Specialist Report

R500338_App1

Development	Extension of west elevation, 22 parking spaces. Retention of additional 505. 1 sqm to main building and all associated site works.
Address	Moyvalley Meats, Tanderagee, Broadford, Kildare
Applicant	Moyvalley Meats (IRL) Unlimited Company
Type of Application	Planning Appeal
Topic	Water Framework Directive Assessment, Assimilative Capacity of receiving waters and Wastewater Treatment Assessment: adequacy of information provided
Scientist	Finbarr Quigley, BSc. MSc.
Planning Inspector	Elaine Sullivan
Date	19th February 2026

Contents

1.0 Introduction

1.1. Scope of Report to Inspector

1.2. Regarding the grounds of appeal, the third-party responses to same, the technical and environmental nature of the issues raised, the Inspector requested assistance from the Environment Team as follows.

- A review of the on-site Wastewater Treatment Plant process and the WWTP Suitability Assessment Report (prepared by Wild Goose Enviro Ltd.).
- The adequacy of the Water Framework Directive (WFD) Assessment report submitted by the applicant.
- A review of the assimilative capacity assessment of the River Glash for ammonia.

1.2.1. In my capacity as Senior Environmental Scientist with over twenty years of professional experience, I have the relevant expertise to provide a professional opinion in relation to the items above.

1.2.2. This report to the Planning Inspector and available to the Commission is a written record of my review and examination of the submitted information and will support the Inspectors report in relation to this application.

1.3. Documentation

1.3.1. For the purpose of this specialist report, I have read all the documentation attached to this case relating to environmental matters including inter alia, details of the

development, the WFD Screening Assessment (2024), the WFD Assessment (2025), the Wastewater Treatment Plant (WWTP) Assessment Report (2025), the Industrial Emissions Licence (IEL) P-0192, the Planning Authority reports, submissions, appeal documents, drawings and site layout plans, and all associated documentation prepared by the Applicant along with any observations received by the Commission.

1.3.2. Other sources of information which were consulted in preparation of this report include the EPA's online Licence & Enforcement Access Portal (LEAP) and the WFD Application on the EPA's Environmental Data Exchange Network (EDEN).

1.4. Site Location and Description of Proposed Development

1.4.1. The proposed development is described in detail in the Inspectors report and not repeated here.

2.0 Assessment

2.1. Wastewater Treatment and the WWTP Suitability Assessment Report

2.1.1. As part of the planning application and appeal, the applicant submitted a report prepared by Wild Goose Enviro Ltd. on the operation and efficiency of the Wastewater Treatment System employed by the abattoir to treat wastewaters arising. A review of the LEAP system found that a site visit by the EPA in March 2023 identified issues with the operation of the WWTS and the Licensee was requested to investigate the feasibility of improving WWTS operation to allow sufficient freeboard in all containers. The site was subsequently inspected by Wild Goose Enviro Ltd. in May 2023 and recommendations for upgrades/improvements were identified.

2.1.2. The report also includes details of a return visit carried out in September 2025 containing remarks on recommendations which were implemented and an overall appraisal of the operation of the WWTS at that time.

2.1.3. The WWTS consists of the following elements:

Coarse Screening, Pumping and Fine Screening; a Balance Tank; Chemical Scada Air Flotation System (SCAF); Chemical dosing; an Anoxic Tank; Aeration Tanks (x 2); a Clarifier incl. provision for nitrification and denitrification; a Final Effluent Tank with overflow discharge to the River Glash.

2.1.4. The 2023 site visit identified several significant upgrades which were required including:

- Replacement of the existing aerators
- Variable speed aeration system to be installed
- Replacement of flow meters failing calibration
- Provision of a SCADA system with online data monitoring
- Installation of Redox and pH probes in Anoxic tank
- Disinfection of final effluent

The 2025 site visit found that with the exception of the installation of the SCADA system, all of the above recommendations had been implemented. The report states that a new SCADA system has been sourced and is due to be installed in Q1 2026.

2.1.5. The report concludes that at the time of the site visit in September 2025, the WWTS was operating well and achieving its final effluent emission limit values. It was also noted that the Balance Tank had been covered since the last visit which resulted in reduced odours from this source.

