

Inspector's Report PL21.248659

Development	Upgrading of the Collooney Wastewater Treatment Plant.	
Location	Union Road, Collooney, County Sligo.	
Planning Authority	Sligo County Council.	
Planning Authority Reg. Ref.	PC17/114.	
Applicant	Irish Water.	
Type of Application	Permission under Section 34 of the Planning and Development Act, 2000, as amended.	
Planning Authority Decision	Grant.	
Type of Appeal	Third Party -v- Grant	
Appellant	Stephen French.	
Observers	None.	
Date of Site Inspection	11 th August and 18 th August, 2017.	
Inspector	Paul Caprani.	

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1.0 Introduction

PL21.248659 relates to a third party appeal against the decision of Sligo County Council to issue notification to grant planning permission to Irish Water for the upgrading of the Collooney Wastewater Treatment Plant. The appeal was lodged by the owner of a residential property adjacent to the wastewater treatment plant. The grounds of appeal argue that the application lodged with Sligo County Council is invalid and that there is no proper assessment of the residential amenity impacts arising from the intensification arising from the upgrading of the treatment plant.

2.0 Site Location and Description

- 2.1. The existing wastewater treatment plant is located in the north-eastern environs of Collooney to the immediate south of the Owenmore River and the immediate east of the N4 dual carriageway (Dublin to Sligo Road). The N4 carriageway is located on a separate grade to the access road which runs underneath the dual carriageway and serves the wastewater treatment plant. The local access road serving the wastewater treatment plant ends in a T-junction approximately 100 metres to the east of the wastewater treatment plant. This local road also serves a larger industrial estate to the south and on lands adjacent to the eastern side of the N4 dual carriageway.
- 2.2. There is one residential dwelling in the immediate environs of the wastewater treatment plant. This dwelling belongs to the appellant and it is located adjacent to the eastern boundary of the wastewater treatment plant.
- 2.3. The existing treatment plant provides for inlet works and preliminary screening along the western boundary of the site. Effluent then passes through aeration units prior to being clarified in two retention tanks. The treated effluent is then discharged via an existing outfall pipe to the Owenmore River to the north. This River forms part of the Unshin SAC. The outfall is approximately 30 metres north of the front boundary of the wastewater treatment plant.

- 2.4. The drawings submitted with the application indicate the presence of two existing filter beds located in the south-eastern corner of the wastewater treatment plant. It appears from my site inspection that these filter beds (for the drying of sludge) have long been redundant and are to be removed as part of the current application.
- 2.5. According to the information submitted the wastewater treatment plant has a site area of 0.22 hectares.

3.0 **Proposed Development**

Planning permission is sought to upgrade the existing wastewater treatment plant and increase the Population Equivalent (PE) to be treated from 1,400 p.e. to 3,100 p.e. The upgrade will be subject to Design, Building and Operate (DBO) principles and therefore the drawings submitted are indicative only and may be subject to some change under the DBO scheme. The wastewater treatment plant will comprise a new inlet works with fine screens together with the washing, collection, compaction and storage of the screens. A grit removal facility will also be installed. The existing secondary treatment chamber is to be converted into a storm tank overflow while the existing clarifiers are to be converted to a sludge holding tank. Two new sequencing batch reactor tanks are to be constructed in the eastern portion of the site adjacent to the existing dwellinghouse. A new administration and control building is to be located near the rear of the site. The sludge holding tank will be covered and sealed and an odour control unit will be provided. The existing control building will be converted to a store room. The site works will also include new entrance gates, paved areas and landscaping.

4.0 **Planning Authority's Decision**

4.1. Decision

4.1.1. Sligo County Council granted planning permission for the proposed upgrade to the wastewater treatment works subject to 7 conditions.

4.2. Documented Submitted with the Planning Application

The planning application was submitted with the following documentation:

- A covering letter which outlines the proposed development. It states that the wastewater treatment plant will comply with an odour concentration limit of 3ou/m³ on a 98 percentile basis at the site boundary.
- The maximum noise level at the site boundary due to the operation and maintenance of the work will be limited to 50db(A) at any time.
- A planning application report was also submitted. It sets out the location of the proposed development, the scope of works and the environmental impacts. Also contained in the planning report is a flood risk assessment. It notes that the site is located in flood zone C and is at low risk of flooding. The proposal involves finished floor levels for a control building at 500 millimetres above the 1 in 100-year event water level. Appropriate landscaping and local road/access levels ensure that there is no loss of floodplain on the surrounding lands. Surface water from the site is collected, attenuated and discharged at greenfield run-off rates. It is concluded therefore that the proposed development will be in compliance with the flood risk management guidelines.
- An invasive species report was also submitted. It states there are no alien invasive species recorded within the wastewater treatment plant. The works will be limited to within the existing site and the discharge point to the Owenmore River. There is therefore no potential for spreading alien invasive species within the proposed work area.
- An AA Screening Report concludes that no significant adverse effect is expected on Natura 2000 sites in terms of qualifying interests, conservation objectives and integrity of the sites resulting from the proposed upgrade.
- An architectural screening assessment was also submitted and concludes that the existing wastewater treatment plant contains the same infrastructure that has been subject to disturbance during the original development. The proposed upgrade will be undertaken within the existing footprint of the site.
- The report goes on to set out the benefits of the upgrade work, the construction phase and compliance matters. While it is noted that the detailed design will be the subject of a design, building and operate contractor, it will be essential that the development proposed must be within the limits and the scope of any

permission granted. Nonetheless some degree of flexibility is sought to deal with minor alterations to the elevation at planning compliance stage.

