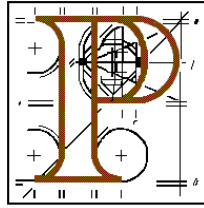


# An Bord Pleanála



## Inspector's Report

**Development:** Córas coiréala fuíolluisce a thógáil agus ocht gcinn d'umair agus príomhphíobán aníos 2.65km ar fhad go Cé Bhaile na hAbhann (Effluent treatment unit with eight tanks and underground pipeline of 2.65km length to Ballynahown Quay) – An Tulaigh agus Indreabhán, Conamara, Co. na Gaillimhe.

### Planning Application

Planning Authority : Galway County Council  
Planning Authority Register Ref. : 15/1601  
Applicant : Údarás na Gaeltachta  
Type of Application : Permission  
Planning Authority Decision : Grant permission

### Planning Appeal

Appellant(s) : Michael Mór Breathnach  
Type of Appeal : 3<sup>rd</sup> Party v Grant  
Observer(s) : Michael & Patricia Ní Fhátharta

**Date of Site Inspection** : 9<sup>th</sup> June 2016

Inspector : **Michael Dillon**

## 1.0 Site Location & Description

- 1.1 The effluent treatment plant site, with a stated area of 0.104ha, is located in the northwest corner of the Údarás na Gaeltachta Industrial Estate, which itself is located between Indreabhán and Baile na hAbhann – just off the R336 Regional Road in west Co. Galway. The 50kph speed restriction applies in this area and there is a public footpath and some public lighting. The industrial estate currently contains 3 no. units. Access to the appeal site is from a hammerhead turning area within the industrial estate – the area around which is landscaped. Tully Lough is located some 50m to the northwest of the site – separated from it by a farm track and grazing land. Surface water from the appeal site drains within an open channel flowing through a small culvert beneath a dry-stone wall and into Tully Lough. There is agricultural land to the west and north of the treatment plant.
- 1.2 The site was formerly used as an effluent treatment plant (until October 2012) but is now used for holding of waste only (tankered out three times per week). Untreated effluent was leaking from the storage tank into the ground on the date of site inspection. There is a large circular tank (14.5m diameter) located below ground level and surrounded by a concrete post and chain-link fence. This tank is disused and the area overgrown. There is an adjacent small control building. There are dry-stone walls and hedgerow boundaries to the northwest and north of the existing facility. To the east of the facility, the boundary is a trimmed Grissellinia hedge. The site is flat, located in a shallow depression – and ground level is indicated between 17.0 and 18.0m OD.
- 1.3 The route of the discharge pipe from the treatment plant is as follows-
- Within industrial estate roads to the estate entrance.
  - Along a section of the R336 Regional Road and along a short stretch of the old R336 (where the road was realigned to take out a bad bend).
  - Off the R336 in a southerly direction (next to the TG4 building) into a network of small, undulating, improved grassland/rough grazing fields, which are separated by a mixture of hedgerows and dry-stone walls).
  - Out onto an unsurfaced track in the vicinity of a concrete deck bridge across the Tully River.
  - Onto a short stretch of tarmac road in the vicinity of Ballynahown Quay.
  - Discharge into the sea from the wall of the quay referred to above.
- There was a flow of water in the Tully River on the date of site inspection. The river is not tidal at the above-mentioned bridge. The quay walls are of stone, with a large amount of concrete infill, and a concrete jetty to the south. There are some picnic tables erected at the quay. Between the R336 and the sea there is a considerable amount of one-off housing in

this area. Whilst there is not any great deal of housing flanking the discharge pipeline route, there are a large number of houses along cul de sac roads leading from the R336 southwards to the sea.

## **2.0 The Proposed Development**

2.1 Permission sought on 23<sup>rd</sup> December 2015, for development comprising an effluent treatment plant at Tully Industrial Estate for a p.e. of 350, and a 2.65km long discharge pipe to the sea at Ballynahown Quay. The principal elements of the plant will comprise the following-

- 5 no. underground tanks (one of which will be re-used).
- 3 no. above ground tanks (two of which will be 4.5m high).
- New single-storey control building with WC (43sq.m).
- Back-up generator within the control building
- 2.4m high palisade fencing around the entire facility.
- One additional lighting column and security cameras.
- 2.65km long underground pumped rising main (160mm diameter) for treated effluent with associated air and sluice valves – discharging to the sea at Ballynahown Quay.
- Water supply to the control building from an existing 100mm diameter main supply within the industrial estate road.
- Surface water discharge to an existing surface water sewer (fitted with petrol interceptor), which in turn discharges to an open drain immediately to the west of the site.
- Removal of existing above ground tank and small control building on the site.

2.2 The application is accompanied by the following documentation of note-

- Planning Report.
- Appropriate Assessment Screening Report – dated February 2014.
- Pale dog-violet Targeted Survey Report – dated July 2014.
- Hydrodynamic Dispersion Modelling of a Treated Effluent Discharge at Cé Bhaile na hAbhann – dated August 2014.
- Hydrodynamic Dispersion Modelling of a proposed Tertiary Effluent Discharge at Cé Bhaile na hAbhann (Addendum Report) – dated October 2014.
- Letters of consent to the making of the application, from 7 no. private landowners whose lands will be traversed by the 2.65km underground discharge pipeline.

2.3 Drawings submitted indicate plans for a second effluent treatment plant to serve private development on a site immediately to the south (but within the ownership of Údarás na Gaeltachta).