2.1.6. I note that the assessment of operation capabilities of the WWTS is a responsibility for the licensing authority, in this case the EPA. However, it is noteworthy that significant improvements in the operation of the WWTS have been reported in this report. A review of the licence compliance data available on LEAP demonstrates that in 2023 and 2024 significant non-compliances were noted with the ELVs, some of which are detailed below:

Table 1 Selected non-compliances with ELVs for Licence P0192-2 (2023 – 2024)

Date	EPA Comments
October 2023	Exceedances of the Emissions Limit Values specified in Licence Reg No. P0192-02 were recorded for the following emission points and parameters: Total volume of **221**m3 at Emission Point W1-1 which exceeded the emission limit value (**120** m3/day) o-Phosphate of **1.5** mg/l P at Emission Point W1-1 against an Emission Limit Value of **0.5** mg/l
May 2024	Exceedances of the Emission Limit Values specified in P0192-02 were recorded for the following parameters on the following dates at Emission

	Point Reference No W1-1: - A BOD value of **13** mg/l was recorded on 01/05/2024 against an Emission Limit Value of **10**mg/l - A BOD value of **20** mg/l was recorded on 09/05/2024 against an Emission Limit Value of **10** mg/l - A BOD value of **15** mg/l was recorded on 31/05/2024 against an Emission Limit Value of **10** mg/l - An Orthophosphate (as P) value of **3.48** mg/l was recorded on 31/05/2024 against an Emission Limit Value of **0.5** mg/l.
June 2024	Exceedances of the emission Limit Values specified in P0192-02 were recorded for the following parameters on the following dates at Emission Point reference No W1-1: - An Orthophosphate (as P) value of **1.79** mg/l was recorded on 07/06/2024 against an Emission Limit Value of **0.5** mg/l - An Ammonia Total (as N) value of **2.68** mg/l was recorded on 07/06/2024 against an Emission Limit Value of **1** mg/l - An Orthophosphate (as P) value of **3.07** mg/l was recorded on 12/06/2024 against an Emission Limit Value of **0.5** mg/l - An Orthophosphate (as P) value of **1.32** mg/l was recorded on 25/06/2024 against an Emission Limit Value of **0.5** mg/l
July 2024	An exceedance of the Emission Limit Value of Orthophosphate (as P) was recorded on 08/07/2024 with a value of **1.23** mg/l being recorded against an Emission Limit Value of **0.5** mg/l.

It is noteworthy that the LEAP system has no record of non-compliances for ELV exceedances in 2025 which suggests improved performance of the WWTS and an improved final effluent. The WWTS report included a set of daily final effluent quality results for the period July – August 2025 which confirmed that ammonia levels in particular were generally well below the ELV of 1mgN/L for this period.

2.1.7. Having regard to the WWTS Assessment Report submitted and the available compliance data on the online LEAP system, I am satisfied that the WWTS is appropriately designed and sized for the volumes and nature of wastewaters it is required to treat. While non-compliances with the licence ELVs do occur, the applicant has also demonstrated that the WWTS is capable of producing a final effluent which is below the ELVs for all required parameters.

2.2. Water Framework Directive Impact Assessment

2.2.1. Having regard to the documents submitted with the appeal, I am satisfied that the information available to the Inspector allows a WFD Impact Assessment to be undertaken.

2.2.2. With regard to the potential for surface water impacts, for context, the site lies within the GLASH_010 river waterbody which is currently (2019-2024 period) at Poor Status and is considered to be At Risk of not achieving its Environmental Objective of Good Status by 2027. The Extractive Industry (Peat Extraction), Agriculture and Anthropogenic sources (UWW or DWWTS) have been identified as the significant pressures on water quality in this waterbody. Elevated levels of nutrients (Orthophosphate and Ammonia in particular) have been identified as the cause of the Poor Ecological Status of the waterbody due to enrichment and eutrophication.

2.2.3. With regard to the potential for groundwater impacts, for context, the site lies within the Trim Groundwater waterbody (IE_EA_G_002) which is currently (2019-2024 period) at Good Status and is considered to be At Risk of not achieving its Environmental Objective of Good Status by 2027. This characterisation is driven by the potential for groundwater contribution of phosphate to associated surface water bodies. Individual sites within the waterbody have demonstrated concentrations of phosphate higher than the threshold values. Agriculture, Domestic Wastewater and Anthropogenic sources have been identified as the significant pressures on water quality in this waterbody.

2024 WFD Assessment

2.2.4. As part of the application (24/61342) to the Planning Authority, the applicant submitted a WFD Screening Report (August 2024) prepared by Nicholas O'Dwyer Ltd. Consulting Engineers. This report correctly described the hydrological setting of the site with regard to the surface and groundwater bodies and connectivity to further surface waterbodies and Protected Areas downstream of the facility.

