity of phosphorus (kg)** |
| **N** | **P**  **P2O5** | **K** |
| 27 | 6 | 12 | 1.9 | x | 6 | x 4.36 | = | 49.7 |
| **Total P content of chemical fertilisers (kg P/year)** | | | | | | | = | **49.7** |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Fertiliser type** | | | **Amount purchased or imported**  **(t)** | x | **%**  **P2O5** | X 4.36 | = | **Quantity of phosphorus (kg)** |
| **N** | **P**  **P2O5** | **K** |
|  |  |  |  | x |  | x 4.36 | = |  |
|  |  |  |  | x |  | x 4.36 | = |  |
|  |  |  |  | x |  | x 4.36 | = |  |
|  |  |  |  | x |  | x 4.36 | = |  |
|  |  |  |  | x |  | x 4.36 | = |  |
|  |  |  |  | x |  | x 4.36 | = |  |
|  |  |  |  | x |  | x 4.36 | = |  |
|  |  |  |  | x |  | x 4.36 | = |  |
|  |  |  |  | x |  | x 4.36 | = |  |
|  |  |  |  | x |  | x 4.36 | = |  |
|  |  |  |  | x |  | x 4.36 | = |  |
| **Total P content of chemical fertilisers (kg P/year)** | | | | | | | = | - (**A)** |

|  |  |
| --- | --- |
| **Annex B** | **P Balance Worksheet** (continued) |

**P INPUTS – Imported Organic Manures**

1. Select the organic manure type and enter the amount imported per year. If ‘Other’ also enter the P content from the lab report.

2. Multiply the amount imported per year by the P content.

3. Total the P content of imported organic manures and insert in **Box B.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Organic manure type** | **Amount imported (m3 or t)** | x | **P content**  **(kg P/m3 or t)** | **=** | **Quantity of phosphorus (kg)** |
| Cattle slurry – 2% DM |  | x | 0.26 | = |  |
| **Cattle slurry – 6% DM** |  | x | 0.52 | = |  |
| Cattle slurry – 10% DM |  | x | 0.79 | = |  |
| Pig slurry – 2% DM |  | x | 0.44 | = |  |
| **Pig slurry – 4% DM** |  | x | 0.79 | = |  |
| Pig slurry – 6% DM |  | x | 1.13 | = |  |
| Separated cattle slurry (liquid portion):- |  |  |  |  |  |
| - Strainer box |  | x | 0.13 | = |  |
| - Weeping wall |  | x | 0.22 | = |  |
| - Mechanical separator |  | x | 0.52 | = |  |
| Separated pig slurry (liquid portion) |  | x | 0.70 | = |  |
| Cattle FYM – 25% DM |  | x | 1.4 | = |  |
| Sheep manure FYM – 25% DM |  | x | 1.4 | = |  |
| Pig FYM – 25% DM |  | x | 2.6 | = |  |
| Broiler litter – 66% DM |  | x | 7.0 | = |  |
| Layer manure – 30% DM |  | x | 5.7 | = |  |
| Turkey litter – 60% DM |  | x | 11 | = |  |
| Duck manure – 25% DM |  | x | 2.4 | = |  |
| Horse manure FYM – 30% DM |  | x | 2.2 | = |  |
| Goat manure FYM – 25% DM |  | x | 1.2 | = |  |
| Spent mushroom compost |  | x | 1.5 | = |  |
| Separated cattle slurry (solid portion) |  | x | 0.87 | = |  |
| Separated pig slurry (solid portion) |  | x | 2.0 | = |  |
| Other |  | x | P content from analysis | = |  |
| **Total P content of imported organic manures (kg/year)** | | | | **=** | - (**B)** |

|  |  |
| --- | --- |
| **Annex B** | **P Balance Worksheet** (continued) |

**P INPUTS – Purchased feedstuffs including concentrates/straights/silage/straw/hay (Do not include home grown feedstuffs)**

1. Enter the feedstuff type and amount purchased per year.

2. Multiply the amount purchased per year by the P content of the feed, (or use the actual declared P content figure if known). Standard P contents are:-

* Unspecified concentrates is taken as 5.8 kg per tonne or 0.58%.
* Ruminant concentrates is taken as 5.5 kg per tonne or 0.55%.
* Poultry concentrates is taken as 5.0 kg per tonne or 0.50%.
* Pig concentrates is taken as 4.8 kg per tonne or 0.48%.

If you purchased a concentrate with a lower P content you must supply documentation to demonstrate the P content. Evidence must include a letter/invoice from the feed supplier containing your name, address, the P content in the meal and dated. In the absence of a letterhead the note should be signed by the supplier together with their contact details.