- Appendix 2 of the document contains the detailed floor risk assessment.
- Appendix 3 contains the invasive species report.
- Appendix 4 contains the AA screening report.
- Appendix 5 contains an archaeological screening report.
- Appendix 6 provides landownership details. The lands in question are owned by Sligo County Council.

4.3. Planning Authority Reports

A report from Inland Fisheries Ireland states that the IFI welcomes the proposed upgrade which should result in improved water quality in the Owenmore River. The Owenmore River provides important salmon and trout spawning and nursery habitats for the Ballisadare River fishery which is one of the country's most prolific salmon fisheries. It is noted that the Owenmore River is identified as being "at risk" of not achieving this target and requires a high level of protection. The IFI submission goes on to make the following comments.

- The expected frequency and duration of the stormwater discharges should be calculated. The converted aeration tank should be designed to eliminate or minimise the number of stormwater discharges.
- The sewage network within Collooney must also be assessed and upgraded where necessary.
- The proposed design does not show a final effluent sampling chamber. The sampling chamber must be provided on a 24-hour basis for authorised persons.
- There must be no discharge of silted or otherwise polluted waters to the Owenmore River during the construction phase of the development. No cement or concrete must enter the Owenmore River. Cement trucks should not be washed on site.
- Irish Water should identify the method for treatment and disposal of the sludge produced on site and ensure that there is adequate capacity provided for this.

- An out of hours contact number for all operating personnel should be provided.
- The IFI must be provided with a method statement for any works to be carried out on the outfall on the Owenmore River. A method statement must be accompanied by a security statement as outlined in the invasive species report.
- An emergency response plan should also be produced for the construction and operational phase of the development with the IFI listed as a notifiable body in the event of a major spill to surface waters.
- The emergency plant outflow pipe should include an emergency stop valve where there is a need to shut down the discharge. There should be emergency storage for effluent in the case of a plant breakdown or non-compliance with standards.
- All chemicals including ferric sulphate must be stored in bunded areas with a 110% capacity of the largest container.

4.4. Local Authority Reports

4.4.1. A report from the Environmental Services Section welcomes the proposal and notes that the application has been referred to the EPA for comments. It also notes that the EPA is a responsible body for emission limit values. The Environment Section comments are restricted to potential water quality impacts during the construction phase of the development and potential noise and odour nuisances associated with the wastewater treatment plant. A site inspection was carried out by the Environment Section in principle to the proposal subject to compliance with development policies and recommends that in the case that planning permission is granted, a total of 15 conditions should be attached.

4.5. **Observations**

An observation was submitted by the current appellant. This observation raises concerns about the validity of the application and the potential impact of the proposed works on the observer's amenity.

4.6. Planner's Report

- 4.6.1. This report sets out the development plan context, planning history and the technical reports submitted from the Environment Section of Sligo County Council and Inland Fisheries Ireland. It is considered that the proposed development complies with the zoning and the general objectives of the development plan which include upgrading works to the Collooney wastewater treatment plant. It is considered that the proposed development will not give rise to any significant visual amenity or residential amenity in terms of noise and odour. It is further considered that the proposed development will not impact on any Natura 2000 sites in the vicinity, will not give rise to flood risk or the colonisation of invasive species. The planner's report also incorporates a detailed screening for EIA where it is concluded that the proposed development would not require EIA. It is therefore recommended that planning permission be granted for the proposed development subject to 7 conditions.
- 4.6.2. A separate Appropriate Assessment Stage 1 Screening is carried out as part of the planner's report. It concludes that the proposed development will not have a significant impact on Natura 2000 sites and therefore an Appropriate Assessment Stage 2 (preparation of a Natura Impact Statement) would not be required in this instance.

5.0 Planning History

There appears to be no planning history associated with the subject site. The planner's report merely notes that the plant was constructed by Sligo County Council in the mid-1970s. According to the planner's report there have been no recent applications relating to the subject site.

6.0 Grounds of Appeal

6.1. The decision of Sligo County Council to issue notification to grant planning permission was the subject of a single third party appeal, the grounds of which are outlined below.