2.2.5. The report states that the proposed development will not involve changes in the wastewater quantity or quality. It also reports that the volume of groundwater abstracted to serve the development will not be increased as part of the proposed development. This finding is significant when considering if the proposal will impact on receiving water quality and the ability of the waterbodies to achieve the WFD objectives set.

2.2.6. This report included an Assimilative Capacity calculation for the River Glash which concluded that the River Glash “has no capacity to assimilate Ammonia.” This element of the assessment will be discussed in greater detail in Section 2.3 of this report.

2.2.7. The report concludes that the proposed development will not cause any significant deterioration or change in water body status or prevent attainment, or potential to achieve, future good status or to meet the requirements and/or objectives in the third RBMP 2022-2027. In addition, it concluded that there are no pollutant linkages as a result of the construction or operation of the proposed development which could result in a water quality impact which could alter the habitat requirements of the Natura 2000 sites within River Boyne.

2.2.8. Under a WFD assessment a development should be assessed to determine if they will cause:

- Deterioration of status (or potential) of a surface or groundwater body, or
- Prevent the achievement of good groundwater status, good ecological status / potential for water bodies currently failing to achieve this status / potential.

Other relevant considerations include:

- whether there is a risk of deterioration of any of the quality elements contributing to the overall status classification as a result of the development proposal even if the overall status remains unaffected.
- If any quality element is already in the lowest class, any deterioration of that element represents a deterioration of the status within the meaning of WFD Article 4(1)(a)(i).

The report does not engage with the subject of current impacts from the wastewater discharges but merely asserts that because no changes to the nature or volume of wastewater is proposed, no impacts will therefore accrue in the future. The impact of the existing discharges on the GLASH_010 waterbody on attempts to return the waterbody to Good Status are not discussed. The report relies heavily on the site demonstrating compliance with the discharge emission limit values as set by the EPA in its Industrial Emissions Licence issued in 2013.

2025 WFD Assessment

2.2.9. In response to a FI request by the PA, the applicant commissioned a second WFD Screening Report (July 2025) prepared by Trinity Consultants/AWN Consulting. This report was updated in November 2025 and submitted with the grounds of appeal. The report provided a comprehensive investigation of the impacts of the development on the water quality of receiving waterbodies. In particular, it reported the results of additional sampling carried out in the River Glash upstream and downstream of the discharge point .

2.2.10. The report also provided a detailed history of water quality in the River Glash using available data from the EPA's monitoring stations. The report concluded that water quality in the River Glash adjacent to the site has been below Good Status since the early 1990's based on Q-value data alone. Having reviewed the available water quality data, I can confirm that this is an accurate conclusion.

2.2.11. With regard to the additional investigative monitoring carried out, the report includes data from two separate sampling events where water samples were taken upstream and downstream of the discharge point. I note that no details were provided on the exact sampling locations or whether there was a discharge from the site at the time of sampling. Also, no results for effluent discharge quality at the time of these sampling events were provided.

2.2.12. The comparative results taken upstream and downstream of the discharge point demonstrated that during dry weather in July 2025, the levels of ammonia, BOD and COD were low in the river and no impact from the discharge (if present) was noted. During the November 2025 sampling event, the ammonia readings both upstream and downstream were significantly higher than those recorded in July (0.08mgN/L compared to 0.01mgN/L) which is a significant finding in itself, as it suggests the presence of another source of ammonia upstream of this location.

2.2.13. During the November 2025 sampling event, Total Phosphorous was recorded as increasing from 0.08mgP/L upstream of the discharge location to 0.14mgP/L which is an increase of 75%. The report described this increase as 'slight' and "comfortably within expected natural variability for a river system and is not indicative of any discharge related deterioration." I disagree with this conclusion and suggest the applicant could have investigated this increase further by linking the result to any

available data for the discharge quality at the time of sampling. It is worth noting that this ‘natural variability’ did not manifest itself in any of the other parameters recorded on the day of sampling.

2.2.14. The 2025 WFD Assessment report also included the findings of a Biological Water Quality Assessment of the River Glash undertaken at locations upstream and downstream of the discharge point. This monitoring demonstrated a Q-value of 3 at both locations with a slight improvement in macroinvertebrate diversity noted at the downstream location. The locations of both sampling points were provided and are appropriate relative to the discharge point. This report concluded that both sampling locations were ‘moderately polluted’ with a Poor Status and there was no evidence that the discharge from the site was having any discernible impact on water quality in the Glash River. The report demonstrated that this monitoring exercise was carried out in accordance with established practice, and I agree with its conclusions based on the reported findings.