## **3.0 Development Plan & Other Guidance**

### **3.1 Development Plan**

- 3.1.1 The relevant document is the Galway County Development Plan 2015-2021. The site is located in an area designated as Landscape Sensitivity Class 2 (where Class 1 is the least sensitive and Class 5 the most sensitive). The development is located within a Protected Focal Point/View (indicated at no.85) – Caorán na gCearc – a hill away to the north. The development will not impact in any way on this protected view. There are no other specific policies or objectives within the Plan relating to this development/site.
- 3.1.2 The Gaeltacht Local Area Plan 2008-2018, indicates that the site is located within the Cois Fharráige Gaeltacht. A potential road-line (one of three alternatives) for a replacement R336 is indicated to the north of the WWTP site. There are no other specific policies or objectives within the Plan relating to this development/site.

### **3.2 Water Quality Standards**

- 3.2.1 The relevant standards for consideration are the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. 272 of 2009). The receiving waters are classified by the EPA as ‘Coastal waters’, notwithstanding the freshwater contribution from the discharge of the Tully River at Ballynahown Quay. The site is within the Western River Basin District. For Coastal and Transitional Waters of ‘High’ status, the standards are as follows-
- Dissolved Inorganic Nitrogen (DIN) (mean) <0.17mg/N/l (coastal waters).
  - BOD (95<sup>th</sup> percentile) <4mg/O<sub>2</sub>/l (transitional waters).
  - Molybdate Reactive Phosphorous (MRP) (median) <0.04-0.06mg/l P (transitional waters).
- 3.2.2 The Urban Waste Water Treatment Regulations 2001 (S.I. 254 of 2001) set down maximum levels to which waste must be treated at the WWTP – at 25mg/l BOD, 35mg/l SS and 125mg/l COD, 15mg/l Nitrogen, 1mg/l Ammonium, Dissolved Inorganic Nitrogen (DIN) 3mg/l, 8mg/l Molybdate Reactive Phosphorous (MRP), and 10,000cfu/100ml *E.Coli*.
- 3.2.3 The Bathing Waters Directive (2006/7/EC) was transposed into Irish law in the Bathing Waters Regulations 2008 (S.I. 79 of 2008). Measured over a four-year average, the EPA website indicates that the 2015 status for the two closest beaches to the proposed outfall point – Trá an Dóilín, An Cheathrú Rua (to the west) and An Trá Mór, Coill Rua, Indreabhán (to the east) are ‘Excellent’ quality – the highest in a categorisation of four levels.

### **3.3 Licensing/Certification**

Waste water treatment plants (WWTPs) with a p.e. of <500 must apply to the EPA for a Waste Water Discharge Certificate of Authorisation (only if operated by a Water Authority) as from 22<sup>nd</sup> December 2009. The proposed WWTP is a private one, and will be subject to effluent discharge licencing, operated by GCC (and not Irish Water). The relevant legislation is contained within the Local Government (Water Pollution) Acts 1977-1990. There is no indication given that a Licence has been sought by the applicant from GCC.

### **3.4 Environmental Protection Agency Standards**

The EPA document “Wastewater Treatment Manuals – Treatment Systems for Small Communities, Business, Leisure Centres and Hotels”, dating from 1999, is of relevance in this instance.

## **4.0 Planning History**

**Ref. 08/2169:** Permission granted by Galway County Council to Údarás na Gaeltachta for replacement effluent treatment plant to serve industrial estate and other associated development including sheltered housing for the elderly, day-care centre, health centre etc. Discharge was proposed to Tully Lough under Licence. On appeal by Michael Mór Breathnach to the Board (**PL 07.232438**), permission was refused on 26<sup>th</sup> March 2010, for reasons relating to unacceptable risk of pollution of surface waters.

**Ref. 06/4802:** Permission granted by Galway County Council to Fintrax Ltd. for 824sq.m extension to unit at this industrial estate. On appeal by Michael Mór Breathnach to the Board (**PL 07.222746**), permission was refused on 7<sup>th</sup> August 2007, for one reason relating to deficiencies in foul sewerage serving the industrial estate.

## **5.0 The Planning Authority’s Decision**

By Order dated 25<sup>th</sup> February 2016, Galway County Council issued a Notification of decision to grant planning permission subject to 2 no. conditions – the first of which required the development to be carried out in accordance with plans and particulars submitted on 23<sup>rd</sup> December 2015; and the second requiring the system to be designed and operated in accordance with EPA Guidelines.

## 6.0 Grounds of Appeal

6.1 The 3<sup>rd</sup> party appeal from Michael Mór Breathnach, Tully, Ballynahown, Co. Galway, received by the Board on 23<sup>rd</sup> March 2016, can be summarised in bullet point format as follows-

- The appellant has no objection to the augmented sewage treatment plant and disposal *per se*.
- The site is within 15km of European sites, and a sufficient screening assessment has not been provided.
- The development does not take into account the reasons given by the Board in refusing permission on this site ref. PL 07.222746.
- The current plant was never fully completed/operated in accordance with original intentions, and there are no guarantees that the proposed plant will be properly completed/operated either.
- The applicant has shown no urgency in sorting out the effluent treatment difficulties at this industrial estate.
- Other more reasonable alternatives have not been considered.
- The discharge route is out of proportion with the plant it serves.
- The application does not include a detailed description of current methods of disposal of effluent from the site. There does not appear to be any permission or permit for receipt of waste from this treatment plant to the one at Ros a' Mhíl.
- There are no details of any Foreshore Licence or disposal licence. These will be necessary for the development to proceed. If these licences cannot be obtained, the development cannot proceed.
- Details are lacking in relation to dispersion of waste at the outfall. There is no tidal information as part of this application.
- If the treatment plant breaks down, raw sewage will end up in the sea.
- Details of the effect on adjoining beaches, fishing and marine life have not been adequately considered. This is a public health issue.
- The development will have an impact on users of the pier at Ballynahown.
- A construction management plan is required due to the amount of excavation within public roads. Works may cause a traffic hazard.
- Wayleave agreements will be required from landowners.
- Appropriate Assessment Screening and Environmental Impact Assessment is required for this development.
- There is no indication given of costs for the development – and whether it is financially viable.
- It is not clear that statutory consultees were consulted.
- It is not clear that the plant can accommodate peak use – particularly from Telegael – there can be up to 360 people on site when filming is under way.

