An Coimisiún Pleanála

Memorandum
PL93.323124

To: Suzanne Kehely

From: Emmet Smyth

Re: ACP323124-25 Concerns

Date: 2nd October 2025.

Development Overview:

The installation of a wastewater treatment system and the construction of a helipad landing area and all associated works at Ballynatray House, Ballynatray Estate, Youghal, Co. Waterford.

Site overview:

The site topographically falls towards the river Blackwater which would be indicative of groundwater flow at the site. The bedrock underlying the site is predominantly moderately productive in local zones and is of mudstones, sandstones and siltstones. The subsoil is a Devonian Sandstone till typically of Brown Earths and Brown Podzolics wrapping around the North of the site a well-drained soil component and undifferentiated Alluvium along the river boundary with impeded drainage characteristics and pockets of Lithosols and Regosols with associated bedrock at or near the surface these are shallow materials but well drained. The vulnerability

classification around the site are low where the alluvial soils are located along the riverbank with high to extreme vulnerabilities throughout the remainder of the site.

The present condition of the receiving waters according to the EPA's data is as follows: IE_SW_020_ 0100 Lower Blackwater M Estuary Youghal is a transitional water and the receiving waters for the proposed discharge and of moderate ecological status hence the status at risk. Present conditions indicate the waters to be at risk, with pressures attributed to agricultural activities impacting on nutrient and organic pollution and associated impact on ecology within the waters.

Wastewater treatment proposal and Site Characterisation and receiving waters.

Submerged Aerated Filters or SAFs are known for their stable performance, low maintenance, small footprint, and ability to handle fluctuations in wastewater strength, making them suitable for secondary and tertiary treatment of sewage and industrial effluents and as such I wouldn't have issue with the plant being proposed but I am of the opinion that there would appear to be a lack of details demonstrating the ability of the receiving waters to accept the treated effluent.

The site has brown earths and brown podzolics to the north of the site which would prove excellent for groundwater discharge. I am unsure why they would not discharge to ground as its sub licence threshold and there would appear to be at a minimum moderately percolating material in and around the site. The maximum daily loading, hydraulic 20 PE X 150 = 3000 litres per day hydraulic and 1200g Biological load per day, is sub threshold for ($5m^3$ in any 24 hours) for licence requirement for a groundwater discharge. In addition to this are the inherent enforcement issues that may arise from this arrangement, and the issues that may arise in the event that the site is sold on in the future.

The proposed treatment system as described will require a Section 4 discharge license to discharge to surface waters via existing marshlands to the Blackwater River SAC 002170. The treatment performance of the plant operating at its highest level will discharge effluent as follows; BOD 10mg/L, SS 10mg/L, NH4-N 3mg/L, Total N 5mg/L and Total P 2mg/L. At this level and the maximum volumes proposed treated effluent will add 9g of Ammonia, 30g of suspended solids, 15g of Total nitrogen etc to the surface waters/marsh waters elevated groundwater per day treated in addition to many other parameters as described.

The applicant has not given any details regarding the ability of the waters to assimilate the effluent as described above. Its proximity to Blackwater SAC and discharge to marsh on the banks of the Blackwater SAC and potential impacts.

Given the direct discharge of treated effluent to waters under the proposed authorisation of a Section 4 Discharge licence this development proposal would need to as a minimum to be at least screened for a Water Status Impact Assessment. Any proposal that could affect the water environment shall demonstrate that they will not cause a deterioration of the status of waterbody/s within their area and furthermore will not cause a deterioration of the status or inhibit the future achievement of good status.

Issues with the site characterisation report are as follows.
The trial hole log is to remain open for a minimum period of 48 hours to allow for the equalisation of the watertable. In this instance the trial hole remained open for 24.5 hours prior to examination. The issue here is that the watertable could have risen to a level in line with the mottling observed in the trial hole at 1200mm BGL and as such this may impact on the invert levels for the polishing filter with knock-on consequences for contamination. However, the SCR is referencing a surface water discharge post treatment without any demonstration as to the ability of the receiving waters to receive the effluent. The report submitted is in the old format and as such there is no indication

as to when the second presoak has been carried out. I am confused as to the rationale for the carrying out of a site characterisation report when a surface water discharge is being proposed. The utilisation of the freer draining soils in and around the site would remove the direct discharge to waters already under pressure and at risk of not meeting WFD objectives.