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DAERA Environmental Advice for Planning

Standing Advice Agricultural developments

Advice for planning officers to inform decision making and applicants seeking planning permission for agricultural developments which may impact on upon the water environment.

Scope of this Standing Advice Guidance Document

This Advice Note applies to agricultural developments that may result in the generation of slurry or dirty water as defined by the following legislation. Developments such as machinery stores are not addressed within this Note.

Legislation and Water Quality

The key legislation, relevant to agricultural developments and their potential impact upon the water environment, is:

- The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) (SSAFO) Regulations (Northern Ireland) 2003¹
- The Nitrates Action Programme (NAP 2014) Regulations (Northern Ireland) 2014²

¹ SSAFO Regulations applied between 1 December 2003 to the 31 December 2014 for the storage of slurry and silage. (Legislative requirements relating to storage of agricultural fuel oil are currently still implemented through the SSAFO Regulations). Any construction (or substantial alteration) of silage, slurry or agricultural fuel oil storage, completed after 1 December 2003, and up until the 31 December 2014 must comply with the SSAFO Regulations.

² From the 1st January 2015 the legislative requirements relating to storage of slurry and silage effluent were contained within the NAP 2014 Regulations and were revoked from the SSAFO Regulations. From the 1st January 2015 until the 10th April 2019 any construction (or substantial alteration) of silage or slurry storage facilities must comply with the NAP 2014 Regulations. As well as design, construction and storage capacity standards, the Regulations require that any new (or substantially altered) silage, slurry storage facilities are located at least 10m from any waterway.

- The Nutrient Action Programme (NAP 2019) Regulations (Northern Ireland) 2019 (as amended)³
- The Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2014⁴
- The Nutrient Action Programme Regulations (NI) 2019 carry forward all the measures from the previous Nitrates Action Programme Regulations (NAP 2014) and Phosphorus (use in agriculture) Regulations (2014). However, some changes and new measures have been introduced and all are now combined into the single Nutrient Action Programme Regulations. Most of the changes will be phased in from 2020. The Information for Farmers document provides a summary of the changes and new measures.
- https://www.daera-ni.gov.uk/artides/nutrient-action-programme-regulations-2019-2022
- DAERA will be publishing a revised NAP Guidance Booklet to explain the changes and new measures in detail. This should be available on the DAERA website at the above link later in 2020.
- The NAP Regulations are one of the Statutory Management Requirements for The Common Agricultural Policy Single Payment and Support Schemes (Cross Compliance) Regulations (Northern Ireland) 2014 and any breach may lead to a penalty being imposed.
- It should also be noted that under the Regulations Northern Ireland Environment Agency (NIEA) Water Management Unit must be notified of new (or substantially altered) silage, slurry and agricultural fuel oil stores, at least 28 days before they are brought into use. When NIEA has been notified, an inspection may be carried out.
- The applicant should be fully aware that if, subsequently, it is found that silage, slurry or agricultural fuel oil is being stored in facilities (built after 1 December 2003) that do not comply with the Regulations, enforcement action may be taken.

Slurry and Dirty Water Collection

 Under the NAP Regulations any run-off meeting the definition of slurry must be collected in a slurry tank. Run-off meeting the definition of dirty water as described in the Regulations must be collected with the slurry or in a separate dirty water tank.

³ From 11th April 2019 requirements relating to storage of slurry and silage effluent are contained within the NAP 2019 Regulations and have been revoked from the NAP 2014 Regulations. From the 11th April 2019 any construction (or substantial alteration) of silage or slurry storage facilities must comply with the NAP 2019 Regulations. As well as design, construction and storage capacity standards, the Regulations require that any new (or substantially altered) storage facilities are located at least 10m from any waterway and have a cover if constructed after 31st December. You must note that where the construction of any above ground slurry store is to commence after the 31st December 2019, the NAP 2019 Regulations require that they must be located at least 50m from any waterway.

⁴ The Phosphorus Regulations have been revoked and are now part of the NAP 2019 Regulations.

- For washings to be considered as dirty water, and, therefore, subject to the measures relating to dirty water under the NAP Regulations, the applicant must ensure the following:
 - The washings must have a Biochemical Oxygen Demand (BOD) no greater than 2000 mg/litre, total nitrogen concentration less than 0.5 kg N/m³, total phosphorous concentration less than 0.04 kg P/m³ and less than 0.5% dry matter (as specified in the NAP Regulations).
 - If the farm unit is subject to a PPC permit, it will need to be demonstrated that wash water collection and storage facilities qualify as "best available techniques" (BAT). Construction of storage tanks to the British Standard BS5502 would qualify as BAT other techniques are not excluded, but it will need to be demonstrated that they qualify as BAT i.e. that they provide a similar or better specification.
- If these conditions cannot be met, <u>any such washings would be considered as slurry</u> under the above Regulations. The tank installed for collection of washings would then have to comply with the SSAFO Regulations or NAP Regulations and any disposal of the collected washings comply with the measures relating to slurry in the NAP Regulations.
- Should a concrete or hardcore apron be placed around a poultry house to assist with litter management around pop holes, all effluent from this apron must be collected as slurry.
- Any hardcore channels/aprons must be lined with an impermeable membrane compliant with the nitrates regulations and the effluent collected as slurry in a NAP Regulations compliant tank.
- Slurry is likely to be created by the movement of animals across any yard areas. All
 yards trafficked by animals should have adequate collection facilities.
- All handling of silage should be over impermeable surfaces and would require an engineered site containment and drainage system and the effluents collected in a suitable tank.
- Effluent such as dirty water or slurry is likely to be created by the daily movement of silage across yard areas. These areas should not have a diverter system due to the frequency of use and potential for spillage of silage, but have the effluent produced collected in a suitable tank.