3. Total the P content of feedstuffs used and insert in **Box C.**

**Example:-**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Feedstuff type** | **Amount purchased per year (t)** | x | **P content**  **(kg/t)** | **=** | **Quantity of phosphorus (kg)** |
| Dairy cow winter meal | 250 | x | 5.5 | = | 1,375 |
| Broiler concentrates | 475 | x | 4.7 | = | 2,232.5 |
| Heifer concentrates | 30 | x | 5.3 | = | 159 |
| **Total P content of feedstuffs purchased/imported (kg P/year)** | | | | **=** | **3,766.5** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Feedstuff type** | **Amount purchased per year (t)** |  | **P content**  **(kg/t)** |  | **Quantity of phosphorus (kg)** |
|  |  | x |  | = |  |
|  |  | x |  | = |  |
|  |  | x |  | = |  |
|  |  | x |  | = |  |
|  |  | x |  | = |  |
|  |  | x |  | = |  |
|  |  | x |  | = |  |
|  |  | x |  | = |  |
| **Total P content of feedstuffs purchased/imported(kg P/year)** | | | | = | - (**C)** |

For the P content of a range of feedstuffs please see Annex A

|  |  |
| --- | --- |
| **Annex B** | **P Balance Worksheet** (continued) |

**P INPUTS – Livestock bought in**

1. Enter the number of livestock purchased and total live weight of these livestock.

2. Multiply the total live weight by the P Content.

3. Total the P content of all livestock bought in and insert in **Box D.**

**Note:** Poultry numbers are not required here as P inputs are accounted for in livestock produce in P outputs.

**Example:-**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Livestock type** | | **Number bought in per year** | **x** | **Average live weight (kg)** | **x** | **P content (kg/unit)** | = | **Quantity of phosphorus**  **(kg)** |
| Cattle | | 5 | x | 650 | x | 0.0066 | = | 21.45 |
|  | **Total P content of livestock purchased/imported in kg P/year** | | | | | | **=** | **21.45** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Livestock type** | **Number bought in per year** | **x** | **Average live weight (kg)** | **x** | **P content (kg/unit)** | = | **Quantity of phosphorus**  **(kg)** |
| Dropped calves (50 kg)\* |  |  |  | x | 0.33 | = |  |
| Cattle |  | x |  | x | 0.0066 | = |  |
| Cattle |  | x |  | x | 0.0066 | = |  |
| Cattle |  | x |  | x | 0.0066 | = |  |
| Cattle |  | x |  | x | 0.0066 | = |  |
| Cattle |  | x |  | x | 0.0066 | = |  |
| Cattle |  | x |  | x | 0.0066 | = |  |
| Sheep/lambs |  | x |  | x | 0.0054 | = |  |
| Sheep/lambs |  | x |  | x | 0.0054 | = |  |
| Sheep/lambs |  | x |  | x | 0.0054 | = |  |
| Pigs |  | x |  | x | 0.0050 | = |  |
| Pigs |  | x |  | x | 0.0050 | = |  |
| Pigs |  | x |  | x | 0.0050 | = |  |
| Other please specify |  | x |  | x |  | = |  |
| **Total P content of livestock purchased/imported (kg P/year)** | | | | | | = | - (**D)** |

\*For dropped calves the weight is not needed.

|  |  |
| --- | --- |
| **Annex B** | **P Balance Worksheet** (continued) |

**Step 2 – P Outputs**

**P OUTPUTS – Crop Produce**

1. Select the crop produce type and enter the amount sold off the farm per year.

2. Multiply the amount sold per year by the P content.

3. Total the P content of crop produce sold and insert in **Box E.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Crop produce type** | **Amount sold per year (t)** | **x** | **P content (kg/t)** | **=** | **Quantity of phosphorus (kg)** |
| Silage |  | x | 0.6 | = |  |
| Hay |  | x | 3.0 | = |  |
| Straw |  | x | 1.0 | = |  |
| Barley |  | x | 3.0 | = |  |
| Potatoes |  | x | 0.4 | = |  |
| Wheat |  | x | 2.6 | = |  |
| Oats |  | x | 2.9 | = |  |
| Other please specify |  | x |  | = |  |
|  |  | x |  | = |  |
| **Total P content of crop produce sold (kg P/year)** | | | | = | - (**E)** |

|  |  |
| --- | --- |
| **Annex B** | **P Balance Worksheet** (continued) |

**P OUTPUTS – Exported Organic Manures**

1. Select the organic manure type and enter the amount exported per year. If ‘Other’ also enter the P content from the lab report.