- There is a more direct route to the sea – prepared in August 2010. It is not clear why the applicant is not using it.
- Storm water is discharged through the southern part of this site. The flow increases as hard surface areas increase. The drain is not maintained and causes local flooding.
- The issues raised in the Board’s decision ref. PL 07.232438 have not been addressed.

6.2 The appeal is accompanied by the following-

- Map to scale 1:2500 showing line of discharge pipe (dated 1996).
- A4 OS map extract showing alternative outfall to the sea at Travore Bay – running partially through lands in the ownership of the appellant.
- Aerial photograph showing the same.
- Letters from Údarás na Gaeltachta dating back to 1994 in relation to agreement to lay pipe through the appellant’s lands and in relation to discharge from the ‘Puraflo’ unit on the site.

## 7.0 Observations

7.1 There was one observation from Michael & Patricia Ní Fhátharta, Baile na hAbhann, Conamara, Contae na Gaillimhe, received on 6<sup>th</sup> April 2016. The issues raised, where different from those already raised in the 3<sup>rd</sup> party appeal, can be summarised in bullet point format as follows-

- No site notice was erected at Baile na hAbhann quay.
- The quay and lands surrounding it are owned by the observers – and no permission was sought to access lands. The road is a private one.
- The quay is located approximately 300m from the shoreline, and ebb & flow run parallel to the shore. The Ballynahown River can be empty in dry summer months.
- There is no provision for information being given to bathers as to when discharges will be made.
- Shellfish and seaweed are harvested in Travore Bay for human consumption.
- A picnic area and walkway has been developed at this location as part of the Wild Atlantic Way. This will be impacted because of the development.

7.1.1 The observation is accompanied by the following-

- Map extract from Property Registration Authority – Folio GY53874.
- Travore Bay Dispersion Study (dated December 1993), with highlighted passages.

7.2 The Board referred the appeal for comment to the following-

- Development Applications Unit of Department of Arts, Heritage and the Gaeltacht.
- Fáilte Ireland.
- The Heritage Council.
- An Taisce.
- Inland Fisheries Ireland.

7.2.1 There were no responses received.

## **8.0 Response Submissions**

### **8.1 1<sup>st</sup> Party Response to 3<sup>rd</sup> Party Appeal**

8.1.1 The response of McCarthy Keville O'Sullivan, agent on behalf of the applicant, Údarás na Gaeltachta, received by the Board on 25<sup>th</sup> April 2016, can be summarised in bullet point format as follows-

- A Feasibility Report prepared by Ryan Hanley Consulting Engineers in March 2012, examined nine different design options – six of which were deemed feasible. The proposed development was selected as the most suitable. The development will allow for expansion of the industrial estate and the adjoining Tearmann Éanna complex.
- Planning permission for the industrial estate and effluent treatment plant was granted in 1983. Various options for waste treatment were looked at over the years arising from difficulty putting the original plan in place due to ownership and wayleave issues – it originally being proposed to discharge waste to nearby Tully Lough.
- The appellant is in favour of improved effluent treatment at this site and in favour of a sea outfall – provided it crosses his lands. It would appear that the appellant does not have sufficient title over these lands (referred to in section 6.3).
- From an environmental standpoint and, in light of the effluent dispersion modelling and current requirements to protect bathing waters, an outfall on the appellant's lands is far less preferable than the current proposal before the Board.
- The Bord na Móna effluent treatment unit was installed in 1996.
- Lack of sewage capacity is holding up future expansion at the industrial estate and at Tearmann Éanna.
- The three units within the industrial estate employ approximately 350 people, whilst Tearmann Éanna employs 20 people.
- Proposals to install a willow treatment zero discharge system would require the importation of significant volumes of soil and would swallow up all the remaining expansion area within the industrial estate.



- The development is not of a scale or type which would require submission of an Environmental Impact Statement and subsequent Environmental Impact Assessment.
- The application was accompanied by an Appropriate Assessment Screening Report. Taking cognisance of the avoidance and mitigation measures proposed, it is not anticipated that any European sites will be significantly affected.
- The status of the wastewater treatment plant on the site and the destination of waste currently tankered out is not a relevant consideration to this planning appeal.
- The proposal does not involve any work beyond the high water mark – therefore a Foreshore Licence is not required.
- The application was accompanied by hydrodynamic dispersion modelling information. The proposed development will not impact negatively on water quality. The Environment Section of GCC was satisfied that the development would not impact negatively on water quality or affect bathing or shellfish. The discharge at the outfall will meet the blue flag requirements of the Bathing Water Regulations.
- An Effluent Discharge Licence will be applied for in respect of the outfall.
- There will be minor traffic disruption during the laying of the outfall pipe within roads. The pipe will be laid in sections to keep disruption to a minimum.
- Letters of consent from all affected landowners have been submitted with the application.
- The financial feasibility of the project is not a relevant planning consideration.
- The onus is on GCC to contact statutory consultees. Meetings were held with IFI.
- Calculations, including existing and anticipated demand, were included with the application.
- The applicant is not obliged to justify the route selection process for the outfall pipe.
- The storm water system for the industrial estate does not form part of the current application.
- The application is neither inadequate nor premature.
- The application has been designed to address the concerns of the Board in relation to two previous refusals of permission on this site. In relation to PL 07.222746, reference in the Inspector's Report to proposals for a new GCC effluent treatment plant for An Tulach – referred to An Tulach, Renvyle and not An Tulach, Baile na hAbhann. GCC does not have any proposal to provide a WWTP for An Tulach.