- 6.2. It is the appellant's opinion that the site layout maps submitted are incomplete in that they do not show all development in the area including structures or walls on the appellant's site. Likewise, there are no finished floor areas or ridge levels shown on the appellant's dwelling. Details of the service connections to the dwellinghouse and whether or not it is served by a sewer connection or an on-site treatment system have not been shown. For these reasons it is considered that the application should be deemed invalid.
- 6.3. Furthermore, the appellant's dwelling is located a mere 7 metres from the common boundary with the subject site. No details are indicated as to how the works will negatively impact on the appellant's property. The report accompanying the application makes no reference to the impact arising from the intensification of use on site. No streetscape showing buildings to be constructed on site have been included.
- 6.4. The intensification of use will lead to a serious potential health hazard due to the increase in malodours from the treatment plant. Lands to the south of the subject site were zoned in the Sligo County Development Plan for any extension to the treatment works. These lands are a greater distance from the appellant's house and would be more appropriate for development.
- 6.5. The narrow country road serving the site does not have any footpath or public lighting. Furthermore, no sufficient turning space is available on the road for large vehicles. The access road is not suitable or designed for heavy traffic. Any intensification of site will lead to odours rendering the appellant unable to use his garden areas.
- 6.6. The proximity of the treatment works to residential dwellings would not comply with any EPA regulations regarding separation distances. Therefore, an increase in the size of the treatment unit should not be permitted. The proposal therefore will result in a serious depreciation of the appellant's property and may leave the property unsellable.

7.0 Appeal Responses

7.1. Response from JB Barry, Consulting Engineers

- 7.1.1. A response was submitted on behalf of Irish Water by JB Barry Consulting Engineers. The response is outlined below. It states that the treatment plant is currently receiving average flows for a population equivalent of 2,500. The additional wastewater is bypassing the treatment process untreated and discharging into the Owenmore River. The response goes on to outline the existing treatment which takes place as the plant. It is also stated that septicity is occurring due to organic overloading. The proposed new arrangements for the wastewater treatment plant are set out including details of the Sequencing Batch Reactor (SBR) process.
- 7.1.2. Site records show that the appellant's foul sewer connection is connected directly to the aeration tank, bypassing the existing inlet screen. This is not good practice and will be rectified as part of the proposed works.
- 7.1.3. It is noted that the existing wastewater treatment plant does not have any odour control measures in place. The proposed SBR treatment process which utilises a fine bubbled diffused aeration system has a odour emission of 60% less than that of the existing process. Odour control on site will therefore be greatly enhanced and odour concentration of 3ou/m³ on a 98th percentile basis of hourly averages will be complied with at the site boundary. It is stated that, based on predicted emissions and air dispersion, this limit is readily achievable at the site boundary. Details of the predicted odour emissions from the process units are indicated in Table 1 of the submission. Details of the mitigation measures to be employed to ensure that odour limits are achieved are also set out.
- 7.1.4. It is stated that the site is adequately screened and will not give rise to any visual impacts.
- 7.1.5. The new upgraded works will provide thicker sludge and therefore the sludge volume produced and removed off-site will be reduced, resulting in less trips to and from the site for sludge removal. In terms of construction traffic details of the proposed construction traffic is set out in Table 2 of the response. It is proposed to resurface the local access road directly servicing the site. It is estimated that there will be

approximately 116 HGV movements to and from the site over an 8-week construction period resulting in a maximum of 15 movements per week.

7.1.6. In relation to zoning, Sligo County Council have completed the Draft County Development Plan for the county and a submission has been received by Sligo County Council to remove the reserved zoned lands to the south of the site as 'utilities'. If the plan is adopted, this land will no longer be zoned for utilities (i.e. lands to the rear of the subject site). It is stated that the existing wastewater treatment plant was constructed in 1975 and the adjacent dwelling was granted planning permission on 24th October, 1975. Originally the house was constructed with a septic tank. The proposed upgrade works are in accordance with guidance and regulations to mitigate any possible environmental impacts which may arise with the on-going operation of the WWTP at Collooney.

7.2. Planning Authority's Response to Grounds of Appeal

- 7.2.1. In relation to the validity of the application it is stated that the applicant has submitted a site layout plan drawn on a scale of 1:500. The drawing clearly shows the location of the adjacent dwellinghouse and associated outbuildings. The boundary of the adjacent site and the distance between the dwellinghouse and the application site has been shown. It is therefore considered that the site plan layout complies with Article 23(1)(a) of the Planning and Development Regulations, 2001 and the application submitted was therefore valid.
- 7.2.2. In terms of impact on residential amenity, it is noted that there is only one dwelling in close proximity of the site. The existing filter bed is located 3 to 4 metres east of the application boundary. The proposed SBR tanks will be located between 3.6 and 5.71 metres from the eastern boundary of the site. The applicant has also proposed to provide screening along the eastern boundary of the site. The proposed upgrade works will eliminate any existing environmental issues and improve the overall site.
- 7.2.3. The rated sound level arising from the works shall not exceed 40dB(A) (15 mins L_{aeq}). Air blowers will be housed in acoustic enclosures and odour control units will be provided to minimise any odour impact.
- 7.2.4. It is also a requirement of the applicant to submit a landscaping scheme to ensure that the proposal does not impact on the visual amenities of the area. It is therefore

considered that the proposal will not result in a significant adverse impact on the residential amenities of the area.

- 7.2.5. The planning application was referred to the EPA however no comments were received.
- 7.2.6. It is noted that the area to the south of the subject site is zoned utilities. The subject application related to the upgrade of the existing treatment plant and not the extension of the treatment plant.
- 7.2.7. The Area Engineer examined the plans and particulars submitted and there is no objection to the proposal in terms of access arrangements.