Clean Water

 Only clean water, i.e. water not defined as slurry or dirty water, should be disposed of to a soakaway or waterway. We would advise that adequate roof guttering to direct clean roof water to storm drainage, would help minimise the volume of dirty water produced at the site.

Lined Lagoons / Pressure Relieving Drains

- Leak detection system: If such a system were to be installed, below the liner of the lagoon (as an optional, additional safety measure) it must be <u>blind-ended</u>, ending at an inspection chamber and not leading to any waterway, drain or soakaway.
- **Groundwater management:** Except when <u>specifically discussed and agreed</u> with NIEA on a site by site basis, any permeable drains must be at least 10 m away from the <u>outer edge</u> of the embankment of the lagoon.
- Pressure relieving drains: NIEA would only consider the acceptability of such a proposal on a site by site basis if a chartered, structural or civil engineer calculates that pressure relieving drains are necessary for the proper functioning of the lagoon, within 10m of the outer edge of the embankment. In such a case, the engineer must provide evidence that groundwater conditions make the provision of such drainage necessary and an inspection chamber would be required on the relief drain down the drainage gradient from the lagoon, with means of preventing flow to any watercourse if pollution occurred.

Please also note that, to comply with the Regulations, the lagoon must also:

- be impermeable;
- have banks designed and constructed to withstand loads calculated in accordance with BS 5502 Part 50;
- have a life-span of at least 20 years;
- have an allowance of 750 mm freeboard which must be maintained;
- failure to manage a diverter system effectively may lead to NIEA requesting removal of the diverter:
- have a cover;
- be notified to NIEA at least 28 days before being brought into use; and,
- a <u>chartered</u>, <u>structural or civil engineer</u> must sign the Notification form to confirm the lagoon has been designed and constructed to fully comply with the standards in the NAP Regulations 2019. Health and safety issues should also be considered in the design of any lagoon.

The applicant should be aware of the requirements of the NAP regulations which became operational on 1 January 2007 and have been now been updated with the 2019 regulations covering all of Northern Ireland.

Please note: these are the requirements under the above Regulations; if and when other legislation is introduced, circumstances may change.

Use of a Diverter

Diverter tanks, if correctly managed, can be useful for dealing with yard water around poultry houses that only occasionally requires collection with the slurry or in a separate dirty water tank.

Diverter tanks must not be used in the area around silage clamps as the risk of pollution is too high.

- Should a diverter for the yard be installed it should be fitted prior to the tank to ensure effluent from the tank is not washed through the diverter and to the waterway.
- Before yard water is directed away from a tank to a waterway, the yard should be power hosed clean and the effluent produced, collected for spreading as slurry or dirty water. Failure to manage a diverter system effectively may lead to NIEA requesting removal of the diverter.

Additional Information

The applicant should view the following link containing further information and a Notification form:

https://www.daera-ni.gov.uk/articles/silage-slurry-and-agricultural-fuel-oil-ssafo-storage

NIEA require notification of all poultry litter/slurry/manure/digestate being exported from any holding. NIEA must be notified of all exports of this material for each calendar year by 31st January of the following calendar year as per the NAP Regulations 2019.

Recommended Informatives

The applicant must comply with all the relevant parts of The Nutrient Action Programme Regulations (Northern Ireland) 2019 (as amended).

Final Comments

Effective mitigation measures must be in place to protect the water environment and surrounding water bodies from any discharge into them that may damage ecological status and to ensure that the Water Framework Directive (WFD) objectives for the water body are not compromised nor the WFD objectives in other downstream water bodies in the same and other catchments.

It is an offence under the Water (Northern Ireland) Order 1999 to discharge or deposit, whether knowingly or otherwise, any poisonous, noxious or polluting matter so that it enters a waterway or water in any underground strata. Conviction of such an offence may incur a fine of up to £20,000 and / or three months imprisonment.

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Apr 2015	First Published
Apr 2017	References to DOE changed to DAERA; Updated URL's
Sep 2017	Addition of section on Lined Lagoons / Pressure Relieving Drains. Revision to Dirty Water measurement (as specified in the NAP regulations)
Nov 2017	Updated DAERA Branding
May 2018	Requirement to notify NIEA added under Legislation
July 2020	Updated to reflect changes in legislation