8.1.2 The response submission is accompanied by the following relevant documentation-

- Feasibility Report for Treated Effluent Disposal at An Tulaigh (dated March 2012) – including letter from Irish Water (dated 22<sup>nd</sup> April 2016) stating that there is no plan for provision of WWTP or sewers at An Tulaigh/Baile na hAbhann.

## **8.2 2<sup>nd</sup> Party Response to 3<sup>rd</sup> Party Appeal**

None received.

## **8.3 3<sup>rd</sup> Party Response to 1<sup>st</sup> Party Response to 3<sup>rd</sup> Party Appeal**

8.3.1 The response of Michael Mór Breathnach, received by the Board on 7<sup>th</sup> June 2016, can be summarised in bullet point format as follows-

- It is incorrect to state that the appellant does not have sufficient title over his land to allow for the shortest route for this pipeline to the sea. The appellant has at all times been willing to negotiate with Údarás na Gaeltachta.
- The applicant has not given a full background history to this development – and has been selective.
- The applicant has spent considerable time and cost in dealing with Údarás na Gaeltachta: trying to facilitate a pipeline through his lands.
- Effluent from this pipeline could be washed back in on the next flowing tide.
- GCC has undertaken no enforcement in relation to this site – and have given Údarás na Gaeltachta a lot of leeway.
- This is a marine discharge which will require Foreshore Licence.
- If the plant malfunctions, it may not be possible to discharge on an ebbing tide.
- The R336 is a heavily-trafficked route, and any disruption would cause major inconvenience to the public.
- There are no letters of consent from the title holders of the ground on which the road is built – notwithstanding that the road is taken-in-charge.
- Public money will be wasted in the pursuance of this development.
- The Údarás na Gaeltachta treatment plant at Ros a' Mhíl has recently received a warning from GCC that it has exceeded its discharge consent levels.
- The applicant has not properly consulted with the EPA and the Department of Marine and Natural Resources.
- Foul and storm discharges from this site need to be dealt with together. The industrial estate currently discharges surface water through the appellant's lands to the sea.
- This is not a vexatious appeal, but is made reluctantly on planning and environmental grounds. The appellant is not a serial objector. The Board has upheld refusals on some of the appeals and

attached appropriate conditions to others. Provision of employment does not over-ride proper planning and sustainable development.

8.3.2 The response is accompanied by copies of the following relevant documents-

- Copy of correspondence from Údarás na Gaeltachta from 1994 and 1996.
- OS Map extract showing a discharge pipeline route through lands in the ownership of the appellant.
- Aerial colour photograph of the area.
- HSE report in relation to water sampling on a land drain on 20<sup>th</sup> April 2016 (on the south side of the R336) and emanating from the industrial estate.
- Correspondence between the Environment Section of GCC and Údarás na Gaeltachta (February/March 2016) in relation to discharge from WWTP at Rossaveal Harbour.
- Plean Forbartha do Cheantar na Tulaigh – for Údarás na Gaeltachta and Coiste Pobail na Tulaí (June 2001) – carried out by Brady Shipman Martin.
- Letter from Údarás na Gaeltachta to agent acting for Micheál Mór Breathnach (dated September 2011) in relation to right-of-way across land for an outfall pipe from the WWTP at the industrial estate. There is an A4 colour map included.
- Copy of Preliminary Report in relation to a wayleave for a pipe through property of Micheál Mór Breathnach – dated August 2010.

#### **8.4 2<sup>nd</sup> Party Response to 1<sup>st</sup> Party Response to 3<sup>rd</sup> Party Appeal**

None received.

#### **8.5 DAU Response to 1<sup>st</sup> Party Response to 3<sup>rd</sup> Party Appeal**

The Board circulated the 1<sup>st</sup> party response to the DAU for comment, on or before 13<sup>th</sup> June 2016. There was no response received.

#### **8.6 An Chomhairle Ealaíon Response to 1<sup>st</sup> Party Response to 3<sup>rd</sup> Party Appeal**

The Board circulated the 1<sup>st</sup> party response to an Chomhairle Ealaíon for comment, on or before 13<sup>th</sup> June 2016. There was no response received.

### **9.0 Assessment**

The principal issues of this appeal relate to surface water quality, and the impact of the discharge from a WWTP into the sea at Ballynahown Quay.