2. Multiply the amount imported per year by the P content.

3. Total the P content of exported organic manures and insert in **Box F.**

**Example:-**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Organic manure type** | **Amount exported**  **(m3 or t)** | **x** | **P content (kg P/m3 or t)** | **=** | **Quantity of phosphorus (kg)** |
| Broiler litter | 100 | x | 7.00 | = | 1091 |
| **Total P content of exported organic manures (kg/year)** | | | | **=** | **1091** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Organic manure type** | **Amount exported (m3 or t)** | x | **P content**  **(kg P/m3 or t)** | **=** | **Quantity of phosphorus (kg)** |
| Cattle slurry – 2% DM |  | x | 0.26 | = |  |
| **Cattle slurry – 6% DM** |  | x | 0.52 | = |  |
| Cattle slurry – 10% DM |  | x | 0.79 | = |  |
| Pig slurry – 2% DM |  | x | 0.44 | = |  |
| **Pig slurry – 4% DM** |  | x | 0.79 | = |  |
| Pig slurry – 6% DM |  | x | 1.13 | = |  |
| Separated cattle slurry (liquid portion):- |  |  |  |  |  |
| - Strainer box |  | x | 0.13 | = |  |
| - Weeping wall |  | x | 0.22 | = |  |
| - Mechanical separator |  | x | 0.52 | = |  |
| Separated pig slurry (liquid portion) |  | x | 0.70 | = |  |
| Cattle FYM – 25% DM |  | x | 1.4 | = |  |
| Sheep manure FYM – 25% DM |  | x | 1.4 | = |  |
| Pig FYM – 25% DM |  | x | 2.6 | = |  |
| Broiler litter – 66% DM |  | x | 7.0 | = |  |
| Layer manure – 30% DM |  | x | 5.7 | = |  |
| Turkey litter – 60% DM |  | x | 11 | = |  |
| Duck manure – 25% DM |  | x | 2.4 | = |  |
| Horse manure FYM – 30% DM |  | x | 2.2 | = |  |
| Goat manure FYM – 25% DM |  | x | 1.2 | = |  |
| Spent mushroom compost |  | x | 1.5 | = |  |
| Separated cattle slurry (solid portion) |  | x | 0.87 | = |  |
| Separated pig slurry (solid portion |  | x | 2.0 | = |  |
| Other |  | x | P content from analysis | = |  |
| **Total P content of exported organic manures (kg/year)** | | | | **=** | - (**F)** |

|  |  |
| --- | --- |
| **Annex B** | **P Balance Worksheet** (continued) |

**P OUTPUTS – Livestock Produce Sold/Exported Off Farm**

1. Select the livestock produce and enter the amount/number sold per year.

2. Multiply the amount/number sold per year by the P content.

3. Total the P content of livestock produce sold and insert in **Box G.**

**Example:-**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Livestock produce type** | **Amount/number sold** | **x** | **P content (kg/unit year)** | **=** | **Quantity of phosphorus (kg)** |
| Milk (1) | 650,000 | x | 0.001 | = | 650 |
| 1000 Broilers | 132 | x | 12 | = | 1,584 |
| **Total P content of livestock produce sold (kg P/year)** | | | | **=** | **2,234** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Livestock produce type** | **Amount/number sold** | **x** | **P content (kg/unit year)** | **=** | **Quantity of phosphorus (kg)** |
| Milk (litres) |  | x | 0.001 | = |  |
| Wool (tonnes) |  | x | 0.4 | = |  |
| 1000 Broilers |  | x | 12 | = |  |
| 1000 Broiler breeders 0-18 weeks |  | x | 11.4 | = |  |
| 1000 Broiler breeders 18-60 weeks (including eggs) |  | x | 33.5 | = |  |
| 1000 Broiler breeders 0-60 weeks (including eggs) |  | x | 44.9 | = |  |
| 1000 Layers (including eggs) |  | x | 42.5 | = |  |
| 1000 Pullets |  | x | 7.9 | = |  |
| 1000 Turkeys male |  | x | 34.6 | = |  |
| 1000 Turkeys female |  | x | 31.7 | = |  |
| 1000 Ducks |  | x | 11.4 | = |  |
| Other |  | x |  | = |  |
|  |  | x |  | = |  |
| **Total P content of livestock produce sold (kg P/year)** | | | | = | - (**G)** |