2.2.15. The biological monitoring results are particularly significant because the community of macroinvertebrates which inhabit a watercourse is indicative of longer-term water quality trends at that location compared to grab sample analysis which record conditions at a moment in time. These results suggest that water quality is equally ‘poor’ upstream and downstream of the discharge point which can only mean the reason for this poor condition is not the applicants discharge alone.

2.2.16. The 2025 WFD Assessment report included an updated Assimilative Capacity calculation which concluded that the Glash River had some limited capacity to assimilate ammonia at the monitoring location closest to the discharge point. This element of the assessment will be discussed further in Section 2.3 of this report.

2.2.17. Section 5.3 of the report identifies all risks to waters from the proposed development during construction and operation. It outlines a range of mitigation measures to be implemented during construction to ensure the risk of pollution from silt, concrete and hydrocarbons is managed and controlled. The report highlights that during the operational phase, the volume or quality of discharges of water from the site will not change and the emission limit values currently set by the IEL will remain unchanged. I am satisfied that the risks to water quality associated with the proposed development have been properly identified and appropriate mitigation measures

established and documented. Once implemented, these mitigation measures will ensure that impacts from the development on waters are not perceptible.

2.2.18. Section 7 of the report discusses the impacts of the proposed development on the adjacent waterbodies ability to achieve the WFD objectives. It concludes that the discharges of treated wastewater and surface water from the site will remain unchanged during the operational phase and will therefore not affect any changes in the current status of associated waterbodies. It does not however, make any attempt to quantify the impact the current discharge has on water quality parameters in the River Glash and relies on compliance with the existing ELVs as a means of protecting water quality.

2.2.19. Similarly in Section 7.2, the report discusses the likelihood of the proposed development impacting on the GLASH_010 waterbody achieving Good Status in the future. It highlights the significant pressures identified by the EPA within the waterbody which did not include the abattoir and concludes that improvements in water quality will not be hindered by the proposed development. While I agree that the proposed development in itself is unlikely to impair attempts to improve the status of adjacent waterbodies, the impact of the current discharge on all quality elements in the GLASH_010 is not engaged with in a meaningful way in this report.

2.2.20. In conclusion, having reviewed the WFD Assessment Reports prepared in support of the planning application and appeal, I am satisfied that the applicant has demonstrated that the proposed development will not have a significant impact on the water quality in the GLASH_010 waterbody or Trim Groundwater waterbody. The absence of changes in volume or character of wastewater discharges as a result of the proposed development mean deterioration of status in either of these waterbodies is not likely. However, the question of whether Good Status can be achieved in the GLASH_010 waterbody while the site discharges at its current rate is not discussed in detail.

2.3. Water Quality in the River Glash

2.3.1. In a submission to the PA during the planning application, IFI recommended refusing the application due to insufficient assimilation capacity for ammonia in the River Glash. In response to this submission, the applicant submitted a new WFD Assessment which concluded that the River Glash had some limited capacity to

assimilate ammonia adjacent to the abattoir. The IFI made a follow-up submission which reiterated its request that the application be refused citing the findings of legal proceedings taken against the operators of the abattoir by the EPA and the potential impact of the discharge on the receiving waters of the River Glash.

2.3.2. In a submission to the Commission in response to the appeal, IFI advised that the River Glash is a “prominent nursery with prominent stocks of Atlantic Salmon, Brown Trout, Eels and Lamprey.” The submission noted that water quality monitoring undertaken by the EPA in 2024 had shown that at a sampling point downstream of the abattoir, the quality had deteriorated from Q3/4 to Q3 and the IFI were ‘extremely concerned’ about this drop in water quality.

Q-Value Data Review

2.3.3. A review of the available Q-value monitoring data for the Glash River has allowed me to make the following conclusions. It was noted that the drop in quality referred to by the IFI submission was at a monitoring station (RS07G020600) located approximately 6.3km downstream of the discharge from the abattoir. Another monitoring location (RS07G020300) located close to the discharge point (265m downstream) was also assessed at the same time as the site referenced by the IFI submission. The site immediately downstream of the discharge point was assigned a Q3 value, indicating Poor Status which was identical to that recorded in the previous monitoring event in 2020. It is noted that this monitoring station has not returned a Q value higher than Q3 since monitoring began in 2012. The 2024 monitoring event at RS07G020300 demonstrated that although the river is at Poor Status, no change in status was noted from the previous monitoring event. If the discharge from the abattoir were responsible for the decline in quality noted 6.3km downstream the nearer station is highly likely to have recorded a deterioration in quality for this period.