## **9.1 The Existing Situation**

- 9.1.1 The existing WWTP on this site is not capable to treating the effluent from the industrial estate – and has not operated as such since October 2012. Inflow of effluent into the site is stored in a 7,000 gallon pre-cast concrete holding tank (previously used as a primary settlement tank), and is tankered out three times a week for treatment at Ros a' Mhíl WWTP. The Bord na Móna 'Puraflo' system on the site was installed in 1996. Waste from this unit was then pumped to the nearby discharge point. The 14.5m diameter 'Puraflo' tank is now disused and is overgrown. The inflow to the site is 225mm diameter. The existing loading from the industrial estate (3 no. units) discharges to the tank. In addition, a pumped rising main from the Tearmann Éanna development (24 housing units), day-care centre and HSE facility (9-bed unit and medical centre), plus one private house is also connected into the industrial estate foul sewer. The estimated loading comes from 390 industrial estate employees and 154 residential/institutional users – giving an hydraulic loading of 25,370 litres per day; an organic loading of 13,225g per day, and a p.e. of 221 (based on 60g per p.e. per day). The holding tank on the site was overflowing on the date of site inspection, and percolating to ground.
- 9.1.2 There is a separate surface water discharge system operating within the industrial estate. An open surface water drain discharges into a culvert beneath the boundary wall to the west of the existing WWTP to ultimately discharge to nearby Tully Lough. Roadside drainage within the industrial estate is routed through an hydrocarbon interceptor to discharge into this open land drain.

## **9.2 The Proposed Replacement**

- 9.2.1 The proposed new system can be described as follows. The underground inlet works comprise a pre-cast concrete channel with inclined screw screen for removal of solids greater than 6mm in diameter. A manual system will also be fitted for use in the event of breakdown, maintenance or repair. An activated carbon-based odour control system will be fitted. The existing underground wastewater holding tank on the site will be re-used as a flow equalisation buffer tank (31.5m<sup>3</sup> capacity). This element of the process will ensure a steady supply of waste to the sequencing batch reactor process – catering for variations in flow into the plant. The majority of the flow into the plant is expected to occur between 0800 and 1800 hours on working days. A mixing facility may be provided within this tank to prevent settlement of solids. An activated carbon-based odour control system will be fitted to this tank. A below ground inlet pumping station will be located within a circular precast concrete structure 1.9m in diameter and 4.5m in depth. Two submersible foul pumps (in duty and standby mode) will be fitted to transfer waste from the flow equalisation

buffer tank to the next stage of the process – sequencing batch reactor. Whilst two no. above ground sequencing batch reactor (SBR) tanks are indicated on drawings (measuring 4.5m in diameter and 4.5m high – capacity of 55m<sup>3</sup> each), only one is to be provided initially. The second will be provided to accommodate future need. Within this stage of the process biological reaction takes place to facilitate reduction in Biochemical Oxygen Demand (BOD) by the addition of oxygen via 2 no. air blowers (duty & standby) and a fine bubble diffused aeration (FBDA) grid installed in the base of the tank. The settlement stage of the process is also completed within this tank by the periodic shut-down of the aeration process in order to separate the Mixed Liquor Suspended Solids (MLSS) into activated sludge and clarified effluent. The clarified effluent is then decanted from this tank, and a small volume of the settled activated sludge is wasted to the underground sludge holding tank. Nitrogen reduction is accommodated with the SBR tank by the suspension of activated sludge in an anaerobic environment, which ultimately results in the release of odourless nitrogen gas to the atmosphere. The SBR tanks are open to the air, but no odour control is required due to the addition of oxygen. A steel fabricated access platform will be provided for the SBR tanks. Tertiary treatment is provided in order to guarantee a final effluent standard of 10mg/l Biochemical Oxygen Demand (BOD) and 10mg/l Suspended Solids (SS). An above ground tertiary filter will be fitted on a concrete plinth to accommodate the entire SBR batch flow in 30-45 minutes. A continuously self-backwashing filter which utilises potable water or final effluent to cleanse its sand, will eliminate the need for backwash water holding tanks and backwash pumps. The footprint will be less than 1.5 x 1.5m with a height of less than 2.4m. To inactivate most of the *E.coli*. the treated effluent will be passed through a closed-vessel Ultra-violet (UV) reactor within the single-storey control building. From the UV reactor, the filtered and disinfected final effluent will flow by gravity to the underground effluent storage tanks (2 in no.). These tanks are indicated as Tidal Tank No. 1 and Tidal Tank No. 2 on drawings submitted. Each interconnected tank has a capacity of 36m<sup>3</sup>. Tanks will be fitted with duty and stand-by submersible pumps.

- 9.2.2 Ultimate discharge is by pumped rising main along a 2.65km length of 160mm diameter polyethylene pipe to discharge to the sea at Ballynahown Quay. The discharge point will be fitted with a 'Tide-flex' check-valve to prevent backflows. Discharge will occur for only one hour during each lunar tidal cycle, to ensure satisfactory dispersion on an ebbing tide (one hour after high tide) – the pumping mechanism being controlled by a lunar clock. Each discharge cycle is expected to contain 31.5m<sup>3</sup> of effluent. The outfall will be located below the lowest occurring high neap tide to ensure that pumped discharge of treated effluent for the hour-long period following the tide level peak is always discharged

underwater to saline waters which are ebbing to the sea. The discharge pipe will be fitted with air and scour valves.

9.2.3 Waste sludge pumped from the SBR will be stored in an underground 36m<sup>3</sup> capacity tank. The tank will provide for approximately 12 days storage with the plant operating at maximum capacity of 354 p.e. An activated carbon-based odour control system will be installed on this tank. Sludge will be periodically tankered off to a licenced effluent treatment plant by sub-contractor.

9.2.4 A network power supply is available to the site. A back-up diesel generator is proposed within the control building. The plant will be surrounded with 2.4m high palisade fencing. Public lighting will be provided within the new compound.