|  |  |
| --- | --- |
| **Annex B** | **P Balance Worksheet** (continued) |

**P OUTPUTS – Livestock Leaving the Farm**

1. Select the livestock type and enter the number leaving the farm and the total live weight of the animals.

2. Multiply the total weight by the P content.

3. Total the P content of all livestock moved off the farm and insert in **Box H.**

**Note:** The P outputs for poultry are already accounted for in animal produce P outputs.

**Example:-**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Livestock type** | | **Number Sold** | **x** | **Average live weight (kg)** | **x** | **P content (kg/unit)** | = | **Quantity of phosphorus**  **(kg)** |
| Cattle | | 30 | x | 16500 | x | 0.0066 | = | 108.9 |
|  | **Total P content of livestock sold/exported in kg P/year** | | | | | | **=** | **108.9** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Livestock type** | **Number sold** | **x** | **Average live weight (kg)** | **x** | **P content (kg/unit)** | = | **Quantity of phosphorus**  **(kg)** |
| Dropped calves (50 kg)\* |  |  |  | x | 0.33 | = |  |
| Cattle |  | x |  | x | 0.0066 | = |  |
| Cattle |  | x |  | x | 0.0066 | = |  |
| Cattle |  | x |  | x | 0.0066 | = |  |
| Cattle |  | x |  | x | 0.0066 | = |  |
| Cattle |  | x |  | x | 0.0066 | = |  |
| Cattle |  | x |  | x | 0.0066 | = |  |
| Sheep/lambs |  | x |  | x | 0.0054 | = |  |
| Sheep/lambs |  | x |  | x | 0.0054 | = |  |
| Sheep/lambs |  | x |  | x | 0.0054 | = |  |
| Pigs |  | x |  | x | 0.0050 | = |  |
| Pigs |  | x |  | x | 0.0050 | = |  |
| Pigs |  | x |  | x | 0.0050 | = |  |
| Other please specify |  | x |  | x |  | = |  |
| **Total P content of livestock purchased/imported (kg P/year)** | | | | | | = | - **(H)** |

Remember to include fallen animals.

For dropped calves the weight is not needed.

|  |  |
| --- | --- |
| **Annex B** | **P Balance Worksheet** (continued) |

**Step 3 – Total P Inputs and Outputs**

Transfer the answers from the relevant sections and enter the amount of P inputs and P outputs on your farm.

|  |  |  |  |
| --- | --- | --- | --- |
| **P inputs** |  | **P outputs** |  |
| Chemical fertilisers  (**A** from page 2) |  | Crop produce  (**E** from page 6) |  |
| **add** | **+** | **add** | **+** |
| Imported organic manures  (**B** from page 3) |  | Exported organic manures  (**F** from page 7) |  |
| **add** | **+** | **add** | **+** |
| Purchased feedstuffs  (**C** from page 4) |  | Livestock produce  (**G** from page 8) |  |
| **add** | **+** | **add** | **+** |
| Livestock bought in  (**D** from page 5) |  | Livestock moved off farm  (**H** from page 9) |  |
| **equals** | **=** | **equals** | **=** |
| **Total P inputs (I)** |  | **Total P outputs (J)** |  |

**Step 4 – Land Area Controlled**

Calculate the total land area (ha) which you control. Exclude non-agricultural areas, including farm roads, paths, buildings, woodland, river, ponds and quarries.

|  |  |  |
| --- | --- | --- |
| **Total eligible agricultural area (ha)** | **N** |  |

|  |  |
| --- | --- |
| **Annex B** | **P Balance Worksheet** (continued) |

**Step 5 – P Balance**

Calculate the P balance by subtracting the P output from the P input and dividing it by the land area controlled.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Total P inputs** | **I** |  |  | **P Balance should be below 10 kg/ha/year to be compliant with this aspect of the Derogation.** |
|  | **less** | **-** |  |
| **Total P outputs** | **J** |  |  |
|  | **divided by** | **÷** |  |
| **Total eligible agricultural area** | **N** |  |  |
|  | **equals** | **=** |  |
| **P Balance** | |  |  |