8.0 Further Submissions

8.1. Further Submission on behalf of the Appellant

Concern is reiterated that the new SBR tanks will be located in closer proximity to the appellant's dwelling and will not be covered. This will undoubtedly lead to odours and increase insects in the area. There are no figures or readings given for actual emissions currently on site and all figures presented are estimates. No reference is made that the proposed development will result in an intensification of use which will lead to serious potential health hazards. The appellant's daughter is autistic and has sensory issues. The smells and odours of the plant can cause significant distress. On a specific date during the summer all doors and windows at this house had to be closed due to odours. The proximity of the treatment works to a residential dwelling would not comply with any EPA Regulation regarding separation distances. The proximity between the wastewater treatment plant and the adjoining dwelling would not be permitted under EPA Regulations.

8.2. Further Submission from Sligo County Council

A further submission from Sligo County Council states that the Planning Authority have no further comments to make in relation to the application.

9.0 **Development Plan Provision**

9.1. Collooney Mini-Plan

9.2. The site is governed by the Sligo County Development Plan 2017 – 2023. Volume 2 of the Plan comprises of mini plans for various settlements around Sligo. The Collooney Mini Plan states the following in relation to wastewater treatment.

A buffer zone shall apply in the vicinity of the existing/proposed wastewater treatment site. Development within this zone may be restricted or prohibited in the interest of public health and the protection of residential amenities. The extent of development restrictions in each case will be assessed at planning application stage. The subject site is zoned for 'Public Utility'.

9.3. Sligo County Development Plan

Section 9.3 of the newly adopted Sligo Development Plan (adopted 28^{th} August, 2017) specifically relates to wastewater treatment. The Plan notes that there is a need to upgrade and improve the network of wastewater treatment facilities in a number of towns and villages throughout Sligo. The proposed treatment works and extensions to drainage infrastructure throughout County Sligo are contained in Table 9C. In relation to Collooney it is noted that currently the design P is 1,400. The existing treatment comprises of extended aeration together with clarification. The current load PE is estimated to be 2,564 (estimated in 2016). The Plan states that it is proposed to upgrade works to provide a 3,100 PE plant and that this is included in Irish Water's Investment Plan for 2017 – 2021.

10.0 Planning Assessment

- 10.1. I have read the entire contents of the file, had particular regard to the issues raised in the grounds of appeal and I consider the pertinent issues in relation to the current application and appeal before the Board are as follows:
 - Validity of Application
 - Impact on Residential Amenity with Specific Emphasis on Noise, Odour and Traffic.

• Appropriate Assessment

10.2. Validity of Application

- 10.2.1. In respect of the validity of the application, the grounds of appeal argue that the application should be deemed invalid as the drawings do not show requisite details in relation to finished floor levels or ridge levels of the adjacent house nor do they indicate details of the existing service connections to the appellant's house. Drawing No. Y15718-C-002 submitted with the application clearly indicates ground levels on the subject site. There is no requirement under the provisions of Article 23 of the 2001 Regulations (as amended) that requires that levels and ridge heights of all existing structures in the vicinity of the site be shown. Article 23(C) sets out the requirement for "*site layout plan and other plans shall show the level or contours where applicable of land and the proposed structures relative to ordnance survey datum or a temporary local benchmark, whichever is more appropriate*". Drawing Y15718-C-002 clearly shows the existing ground levels and Drawing No. Y15718-C-003 shows the finished floor levels of the structures proposed. There is no requirement to show the same level of detail on structures on adjoining lands.
- 10.2.2. While the details contained in the planning drawings in my view are fully compliant with the requirements of Article 23, it is of course open to the Board to seek further information should the Board deem such information to be necessary for the purposes of determining the application.
- 10.2.3. The Board should also bear in mind that, as in the case of most wastewater treatment plants, the Collooney plant is to be constructed in accordance with the design, build and operation (DBO) model. The DBO model allows some flexibility in terms of providing structures on site. Irish Water points out in its response to the grounds of appeal some alterations may be required in a detailed design in order to comply with any emission limit values (ELV) attached to any waste discharge authorisation licence issued by the EPA. For this reason, I do not consider it necessary that further detailed requirements in relation to finished floor levels are necessary in the case of the drawings proposed as these drawings may in fact be subject to some minor change.

10.3. Impact on Amenity

10.3.1. Odour

A key issue raised in the grounds of appeal relates to malodour arising from the development particularly in periods of warm weather. I visited the site on two occasions in the summer months when the activated sludge tank on site was operational. I could not detect any discernible odour around the site boundary on either occasion. On my second site visit I gained access to the facility and odour was apparent when in close proximity to the inlet works, the secondary treatment tanks and to a lesser extent the clarification unit on site. It was very apparent from my site inspection that there was a high concentration of mixed liquor and suspended solids (MLSS) in the activated sludge tank. The high loadings is likely to result depleted oxygen in the tank which in turn results in inefficient treatment of effluent and consequential high levels of septicity. This is particularly apparent around the perimeter walls of the activated sludge tank. The on-site evidence would in my view support Irish Water's contention that the tank is overloaded and the activated sludge treatment is being overwhelmed by the organic loading. The population equivalent figures set out in the development plan in Table 9C would also support this conclusion. The figures indicate that the tank is catering for an overload of approximately 1,100 PE. There is evidence therefore to suggest that the site is operating beyond capacity with an inefficient F/M ratio. This is going to give rise to sub-optimal treatment in the activated sludge process and the clarification tank. This in turn is generating excess levels of odour.