2.3.4. A review of the available Q-value data for the Glash River shows that in 2012 biological monitoring was undertaken by the EPA at 4 sites along the stretch of the river including a location (RS07G020200) 845m upstream of the abattoir discharge. All 4 monitoring locations were assigned a Q3 value at the time indicating the river Glash was at Poor Status along its entire length, including upstream of the abattoir discharge. This information is included to demonstrate that at that time, there existed

unidentified pressures impacting water quality in the upper catchment of the river Glash. Unfortunately, this monitoring station was not assessed since 2012 depriving us of quality data on the current status of the river upstream of the abattoir discharge.

Figure 1 EPA River Quality Survey Data (Q-Values) for the River Glash

GLASH **07G02**

Date Surveyed (last survey year only): 05/09/24, 25/09/24

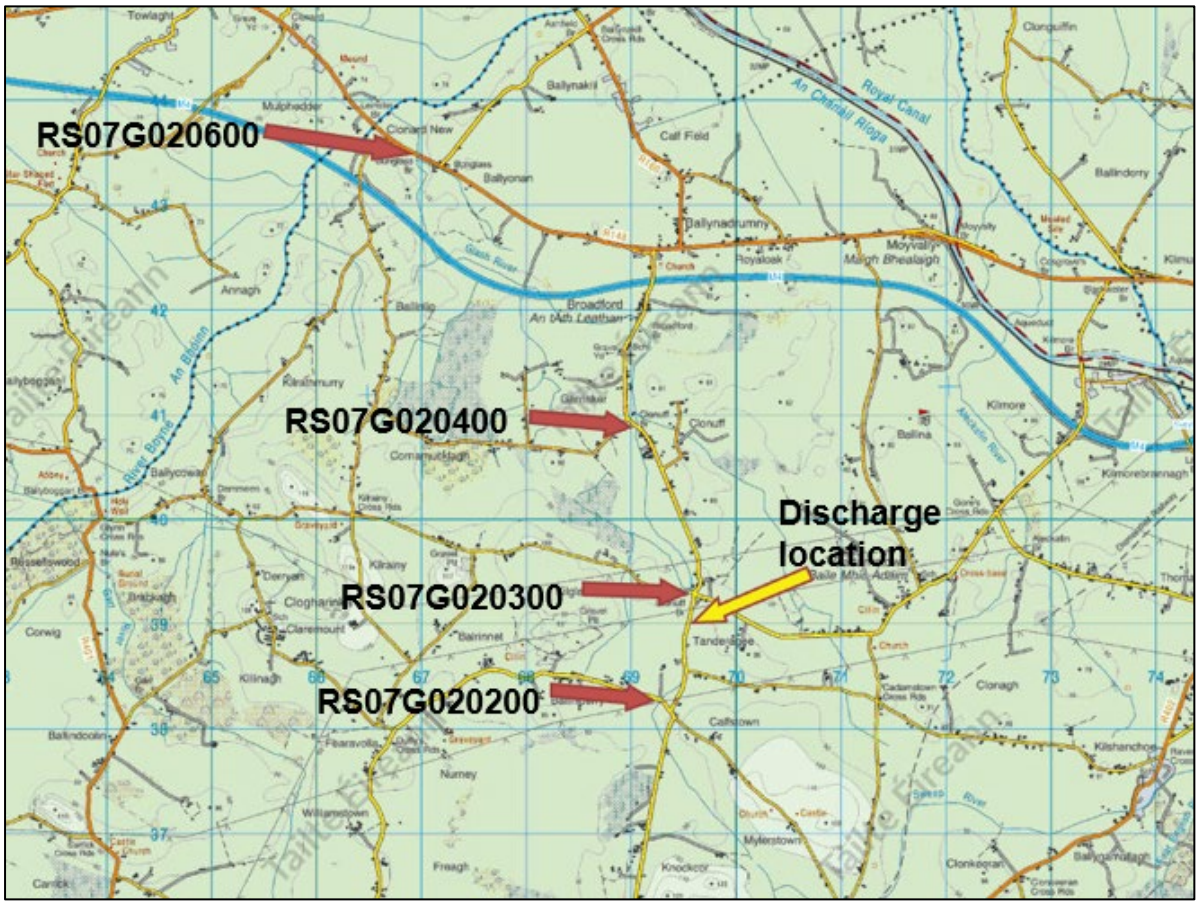
Biological Quality Rating (Q Values)

Station Code	1990	1994	1997	2000	2003	2006	2009	2012	2015	2018	2020	2024
RS07G020200								3*				
RS07G020300								3	3	3	3	3
RS07G020400		3	3	3-4	3*	3		3	2-3	3	3	3
RS07G020500	3-4											
RS07G020600	4	3-4	3	3-4	3	3	3	3	3-4	3-4	3-4	3

Most Recent Assessment:

The lack of pollution sensitive taxa, in-stream siltation and algal growth continues to indicate unsatisfactory ecological conditions at all three stations surveyed on the Glash River. Sites 0300 and 0400 remain at poor ecological condition. Site 0600 declined from moderate to poor.