|  |  |
| --- | --- |
| **Annex C** | **Contact details** |

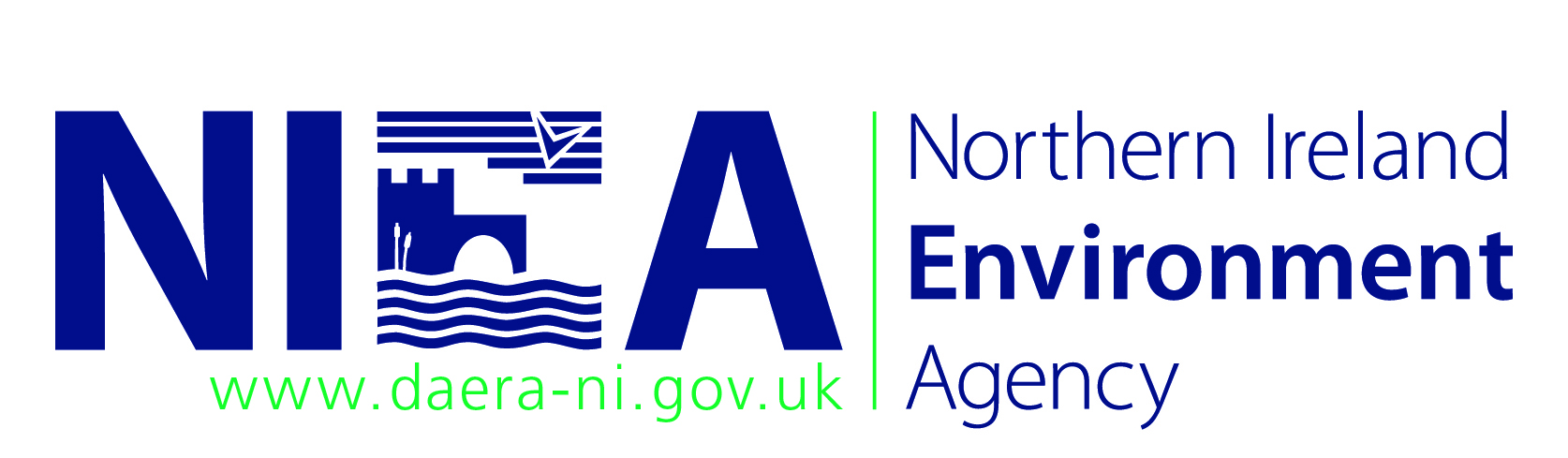
|  |  |
| --- | --- |
| **Northern Ireland Environment Agency (NIEA)**  Water Management Unit, 17 Antrim Road, Lisburn BT28 3AL -[**www.daera-ni.gov.uk/northern-ireland-environment-agency**](http://www.daera-ni.gov.uk/northern-ireland-environment-agency)  **Useful NIEA telephone numbers** | |
| **Agriculture Regulation Team:-**  Nitrates Action Programme, Nitrates Derogations, Phosphorus Regulations and Field Storage of Poultry Litter. | **028 9262 3184** |
| **Silage and Slurry issues:-**  Contact the NIEA before planning to substantially alter any existing storage facility or commission new silos or slurry tanks. | **028 9262 3205**  **028 9262 3190** |
| **Ground Water Authorisations:-**  Authorisation for disposal of spent sheep dip. | **028 9262 3279** |
| **Applying Sewage Sludge to Land** | **028 9263 3445** |
| **Registration of Waste Carriers** | **028 9056 9360** |
| **Simple Waste Management Exemptions** | **028 9056 9358** |
| **Other Waste Management Exemptions** | **028 9056 9358** |
| **Hazardous Waste Queries** | **028 9056 9710** |
| **Pollution Prevention and Control (PPC) licensing** | **028 9056 9299** |
| **24 hr Pollution Hotline Number Freephone** | **0800 80 70 60** |

|  |  |
| --- | --- |
| **Annex C** | **Contact Details** (continued) |

|  |  |
| --- | --- |
| **Department of Agriculture, Environment and Rural Affairs (DAERA)**  **Useful DAERA telephone numbers** (Note: DARD 0300 numbers are charged at local rate) | |
| **Environment Awareness:-**  Agri-environment scheme information. Countryside Management advice including – Cross-Compliance, Nitrates Directive, Codes of Good Agriculture Practice, Farm Waste Management, Uncultivated Land Regulations and Field Boundary Removals. | **0300 200 7842** |
| **Education and Training:-**  The College of Agriculture, Food and Rural Enterprise offers training including Cross-Compliance, Nitrates and Nutrient Management Planning. ([www.cafre.ac.uk](http://www.cafre.ac.uk)). | **0300 200 7841** |
| **DAERA Corporate Services:-**  DAERA Headquarters, Press Office, information services and systems, human resources and facilities management. | **0300 200 7850** |
| **DAERA Animal By-Products Section** | **028 9052 5275** |
| **Textphone:-**  For people with hearing difficulties. | **0300 200 7851** |
| **Calls from non-UK numbers or networks/international calls** | **+44 (0)28 9049 5780** |
| A list of DAERA contact numbers can be obtained by visiting the ‘Contact Us’ section of the DARD Website - [www.daera-ni.gov.uk](http://www.daera-ni.gov.uk) | |

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