### **9.3 General Comment**

9.3.1 The existing effluent treatment arrangements at this industrial estate are unsatisfactory – tankering waste to another WWTP is not a long-term sustainable solution. The existing arrangements were not operating in a satisfactory manner on the date of site inspection – with effluent overflowing from the holding tank and percolating into the ground. The appellant has claimed that a surface water outfall from this industrial estate, through his lands on the south side of the R336, is contaminated with sewage. The appellant argues that the history of this treatment plant and its outfall needs to be considered in relation to the current appeal. It is evident that effluent treatment arrangements at this industrial estate are unsatisfactory. The proposed development is an attempt to deal with the issue, and to come up with a satisfactory arrangement to meet the existing and future needs of the industrial estate and adjoining development. The lack of treatment capacity has been, and is, acting as a constraint on the future development of the industrial estate and the adjoining Tearmann Éanna development. The applicant has put forward a solution for dealing with effluent disposal at this site. This application must be judged on its merits, whatever the appellant may think of the desirability of an alternative discharge route to the sea. The Board has before it a proposal for a 2.65km discharge pipeline route to the sea, and this is what must be assessed, not whether there might be a better/shorter route.

9.3.2 The applicant has submitted letters of consent from affected landowners. Written agreements for wayleave have not been submitted – such would not normally be required. The applicant is satisfied that there is sufficient legal interest to make the application. In relation to control over the road, GCC grants Road-opening Licences for cables and pipes located within public roads. There will already be a number of services located underground within roads in the vicinity. The proposed pipe route is not of

such magnitude as to require a Construction Management Plan. It is noted that the route of the discharge pipeline in the vicinity of Ballynahown Quay (where it passes along a short stretch of tarmacadam road) has been claimed as private property by an observer to the appeal. This is a private property dispute and is not strictly relevant to planning. There is an existing tarmacadam road serving as access to Ballynahown Quay. Claims as to ownership are necessarily a matter for the courts.

- 9.3.3 The claim by the appellant that the application should have been for surface water as well as for foul effluent is not strictly relevant. I do not see why the two systems should be connected. The industrial estate is in existence and surface water is making its way from this site, ultimately to the sea. The proposed development will not have any impact on the surface water outfall to Tully Lough. As to the claims of the appellant in relation to surface water outfall through his lands to the south of the R336, this is an entirely separate matter, and not relevant to the current appeal.
- 9.3.4 The claim by the appellant in relation to the effluent treatment plant at Ros a' Mhíl and its operation, is not strictly relevant to this appeal. The proposed development, if it goes ahead, will obviate the need to tanker waste to this WWTP.
- 9.3.5 There can be no question that the proposed provision of jobs can override the proper planning and sustainable development of an area. The application for the new WWTP must be dealt with on its merits, due regard being had to its impact on the environment.
- 9.3.6 The applicant is satisfied that a Foreshore Licence will not be required for the outfall, as no development is to take place on any ground between the high water and low water marks. The outfall will be located within the stone wall of the quay. However, if it should be determined that one is required, then it will be a matter for the applicant to apply for one.
- 9.3.7 The proposed treatment plant will be operated privately. It will not be in the care of Irish Water. For this reason, the plant will be subject to Effluent Discharge Licence – overseen by GCC. There is no indication within the documentation submitted with the application that such a Licence has been sought to date. The appellant correctly points out that if such a Licence is not forthcoming, the development will not be able to operate.
- 9.3.8 The appellant has claimed that no financial appraisal of the feasibility of the scheme has been prepared. This is not a relevant planning consideration. The applicant has made the planning application – and it would be unlikely that this would be done if it was not deemed a feasible scheme as the time of the making of the application.

9.3.9 The application and/or the appeal has been referred by GCC and ABP to the relevant statutory consultees.

#### **9.4 Assessment of WWTP Proposal and Outfall**

9.4.1 The proposed development will be a significant improvement on the system that currently operates to serve this industrial estate and adjoining development. It is estimated that the current p.e. loading is 221. The new WWTP will have a capacity of 350 p.e. Waste will undergo preliminary screening, biological treatment (including anoxic Nitrogen reduction), tertiary filtration, and finally, disinfection. To allow for heaviest usage on working days, a flow equalisation tank is to be incorporated into the design. There will be a lower level of weekend loading from the industrial estate and the Tearmann Éanna development (a residential and health service facility). The new system will provide for tertiary treatment of waste to guarantee a final effluent standard of 10mg/l BOD; 10mg/l SS; 1mg/l total Ammonium; 15mg/l total Nitrogen; 3mg/l DIN and 8mg/l MRP. These standards are below those set down in the Urban Waste Water Treatment Regulations of 2001. In addition, ultra-violet disinfection will be used to ensure *E.coli* and *Enterococci* values within the required parameters which would meet Bathing Waters standards. Two underground holding tanks on the site of 36m<sup>3</sup> capacity each. The tanks will contain limited spare capacity for a discharge of 31.5m<sup>3</sup> for one hour on each ebbing tide. Back-up pumping is provided for use in the event of maintenance and break-down. An underground sludge holding tank of 36m<sup>3</sup> capacity will have a 12-day capacity (assuming operation at full 350 p.e. Sludge will be tankered out periodically to a WWTP for final disposal. The facility will be powered by mains electricity – with a back-up diesel generator for use in the event of a power outage.

9.4.2 Odour control at the WWTP is provided in the form of activated carbon at the inclined inlet screw and the flow equalisation tank. A similar odour control mechanism will be used on the sludge holding tank. There are no houses or residential units in the immediate vicinity of the WWTP. There is one industrial unit located some 40m to the east. The WWTP is currently screened from view from this industrial unit by a Grissellinia hedge.

