

Memorandum ABP- 316127-23

To: Dolores McCague.

From: Emmet Smyth.

Re: ABP-316127-23 (23/60021 Laois County Council).

Date: 21st February 2024.

Reference ABP-316127-23 to construct an overground slurry store, an underground slurry reception tank, a manure pit and a storage area for tyres and plastic, and all associated ancillary facilities works and services at Ballybooden, Ballacolla, Co. Laois.

The site is underlain by gravels chiefly derived from limestones with shallow well drained soils of the soil group Renzina or Lithosol. The subject site is classified by the Geological survey of Ireland as having high vulnerability with a Locally important Aquifer with moderately productive bedrock in local zones, this gives the area a land spreading groundwater protection response of R1, acceptable subject to normal good practice. The probable groundwater flow can be inferred from topography and likely flows in a northerly direction. The Cullahill public water scheme source protection area is located c.3.5km from the proposed development. In addition, there are 2 wells mapped on the GSI mapping tool located within 1 kilometre of the development, with the site itself being served by an existing private well.

The European Union, Good Agricultural Practice for the Protection of Waters, Regulations, 2022, Article 7(2)(b) states that; Storage facilities being provided on a holding shall comply

with such construction specifications for those facilities as may be approved from time to time by the Minister for Agriculture, Food, and the Marine.

TAMS Farm building and structure specifications documents S123 & S122 'Bovine livestock Units and slatted units' & 'Proprietary Overground circular Slurry Stores' respectively, as issued by the Minister for Agriculture, Food and the Marine state that; As a general guide, a storage facility for silage effluent/slurry/soiled water should be located not less than 50m from any waterbody in the case of new farmyards, and not less than 10m in the case of extensions/modifications to an existing facility. The minimum distance between a storage facility and a public/private water supply source, either surface or ground, shall be 60m for new farmyards and this may be reduced to not less than 30m for existing farmyards subject to a hydro-geological survey. In vulnerable situations this distance shall be increased up to 300m. In addition, Document S122A lists approved contractors that shall be engaged for the construction of the overground slurry store.

In this instance the separation distances applicable are ≥ 10 metres from any waterbodies given that the subject development is an extension to an existing facility. In addition, the storage facility (the slurry reception tank and the overground slurry store) shall be a minimum of 60 metres or ≥ 30 m subject to a hydro-geological survey, this was not included with this application. In vulnerable situations, such as a classification of high or extreme vulnerability the distance **shall** be increased up to 300m.

In this instance and based on the GSI mapping tool a number of wells (source or resource) exist **POTENTIALLY** within a distance of c.250metres from the subject site. The applicant would be expected to be able to demonstrate by **hydrogeological Assessment that the** development as proposed will not impact on the condition of any wells within three hundred metres of the facility given the high vulnerability classification.

Uncontaminated waters collected from the roof should be directed to soakaways designed in accordance with BRE 365 testing and recommendations.

The development is located c.400 metres to the south of the Erkina river at its closest point and 215 metres from the River Barrow & River Nore SAC/SPA boundary, with the river Goul at its closest point located c.550 metres to the south east with the river Barrow & River Nore SAC/SPA boundary located c.400 metres to the south East. The water body (Reference

Erkina_050) is deemed to be of moderate status and deemed to be at risk, with the primary pressure being agriculture. The development is located within the Rathdowney groundwater body (IE_SE_G_114) which has an overall good status both quantitatively and chemically and is not deemed to be at risk.

EPA Pollution impact potential maps (PIP Maps) were generated to indicate areas of high pollution potential with specific regard to Phosphorus and nitrogen losses to waters. They are used to target measures in areas were monitoring data has indicated ongoing issues.

Elevated risk areas for phosphorus loss typically have poor draining soils and dominant overland pathways. Whereas freely draining soils and substantial groundwater pathways pose an elevated risk for nitrogen losses.

The applicant submitted a map showing the land holding outlined in blue on an Ordnance Survey map entitled 'location map lands farmed.' A sizeable portion of these lands are wetlands with springs throughout. These lands, should they be utilised for land spreading of the slurry would pose a significant risk to the River Barrow & River Nore SAC/SPA by virtue of phosphorus loading from overland run-off. In addition, these wetlands are included in CFRAM river flood extents. Lands in where low probability flood events have approximately a 1-in-a-1000 chance of occurring or being exceeded in any given year. This is also referred to as an Annual Exceedance Probability (AEP) of 0.1% this includes a sizeable portion of the lands farmed by the applicant and again this poses a significant risk to the River Barrow & River Nore SAC/SPA from overland run-off. In the absence of any soil testing the assumed P soil index would be 3.

The applicant has not indicated any outlet for the stored slurries either by export or by land spreading. There is no indication of any volumes of soiled waters that would be collected at the site as a whole. The applicant would need to take account of all these details in the form of a nutrient management plan.

The land holding outlined in blue is assigned high/moderate vulnerability with a locally important aquifer with moderately productive bedrock in local zones. Overall, the land holding would have groundwater protection response R1 for land spreading, acceptable subject to normal good practice. Normal good practice would include no land spreading on waterlogged land, lands liable to flood or flooded lands which would preclude a sizeable

portion of the landholding outlined in blue on the OS map entitled 'Location Map lands Farmed.'

Based on the information to hand, I am of the opinion that the applicant would need to provide additional information as outlined in the body of this report.