Figure 2 EPA monitoring locations for the River Glash with Moyvalley Meats discharge identified



2.3.5. The conclusion of this review of available Q-value data from the EPA must be that the River Glash has been at Poor Status in the upper reaches since monitoring

began in the 1990s. Apart from one sampling event in 2012, there is no quality information from EPA biologists on the status of the River Glash upstream of the discharge from the abattoir. This means we cannot conclusively rule out the discharge from the abattoir being the current significant pressure on water quality at that location based on the EPA-provided Q-value data alone. The applicants own biological monitoring report does provide noteworthy evidence as discussed in Section 2.2.14 of this report.

Assimilative Capacity Assessment

2.3.6. The ability of a water body to receive an effluent discharge will depend on the assimilative capacity (AC) of the water body. Guidance on the calculation of assimilative capacity is provided in the Guidance Document *Guidance, Procedures and Training on the Licensing of Discharges to Waters and to Sewer for Local Authorities (2011 Revision B)*, published by the Water Services Training Group.

2.3.7. In Sections 2.2.6 and 2.2.16 above, I referred to the applicants results from assimilative capacity calculations for the River Glash at the point of discharge. For the purpose of this assessment, I will focus on the assimilative capacity for ammonia only as it was referenced in the initial IFI submission to the PA as a concern.

The formula used for this calculation is as follows:

$$Assimilative\ Capacity = [(C_{max} - C_{back}) \times F \times 86.4] kg/day$$

Where

$\boldsymbol{C_{max}}$ = **maximum permissible concentration (EQS) (mg/l)**

$\boldsymbol{C_{back}}$ = **background upstream concentration (mg/l)**

$\boldsymbol{F}$ = **flow in the river (m^3/s) at 95%ile flow**

86.4 = constant to correct the units to kg/day

2.3.8. For ammonia, the maximum permissible concentration is taken as the threshold value for Good Status in the EU Environmental Objectives (Surface Waters) (Amendment) Regs, 2019 which is either ≤0.065 mg N/L (mean) or ≤0.140 mg N/L (95%ile). The guidance document recommends that the 95%ile concentration quality standard at the 95%ile flow be used. In both 2024 and the 2025 AC calculations the applicant used the 95%ile concentration as recommended.

2.3.9. The background upstream concentration should be a mean value based on a series of data, where available. In the 2024 and 2025 AC assessments, the applicant used water quality data from the monitoring station at Clonuff Bridge (RS07G020400) as background data. The 2024 report stated that this location was “considered representative of the immediate downstream conditions”. I disagree with this as the data used is from a monitoring station located 2km downstream of the discharge point and is therefore not representative of the actual background concentration at the point of discharge. The correct way to establish background concentration would have been to take samples upstream of the discharge point but this was not done. The Industrial Emissions Licence issued to the applicant does not require that ambient monitoring be carried out upstream of the discharge.

2.3.10. The 2024 AC calculation used a background mean value of 0.37mgN/L which it obtained from EPA water quality data for Clonuff Br. The report references the complete data set being available in Appendix A but this was not included in the report I had access to so could not be verified. The 95%ile flow value used for this site was 0.014m^3/s which is appropriate for the location. The 2024 AC calculation provided a negative value which means there was no capacity in the river to assimilate ammonia based on the background concentration applied. The use of this background value is flawed as mentioned above and the result is therefore not a valid estimation of capacity at the discharge point.

2.3.11. The 2025 AC calculation used the same values as the 2024 version, with the exception of the background concentration. The 2025 AC calculation used a median value of 0.089mgN/L (2020-2025 data) for ammonia at Clonuff Br. which gave an AC value of 0.14kg/day. The guidance however requires that a mean value for background concentration be employed and not a median. The mean value for the available ammonia data at Clonuff Br. for the 2020-2025 period is 0.129mgN/L which when used in the AC calculation provided a value of 0.013kg/day which is a factor of 10 lower than that provided by the applicant.

2.3.12. The applicants attempts to calculate the AC in the River Glash are flawed as they do not represent the conditions present in the river at the point of discharge. The AC has been calculated for a point 2km downstream of the discharge and using the correct (mean) values shows that there is limited capacity to assimilate ammonia in the River Glash at this location. This does not mean the lack of capacity is due to the

discharge from the abattoir however as there are other potential sources of ammonia in this stretch of the river which will be discussed later.