9.4.3 The treated effluent will be pumped via a 160mm diameter polyethylene rising main, for a distance of 2.65km to Ballynahown Quay. The line will be fitted with scour hydrants and air valves for efficient operation and maintenance. The outfall at Ballynahown Quay will be located within the quay wall, and will be fitted with a flap to ensure sea water or objects which could cause a blockage are not washed back up the rising main during flowing tide conditions. The outfall pipe will be located below the



lowest occurring high neap tide – to ensure that the outfall is covered by sea water, even at the lowest full tides when discharge is occurring. The base of the quay is stated to be -0.7m OD. The discharge flap will be located at -0.25m OD. Discharge (31.5m<sup>3</sup> of waste) will occur for one hour only during each lunar cycle – one hour after high tide, to ensure maximum dispersion on an ebbing tide. I would note that the Tully River discharges into the sea at Ballynahown Quay. The timing of the discharge will be controlled by a lunar clock within the control building at the WWTP.

- 9.4.4 The critical issue in relation to the proposed outfall to the sea, is the assimilative capacity of the receiving waters. An hydrographic survey was carried out over the period 4<sup>th</sup>-24<sup>th</sup> April 2014, to measure the bathymetry in the Ballynahown Bay area and the low flow channel from the Tully River discharge at Ballynahown Quay. A topographical survey of the coastline was carried out in May 2014 to augment the bathymetric survey. Marine Institute Lidar data was also utilised to come up with an hydrodynamic dispersion model for the outfall from the proposed WWTP. The area modelled extended 1.8km south of the quay and 4.0km parallel to the coastline. Nine points were used for modelling – no.s 1-3 being up-river of the outfall; no. 4 being at the outfall; and no.s 5-9 being within the Bay. Variations for consideration in the model included spring and neap tides, wind (predominantly onshore in this location), salinity, temperature and mean and 95<sup>th</sup> percentile inflow from the Tully River (as low as 20l/s) – amongst others. Mid-ebb and mid-flood tidal flow conditions showed slack flow in the shallow inshore waters. Further offshore, predicted velocity magnitudes increase and generally flow parallel to the shoreline – varying from east-northeast to west-southwest depending on ebbing or flowing tides. Dispersion simulations were used for *E.Coli*, Total Nitrogen (to reflect DIN), Ammonium, Phosphorous (MRP) and BOD. Without disinfection, at 95<sup>th</sup> percentile in-flows from the Tully River and a neap tide, the outfall would exceed the Bathing Waters Directive standards as per the model for *E.Coli* – particularly at points 4 & 5. Disinfection reduces the concentration of *E.Coli* to acceptable limits for all nine modelled points at spring and neap tides. For Ammonia and Phosphorous, the concentrations at all nine modelled points at spring and neap tides is below the relevant target concentrations of 1mg/l and 8mg/l respectively. Biochemical Oxygen Demand concentrations for all nine modelled points at spring and neap tides is below the 10mg/l threshold. Not surprisingly, all of the simulations show that maximum concentrations occur at the outfall (modelling point no. 4). Reductions occur as the plume is drawn out to sea on an ebbing tide (assisted by outflow from the Tully River) – illustrated on colour maps. An addendum report relating to the hydrodynamic modelling was included with the application – with simulation results for *Enterococci*, *E.Coli*, BOD, Total Nitrogen, Total DIN, Total Ammonium, MRB and Total Suspended Solids. In particular, the computed DIN mean concentration in the vicinity of the outfall (point 4) is

0.0425mg/N/l, and 0.0191mg/N/l at point 5 (40m out to sea). This indicates that the proposed discharge will easily meet the standards set down in the Surface Water Regulations of high status coastal waters for DIN of <0.17mg/N/l.

9.4.5 I would be satisfied that the design of the proposed WWTP is in accordance with best practice, and that effluent would be treated to a standard in accordance with the Urban Waste Water Treatment Regulations 2001. Having regard to the proposal to disinfect effluent to reduce the concentration of *Enterococci* and *E.Coli* present; the proposal do discharge effluent for one hour only on each ebbing tide; and to the results of the hydrodynamic dispersion modelling submitted with the application; I would be satisfied that the proposed outfall at Ballynahown Quay, into coastal waters of high status, would be in compliance with the standards set down in the Surface Waters Regulations 2009 – particularly with regard to Dissolved Inorganic Nitrogen (DIN). The proposed development would not detrimentally impact on the quality of the receiving waters and would not be prejudicial to public health. The discharge will not negatively impact on shellfish and seaweed for human consumption, and would not impact in any significant way on the health of persons using Ballynahown Quay.

## 9.5 Ecology

The Pale dog-violet (*Viola Lactea*) is subject to a Flora Protection Order (1999). The route of the pipeline was identified as suitable habitat for this species. There are records of this species in the two hectads traversed by the pipeline. A targeted species survey was undertaken on 16<sup>th</sup> June 2014. The habitats and species encountered are listed. No Pale dog-violet plants were recorded – only Common dog-violet.