The proposed upgrading will in my view reduce odour emissions to a significant extent through the following measures:

 It is proposed to incorporate a more efficient secondary treatment through the use of sequence and batch reactor units (SBR units). While these units are located closer to the appellant's dwelling, the units allow more effluent use and monitoring of dissolved oxygen levels within the tank to ensure that the level of secondary treatment is more robust and efficient. The SBRs will use a "fine bubbled diffused aeration system" which is a very effective method of secondary treatment and maximises organic breakdown within the biological process. There is a direct correlation between more effective secondary treatment and odour reduction. The installation of more up to date secondary treatment will result in a significant reduction in odour generation.

- It is also proposed to incorporate an odour treatment unit particularly at the inlet screen. Inlet screens are a major source of odour generation. The incorporation of an odour control unit will result in significant reductions of odour generation.
- The incorporation of a covered sludge holding tank will also reduce odour generation to a significant extent.

The Waste Discharge Authorisation Regulations permit the competent Planning Authority to attach conditions relating to emissions other than those associated with the actual wastewater discharge. I refer the Board to Article 41(1) of the Waste Discharge Authorisation Regulations which states that 'An Bord Pleanála, where it decides to grant permission under Section 34 on appeal or otherwise in respect of a proposed development that involves a wastewater discharge from a wastewater works, shall not subject the permission to conditions which are for the purposes of controlling the wastewater discharge'.

It is apparent therefore that while the Board cannot include conditions in relation to emission limit values in the discharge (BOD, Suspended Solids, COD etc.) as this is a matter for the EPA in licensing the treatment plant under the said Regulations. It is of course open to the Board to attach conditions in relation to noise and odour as these do not specifically relate to the wastewater discharge from the treatment plant.

The applicant in the information submitted states that the wastewater treatment plant will comply with an odour concentration limit of 3ou/m³ on a 98th percentile basis of hourly averages at the site boundary. There are no specific Irish national guidelines in relation to odour guidance. However, odour guidance for local authorities have been issued by DEFRA in the UK. I note that the guidelines state that "*typical standards might be for omissions to be controlled and sourced to such a level that modelled odour exposures should not exceed a 98th percentile hourly mean concentration of 1.5, 3 or 5 odour units/M³ at receptor locations". Therefore, Irish Water's proposal to limit the odour concentration at the boundary to 3 odour units/m³ on a 98 percentile basis would appear to comply with DEFRA Guidelines and therefore would appear to be good planning practice.*

In conclusion therefore I am satisfied that the proposed development is more likely to result in reduced odour generation than that currently experienced at the site for the reasons set out above and therefore the proposal will result in an overall improvement in the appellant's amenity in terms of odour. I do however note that the SBR units are to be left uncovered for maintenance reasons. The appellant has expressed concerns in relation to same. If the Board have any similar concerns, it could condition that the SBR units be covered. However, having regard to the measures to be put in place and the stated odour limits to be achieved at the boundary according to the information contained on file, I do not consider that such a requirement is necessary at the moment. The applicant has stated that he will fully comply with the requirements of SI 787 of 2005 (European Communities (Wastewater Treatment) (Prevention of Odours and Noise) Regulations of 2005). Under these regulations a Sanitary Authority shall, inter alia, maintain a good record of all mandatory environmental standards including those relating to odour and noise and shall provide records in relation to same. Based on the information contained on file therefore and the requirements under the above regulations I am satisfied that subject to a condition requiring an odour concentration limit of 3ou/m³ on a 98th percentile basis can be achieved and as such will not adversely impact on the appellant's amenity.

10.3.2. Noise Considerations

The grounds of appeal also express concerns that the proposal will give rise to excessive noise which will impact on the residential amenities of the adjacent house. Many of the points made above in respect of odour are also applicable in the case of noise. It is open to An Bord Pleanála to condition noise limits as part of any grant of planning permission under Section 34 of the Act as per Article 41(1) of the Waste Discharge Authorisation Regulations. The information submitted with the application indicates that the upgraded wastewater treatment plant will be designed and constructed to ensure that the maximum noise levels the site boundary due to the operation and maintenance of the work is limited to 50dB(A) (15 mins L_{Aeq}) at any given time. The noise limits of 50dB(A) at the site boundary is a reasonable limit for protecting adjacent residential amenity in my opinion. The existing activated sludge treatment gives rise to noise generation within the wastewater treatment plant.

particularly during the diffused bubbled aeration system process. However, the air blowers will only be operating during a specific phase of the SBR process and will not be operating on an almost constant basis as is the case in the activated sludge treatment. Furthermore, the air blowers are housed in acoustic enclosures in order to reduce noise at the site boundary. The information submitted with the application indicates that there will be no discreet tones or impulses which would attract an $L_{AR}T$ rating in any noise assessment. The information submitted with the application indicates that the rated sound level at the adjacent residence caused by the operation of the site will not exceed 40dB(A) (15 mins L_{Aeq}). Such levels would comply with all EPA guidance in respect of noise.