2.3.13. When the EPA reviewed the licence (P0192-2) issued to the applicants in 2012, the Inspector assessing the file carried out a Mass Balance calculation to calculate the resultant concentration in the receiving water due to the discharge. This method accounts for the volume of flow in the discharge thus making it the preferred method of determining the impact on the receiving water. No background concentration values were available for ammonia at the time, so the Inspector applied an adjusted background concentration value which is in line with the criteria set out in the *Guidance, Procedures and Training on the Licensing of Discharges to Waters and to Sewer for Local Authorities (2011 Revision B).* This means that the impact of the discharge on receiving waters and compliance with legislative objectives for surface water quality assumed that the receiving waters would achieve the threshold values for good status by 2027. It is noteworthy that some 14 years later, those assumptions have not materialised.

2.3.14. In conclusion, the AC calculations carried out by the applicant did not employ the correct background concentration value and related to a site 2km downstream of the discharge point. My calculations of AC at Clonuff Br. have demonstrated there is limited (almost none) capacity to assimilate ammonia at this location however it cannot be presumed that this is due to the discharge from the abattoir.

Significant Pressures on Water Quality in the River Glash

2.3.15. Within the GLASH_010 waterbody, the following pressures have been identified by the EPA as being significant with regard to impacts on water quality:

- Extractive Industry – Peat extraction
- Agriculture – loss of N & P from pasture lands and,
- Anthropogenic Pressures – Urban Wastewaters or Domestic Wastewaters

The characterisation of this waterbody was updated by the EPA in January 2026 to include a reference to the abattoir which stated the following:

“There is currently insufficient evidence to classify this site as a significant pressure. Licensee is generally compliant with their emission limit values. Recent sampling

upstream and downstream of the discharge showed no difference in ammonia concentrations. Q surveys in 2023 upstream and downstream were both Poor."

2.3.16. To the south of the abattoir lies an area of raised peat bog and there is a relatively large (>50ha) unlicensed peat extraction at this location. The waterbody characterisation by the EPA includes the following information:

"The peat extraction site is located over 3km upstream of the monitoring station. It is suspected that ammonium from the peat extraction site is nitrifying to nitrate in that distance, which has been identified as a significant issue at the station."

The main impacts on water quality arising from peat extraction and drainage include the release of pollutants to water such as ammonium and fine-grained suspended sediments**.** Ammonia is produced when organic compounds are decomposed through microbial action induced by drainage/lowering of the water table. Un-ionised ammonia is toxic to fish. Ammonia is oxidised into ammonium and then nitrite and nitrate through nitrification. Because of the absence of water quality data upstream of the discharge from the abattoir, the potential impacts of this peat extraction site on concentrations of ammonia and other nitrogen compounds in the River Glash is unknown but potentially significant.