## 9.6 Appropriate Assessment

9.6.1 A Stage 1 Appropriate Assessment Screening Report accompanied the application – dated February 2014. The planning authority carried out a screening for appropriate assessment, and concluded that the development would not affect the integrity of any European site. A field walkover study was undertaken by the agent for the applicant in November 2013. European sites within a 15km radius were identified. The outfall pipe will be laid in an open trench 450mm wide and 1,000mm deep. Trenches will be backfilled with excavated materials. Construction stage impacts (particularly for the outfall pipe) were identified, but will be of limited duration. An Environmental Operating Plan (EOP) will be put in place by the contractor, prior to commencement of development, and this will include the appointment of a Site Ecologist. Operational impacts were also identified – principally the release of effluent to the sea. Habitats

along the discharge pipeline route were identified. The treatment plant is located 50m from the boundary of the Connemara Bog Complex cSAC (Site code 002034). The cSAC is located to the north and west of the WWTP. The qualifying interests are as follows-

- Coastal lagoons (priority habitat).
- Reefs.
- Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*).
- Natural dystrophic lakes and ponds.
- Northern Atlantic wet heaths with *Erica tetralix*.
- European dry heaths.
- *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*).
- Blanket bogs (priority habitat – if active).
- Transition mires and quaking bogs.
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation.
- Depressions on peat substrates of the Rhynchosporion.
- Alkaline fens.
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles.
- Marsh fritillary (*Euphydryas aurinia*).
- Atlantic salmon (*Salmo salar*).
- Otter (*Lutra lutra*).
- Slender naiad (*Najas flexilis*).

9.6.2 No Annex 1 habitats of qualifying interest were recorded within the works area. There is limited surface water connectivity between the proposed works/treated effluent outfall and the marine habitats of the cSAC: treated effluent will be diluted on an ebbing tide. There will be no discharge of waters into the cSAC. The next nearest European site, by way of sea, is 8.1km. Trawmore Bay to which effluent will be discharged, does not form part of any European site. Suitable habitat for Otter and Atlantic salmon are present within the works area. Given the nature and scale of the works proposed, implementation of best practice during construction works, operational design and maintenance of the effluent treatment plant/outfall, and distance by land and water from European sites, there is no likely vector, pathway or conduit for pollution from the proposed facility to impact on any European site – and in particular the Connemara Bog Complex cSAC. There are no known additional plans/projects on-going or proposed, which, in combination with the proposed project could give rise to any form of cumulative impact on European sites.

9.6.3 It is reasonable to conclude that on the basis of the information on the 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 European site no. 002034, or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment is not, therefore, required.

## **9.7 Other Issues**

### **9.7.1 Financial Contribution**

GCC did not attach any condition requiring payment of a development contribution. In the light of this, any permission issuing from the Board should not contain a condition requiring payment of a development contribution.

### **9.7.2 Impact on Tourism**

Ballynahown Quay is used by tourists. There should be no requirement for signage to warn users of the quay of the presence of an outfall from a WWTP. If the discharge is properly managed and controlled, there is no reason why it should impact on tourism in the area.

### **9.7.3 Impact on Travore Bay**

It has been claimed by the appellant and the observer that the discharge will have a detrimental impact on those who use the Bay, and on consumers of shellfish and seaweed taken from it. No evidence has been adduced to back up such a claim. The proposed development, if properly constructed, operated and managed should not result in the release of untreated effluent or inadequately treated effluent to the sea. The appellant has referred to potential malfunction at the WWTP. Such will always be a risk with mechanical WWTPs such as this one. However, a number of security and back-up systems have been designed into the WWTP. I would be satisfied that, if properly constructed and managed, the proposed WWTP would not result in any significant deterioration in water quality at Ballynahown Quay and the wider Travore Bay area.

### **9.7.4 Site Notices**

The observer has stated that there was no site notice erected at Ballynahown Quay. The application was accepted and validated by GCC. The Council was satisfied that the public notices advertising the proposed development were acceptable. The Board is not in a position to comment on site notices, where they were erected, or for how long they were maintained in place.

### **9.7.5 Development Plan**

The proposed development is in accordance with the Galway County Development Plan 2015-2021, and will not have any impact on Protected Focal Point/View (indicated at no.85) – Caorán na gCearc – a hill away to

the north. The development is in accordance with the Gaeltacht Local Area Plan 2008-2018).

## **10.0 Recommendation**

I recommend that permission be granted for the Reasons and Considerations set out below, and subject to the attached Conditions.

### **REASONS AND CONSIDERATIONS**

Having regard to-

(a) the proposal to upgrade the wastewater treatment facilities serving this site – and to provide for future development expansion;

(b) the detailed proposal for an outfall to the sea at Ballynahown Quay and accompanying hydrodynamic dispersion modelling to justify such a discharge;

(c) the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. 272 of 2009);

(d) the Urban Waste Water Treatment Regulations 2001 (S.I. 254 of 2001);

(e) the Bathing Waters Regulations 2008 (S.I. 79 of 2008);

(f) the Appropriate Assessment Screening Report submitted with the application – and in particular the proximity of the Connemara Bog Complex cSAC; and

(g) the documentation submitted with the application and the appeal;

it is considered that, subject to compliance with the attached conditions, the proposed development would not be prejudicial to public health, would be acceptable in terms of traffic safety and convenience, and would be in accordance with the proper planning and sustainable development of the area.

### **CONDITIONS**

1. 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 points of detail to be agreed with the planning authority, these matters shall be the subject of written agreement and shall be implemented in accordance with the agreed particulars.

In default of agreement, the matter(s) in dispute shall be referred to An Bord Pleanála for determination.

**Reason:** In the interest of clarity.

2. The waste water treatment plant shall be designed, installed and operated in accordance with the Environmental Protection Agency publication “Wastewater Treatment Manuals – Treatment Systems for Small Communities, Business, Leisure Centres and Hotels” 1999 – except as may otherwise be required by Galway County Council.

**Reason:** In the interest of public health.

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**Michael Dillon,  
Inspectorate**

**17<sup>th</sup> June 2016.**