Finally, in relation to this issue, the Board should note that the appellant's house is located c.80 metres from the N4 National Primary Route (Sligo to Dublin route) which is a dual carriageway. While this dual carriageway is at a separate grade and is higher than the subject dwelling, traffic along this route travels at high speed and is therefore likely to give rise to significant noise generation. Likewise there are zoned for business and enterprise in the immediate vicinity of the subject site and there are a number of transport depots and similar type uses within the wider area particularly to the east and south of the subject site. These would also give rise to noise generating activities.

In conclusion therefore, I do not consider that the appellant's dwelling could be regarded as a typical rural type dwelling located in a rural area where ambient noise levels would be very low. The site in question is located adjacent to and within lands zoned for enterprise and employment activities as well as in close proximity to a national primary route. These uses will give rise to significant noise generation. In this context it cannot be reasonably argued in my opinion that the noise levels generated by the wastewater treatment plant which would be limited to 50dB(A) at the site boundary and 40dB(A) at the nearest residence would give rise to an unacceptable level of noise generation.

10.3.3. Traffic

The subject site is located on a local road with no footpaths. There are no uses on this section of roadway to the east of the N4 underpass other than the appellant's dwelling at the wastewater treatment plant. Details of the construction traffic prediction are set out in Table 2 of the applicant's response to the grounds of appeal. It indicates that the number of HGV movements to and from the site will amount to 116 movements. These movements will take place over a period of at least 8 weeks or possibly longer (Table 2 of the applicant's response to the grounds of appeal does not clearly indicate whether or not and to what extent the various construction phases will take place). Over an 8-week period it is estimated that the HGV traffic to and from the site would amount to approximately 14 to 15 movements per week or three movements per day. This level of traffic on the local road would be acceptable. Furthermore, it would be temporary in duration and therefore would not have a lasting impact on the appellant's amenity. During the operational phase the response to the grounds of appeal states that the frequency of traffic will remain as per the current situation amounting to one car daily. Because of the higher proportion of dry solids in the sludge currently at 0.75% which would be increased to 3.5% this will result in a significant reduction in sludge volume produced which would have a commensurate reduction in traffic generation resulting from sludge removal. I am therefore satisfied that the proposed development will not have any adverse or undue impact on the appellant's amenity in terms of traffic either during the construction or operational phases.

Finally, in relation to visual amenity I do not consider that the proposed development will give rise to any adverse visual impacts. The upgrading of the wastewater treatment plant will improve the appearance of the site and the proposed sequencing batch reactors, odour control unit or sludge holding tank or the proposed administration building are not of a significant size and scale to materially impact on the appellant's visual amenity. I further note that there is a thick band of conifer trees located along the boundary of the site (see photographs attached) which provide more than adequate screening of views from the appellant's dwelling. The drawings submitted indicate that additional planting will take place in order to augment the existing screening. The proposed development therefore in my view is acceptable from a visual amenity point of view.

11.0 Conclusions and Recommendation

Arising from my assessment above I consider the proposed development constitutes necessary infrastructure needed to cater for increased wastewater loading from the town of Collooney which will have major environmental benefits for both the town and the receiving environment. Furthermore, I am satisfied that the application as submitted is valid and that the proposed development will not give rise to any significant or material impact of the residential amenity of the adjoining dwellinghouse to the east. I therefore recommend that An Bord Pleanála uphold the decision of Sligo County Council and grant planning permission for the proposed development.

12.0 Appropriate Assessment

Introduction

I note that the application was accompanied by a screening for an appropriate assessment report and furthermore that Sligo County Council in assessing the application carried out a comprehensive and robust AA Screening Report. For the purposes of completeness, it is proposed to undertake a separate and independent assessment as part of the evaluation of the proposed development. Effluent from the WWTP flows via a discharge pipe into the Owenmore River which links up with the Ushin River approximately 500m to the north of the site. Both the Owenmore River and the Unshin River form part of the Unshin River SAC. For the purposes of clarity therefore, the outfall from the WWTP discharges directly into the SAC.

Natura 2000 Site in the Area

It is noted that there are 14 designated Natura 2000 sites within a 15 kilometre radius of the subject site. Four of these sites are located within a 5 kilometre radius. These are the Unshin River SAC, the Union Wood SAC, the Ballisadare Bay SAC and the Ballisadare Bay SPA. The other Natura 2000 sites are located between 6 kilometres and 15 kilometres from the proposed wastewater treatment plant and they are not hydrologically or otherwise connected with the wastewater treatment plant.

The wastewater treatment plant currently discharges into the **Unshin River SAC** (Site Code: 001898) and this is to remain the case under the proposed upgrade. The Unshin River SAC has the following qualifying interests.