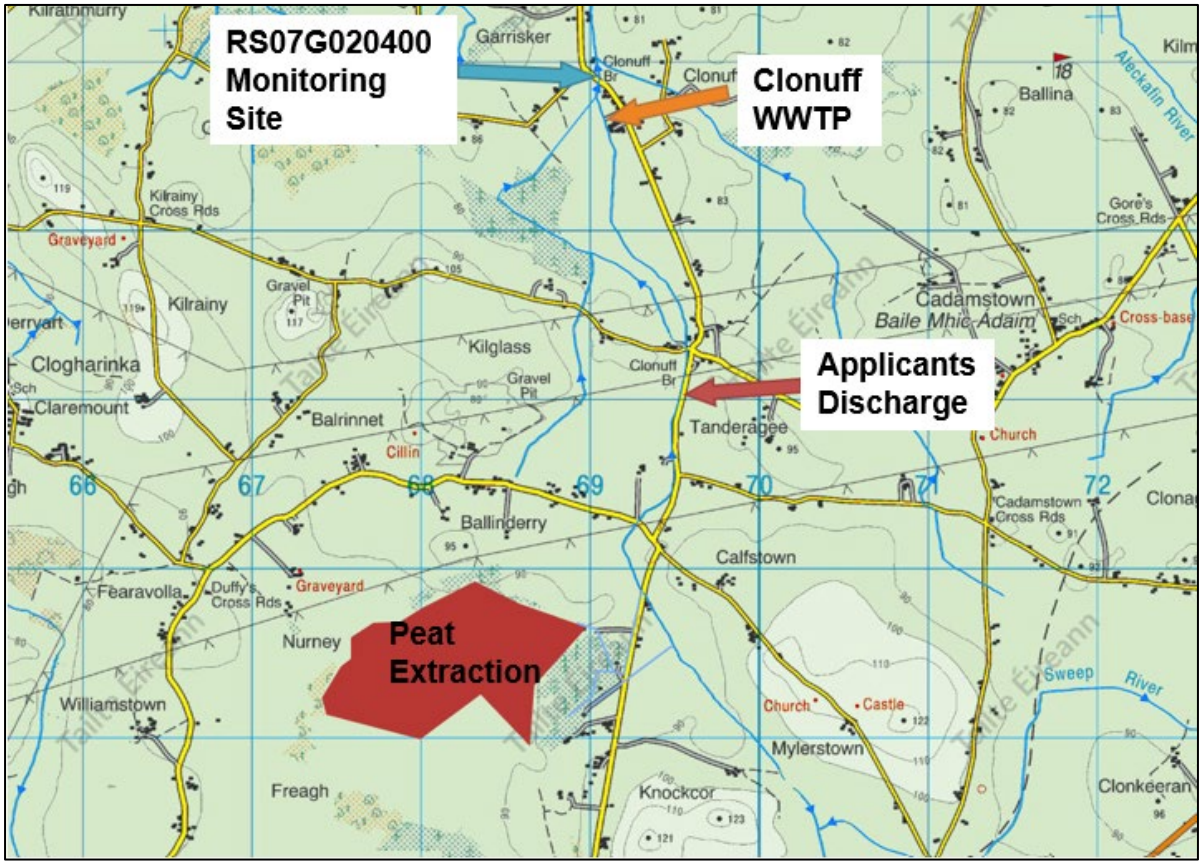
2.3.17. The main source of water quality data in the GLASH_010 waterbody is from the monitoring station at Clonuff Br. (RS07G020400). It was noted that a Wastewater Treatment System serving a number of dwellings discharges into the River Glash approximately 250m upstream of this monitoring point. The WWTS was issued a Certificate of Authorisation (A0141-1) by the EPA in 2011. When the EPA reviewed the licence (P0192-2) issued to the applicants in 2012, the Inspector assessing the file noted the following:

"The Clonuff Certificate of Authorisation (A0141-01) allows discharges to the River Glash approximately 2km downstream of the installation. This agglomeration has a population equivalent of 40 and provides primary treatment consisting of a septic tank. The Office of Environmental Assessment (OEA) has reported that the suspect cause of pollution on the River Glash is municipal due to a small primary WWTP."

This discharge of domestic wastewater 250m upstream of the monitoring station has the potential to be a significant contributor to the concentrations of ammonia recorded at Clonuff Br. There is no information available on the LEAP system

regarding the performance of this treatment system as the compliance requirements for these facilities (<500pe) are minimal, compared to facilities >500pe.

Figure 3 Map of the River Glash with Significant Pressures and the Moyvalley Meats discharge identified



2.3.18. In conclusion, the EPA are the competent authority for carrying out an assessment of significant pressures in all waterbodies. As part of their characterisation of the GLASH_010 waterbody, the Agency has identified unlicensed extraction of peat, discharges from a municipal WTTP and agriculture as the significant pressures within the waterbody. The EPA have explicitly reported that the applicant's licensed facility is not currently considered to be a significant pressure on water quality in this waterbody.

3.0 Conclusions

3.1.1. Having reviewed the available information provided in the appeal documents and assessed the proposed development my conclusions are as follows:

- The wastewater treatment plant employed by the applicants to treat wastewaters arising is fit for purpose and is capable of producing a final effluent which meets the emission limit values as specified in their licence.
- The proposed development will not alter the existing volume or nature of the discharge to the River Glash and therefore WFD compliance will not be impeded as a result of this application.
- The River Glash has limited capacity to assimilate ammonia at Clonuff Bridge due to elevated concentrations of ammonia from a number of sources most notably a municipal wastewater treatment and an unlicensed peat extraction site. While the loading contribution of ammonia and other parameters from the applicant's abattoir has not been demonstrated, it is acknowledged that the EPA is responsible for setting the emission limit values for the discharge and ensuring compliance with same.
- The EPA do not consider the discharge from the applicant's facility to be a significant pressure on water quality in the River Glash. While I believe this proposed development will have no significant impact on water quality, the overall impact of the discharge from the facility (including past ELV exceedances) has not been clearly demonstrated.

Finbarr Quigley
Senior Environmental Scientist

19th February 2026