- Watercourses of plain to montane levels with ranuculion fluitantis and Callitricho-Batrachion vegetation.
- Alluvial forests with alnus gultinosa and fraxinus excelsior (priority habitat).
- Salmon.
- Otter.

The Unshin River in turn discharges into the Ballisadare Bay SAC (Site Code: 000622) and SPA (Site Code: 004129).

The qualifying interests associated with the Ballisadare SAC are as follows:

- Narrow-mouthed whorl snail.
- Estuaries.
- Mudflats and sandflats not covered by sea water at low tide.
- Harbour seal.
- Embryonic shifting dunes.
- Shifting dunes along the shoreline.
- Fixed coastal dunes with herbaceous vegetation.
- Humid dune slacks.

The qualifying interests for the Ballisadare SPA (Site Code: 004129) are as follows:

- Brent Goose.
- Grey Plover.
- Dunlin.
- Bartailed Godwit.
- Redshank.
- Wetlands.

Thus any adverse impact arising from the proposed development in the Unshin River could potentially impact on the qualifying interests associated with the Ballisadare SAC and SPA as both are located downstream from the subject site.

Union Wood SAC is located approximately 1 kilometre north of the subject site. The single qualifying interest associated with Union Wood is the Old Sessile Oak Woods with Ilex and Blechnum in the British Isles. Having regard to the separation distance and the nature of the qualifying interests I do not consider that there is any potential for the proposed development to adversely impact on the qualifying interest associated with Union Wood and for this reason any potential impact of the proposed development on the Union Wood SAC can be discounted.

Construction Impacts

In terms of construction impacts, the subject site is separated from the southern boundary of the Unshin River SAC by a public road and hedgerow. The SAC incorporates a strip of land along the southern side of the Owenmore River approximately 20 metres in width. This strip of land comprises of a field and does not contain any alluvial forest which is one of the qualifying interests associated with the SAC. The other three qualifying interests all relate to the watercourse and the water quality associated with the Owenmore River/Unshin SAC.

Construction impacts do have the potential to give rise to spillage accidents including spills of oils, chemicals and hydrocarbons, or elevated suspended solids in any run-off from construction activities. Having regard to the presence of the public roadway along the northern boundary of the site, and the strip of agricultural land between the roadway and the banks of the Owenmore River, I do not consider that there is any potential that adverse impacts could arise from construction activities in the form of spills etc. which could impact on the water quality of the Owenmore River. Any such spills which occur within the site would be intercepted by the roadway and the agricultural buffer zone before reaching the Owenmore River. The Planning Report submitted with the application indicates that best practice will be put in place to prevent possible pollution substances from entering the Owenmore River". (P.2)

Operational Impacts

In terms of operational impacts, the upgrade of the wastewater treatment plant will result in a more robust and comprehensive treatment of wastewater before discharging into the Owenmore River. The information submitted indicates that no specific works are proposed to the outfall to the Owenmore River. Therefore, the works to be undertaken will only affect the quality of discharge from the wastewater treatment plant to the Owenmore River.

The current water quality in the Owenmore River is set out in Table 1 of the Appropriate Assessment Screening Report submitted with the application. The existing water quality is set out below.

Parameter	Units	Upstream	Downstream	EQS (Good Status) (95%ile)
BOD	Mg/I	0.5	1.3	≤ 2.6
Total Ammonia	Mg/I	0.01	0.061	≤0.14
Ortho-P	Mg/I	0.014	0.018	≤0.075

 Table 1 Water Quality Upstream and Downstream of Discharge Point

It is clear from the above table that the water quality both upstream and downstream of the discharge point in the Owenmore River for the above parameters attained the EQS of good status. Therefore, it appears that while there may have been exceedences in the wastewater discharge licence from the Collooney wastewater treatment plan, there was no significant impact on the quality of the Owenmore River in terms of River Status.

The proposed development in this instance seeks to ensure that the wastewater treatment plant will operate in accordance with any limits set down in the EPA's revised wastewater treatment discharge licence. The proposed development in this instance seeks to ensure that the effluent being discharged from the wastewater treatment plant is of a higher quality than that currently being discharged. It is reasonable therefore to assume that if the quality of wastewater being discharged from the treatment plant represents an overall improvement to that currently being discharged that the consequently impact on water quality in the receiving waters of the

Owenmore River which forms part of the Unshin River SAC, will improve as a result of the works to be undertaken during the operational phase. It stands to reason therefore that any improvement in water quality in the receiving waters will not have any adverse impact on the qualifying interests associated with those receiving waters.

Likewise, having regard to the fact that the Owenmore River which forms part of the Unshin River SAC subsequently flows into the Ballisadare Bay SAC and SPA and it can be reasonably concluded that the water quality within the bay will improve somewhat as a result of the works to be undertaken. Thus, it can be reasonably concluded that the proposed works to be undertaken will not in any way adversely impact on the qualifying interests of the Natura 2000 sites downstream of the discharge point.

In- Combination Effects

In terms of cumulative impacts or indirect impacts, it is apparent that the proposed development will not have any significant adverse impacts on Natura 2000 sites and if anything, will improve the water quality of the receiving waters of these Natura 2000 sites. As such it cannot be expected that the works to be undertaken will contribute in any adverse way to in-combination effects with other plans or projects in the area.

Conclusion

It is reasonable to conclude that on the basis of the information on file which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on the Unshin River SAC (Site Code: 001898) or any other European site in view of the site's conservation objectives and a Stage 2 Appropriate Assessment (and a submission of an NIS) is not therefore required.

13.0 Decision

Grant planning permission for the proposed development in accordance with the plans and particulars lodged based on the reasons and considerations set out below.

14.0 Reasons and Considerations

It is considered that the proposed upgrading of the Collooney Wastewater Treatment Plan would, subject to conditions set out below, would not seriously injure the amenity of the area or property in the vicinity, would not be prejudicial to public health and would result in a higher quality of effluent being discharged into the Owenmore River which would be beneficial to the receiving environment, and would generally be acceptable in terms of traffic safety and convenience. The proposed development would therefore be in accordance with the proper planning and sustainable development of the area.

15.0 Conditions

 The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to the commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. Odour levels at the site boundary shall comply with an odour concentration limit of 3 ou/m³ on a 98th percentile basis of hourly averages. Monitoring and recording of odour concentration levels shall be carried out at intervals to be agreed with the planning authority and details of all surveys undertaken shall be submitted to the planning authority at intervals to be agreed with the planning authority.

Reason: To protect residential amenity.

 The maximum noise level at the south boundary during the operation of the wastewater treatment plant shall not exceed 50dB(A) (15 mins L_{Aeq}) at any time.

All sound measurements shall be carried out in accordance with ISO Recommendation R1996 "Assessment of Noise with Respect of Community Response" as amended by ISO Recommendations R1996 1, 2 or 3 (Description and Measurement of Environmental Noise as applicable).

Reason: To protect the residential amenities of property in the vicinity.

 The applicant shall fully comply with the monitoring and reporting requirements as set out in SI No. 787/2005: European Communities (Wastewater Treatment) (Prevention of Odour and Noise) Regulations 2005.

Reason: To protect residential amenity.

 Irish Water or any agent acting on its behalf shall implement in full the mitigation measures set out in the Flood Risk Assessment and the Report on the Invasive Species Survey submitted to the planning authority on 27th March, 2017.

Reason: In the interest of protecting the environment.

6. Construction and demolition waste shall be managed in accordance with a construction waste and demolition management plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall be prepared in accordance with the "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects", published by the Department of the Environment, Heritage and Local Government in July 2006. [The plan shall include details of waste to be generated during site clearance and construction phases, and details of the methods and locations to be employed for the prevention, minimisation, recovery and disposal of this material in accordance with the provision of the Waste

Management Plan for the Region in which the site is situated.].

Reason: In the interests of sustainable waste management.

- 7. During construction activities Irish Water and any agent acting on its behalf shall comply with the following measures:
 - (a) Silt traps shall be installed at locations that will intercept any construction run-off onto the adjoining roadway and Owenmore River.
 - (b) Temporary oil interceptors will be installed to ensure that oils and hydrocarbons do not discharge into the Owenmore River.
 - All plant and machinery used during construction works shall be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens and
 - (d) All fuels, oils, greases and hydraulic fluids shall be stored in bunded compounds away from the front boundary of the site.

Reason: To ensure the protection of watercourses in the vicinity during construction works.

- The applicant shall maintain waste disposal records for site for the duration of the construction project and these shall be submitted to the planning authority on completion of the construction phase of the development.
 Reason: To protect public health.
- 9. All construction work on site shall be scheduled in a manner that provides equivalent treatment of municipal wastewater entering the wastewater treatment plant while the construction of the new wastewater treatment facility is on-going in order to minimise impacts on the receiving waters during the construction phase.

Reason: In the interest of prevention of water pollution.

10. The applicants shall maintain on site for the duration of the construction phase of the development adequate stocks of silt fences, silt bags, oil spillage equipment, drip trays, absorbent sponges and pads in the event of accidental spillages of hydrocarbon or sediment on site. Full details shall be submitted to the planning authority prior to the commencement of development.

Reason: To protect watercourses in the vicinity.

11. The applicants shall provide the planning authority of Sligo County Council and the Regional Office of Inland Fisheries Ireland with formal written notification of the date of the commencement of construction works on site.

Reason: In the interest of clarity.

12. All external lighting within the proposed development shall be sufficiently cowled so as to ensure that light spillage beyond the boundary of the site is minimised.

Reason: In the interest of residential amenity.

 Where chemicals are to be stored on site such chemicals shall be stored in a suitably bunded area.

Reason: In order to prevent pollution.

- Irish Water shall prepare and fully implement a landscaping scheme which provides planting around the inside of the perimeter fence so as to adequately screen the proposed development.
 - (2) All planting shall be adequately protected from damage until established. Any plants which die, are removed, become seriously damaged or diseased within a period of 5 years from the completion of the proposed development shall be replaced within the next planting season with others of similar size and species.

Reason: In the interest of visual amenity.

Paul Caprani, Senior Planning Inspector.

21st September, 2017.