Presentation to Oral Hearing into "Greater Dublin Drainage" Clonshaugh Sewage Treatment Plant, Ireland's Eye outfall etc.

ABP 301908

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#### 1. Site notices

I made this observation in my original submission to An Bord Pleanála last year:

There were no site notices at the land locations nearest to the outfall nor at the locations where people take boats to get to the waters into which the effluent will be discharged. Clearly there should have been site notices on Ireland's Eye and Howth Harbour.

Irish Water replied in their Response to Submissions:

As no works are planned at Ireland's Eye or at Howth, it was not necessary to erect site notices at these locations.

I'm not sure what "necessary" is intended to mean in this context. If the purpose of site notices is to inform "the public concerned" to use the Aarhus Convention phrase, it is necessary to put the site notices where members of that section of the public are likely to see them.

### 2. Impact on water users

I made this observation:

I contacted Irish Water some time ago pointing out that the waters around Ireland's Eye are used for a wide range of activities (swimming, sailing, kayaking, scuba diving, lobster and other fishing) and asking that all of these groups be considered and consulted. Despite that I can find no mention of some of these activities in the EIAR (e.g. scuba diving and kayaking). There is no meaningful assessment in the EIAR of the impact of the effluent outfall on the water quality in which these activities take place.

The EIA needs to assess the impact on all water users who are entitled to continue to use the water in Portmarnock, Balscadden and Ireland's Eye which is currently of excellent quality. This has not been done in the EIAR.

I can't identify any direct response to this in the Response to Submissions. It remains obvious to me that the areas used for scuba diving and kayaking in particular should be mapped in the EIAR and the potential impacts on water quality in this areas specified.

### 3. Inadequate information on modelling

I made this observation:

Either the modelling itself is inadequate or the results have been inadequately presented.

The area into which the effluent will be released has excellent water quality. The water quality at Portmarnock is almost always excellent and often at the lower limits of detection. As a result it has the only Blue Flag in the Dublin area. All of the tests at Balscadden and Ireland's Eye have come back at the lower limits of detection. (Fingal's water testing at Balscadden and Ireland's Eye came about in part due to local concerns at the potential impact of this proposed outfall.)

Irish Water wouldn't release any of their water quality studies in advance of submitting the planning application which unfortunately they did at the end of June, leaving the public with the holiday period to look at it.

E.coli levels at Balscadden and Ireland's Eye are always <10 MPN/100ml. In the standards, <250 is "Excellent", so it's 25 times cleaner than "Excellent". Intestinal enterococci results are <1 CFU/100ml, to be compared with an "Excellent" standard of <100ml. So the water quality is 100 times cleaner than excellent by that metric.

Irish Water appear to have wrongly assumed that the standard to be met is 500 and that they are not required to always maintain excellent quality where it exists:

"The Bathing Water Quality Regulations 2008 (S.I. No. 79 of 2008) require that the maximum values of Escherichia coliforms should not exceed the mandatory value of 500/100ml in 95% or more of the samples taken in the season to ensure a 'good' classification of bathing water beaches."

(Chapter 8 Marine Water Quality, <a href="https://www.gddapplication.ie/planning-sites/greater-dublin-drainage/docs/environmental-documents/volume-3a/Chapter%208%20Marine%20Water%20Quality.pdf">https://www.gddapplication.ie/planning-sites/greater-dublin-drainage/docs/environmental-documents/volume-3a/Chapter%208%20Marine%20Water%20Quality.pdf</a>)

The analysis presented by Irish Water in their EIS has its minimum cut off at 250 MPN/100ml. The analysis carried out with a minimum graphic representation of 250 MPM/100ml is presented as a series of small maps at very small scale with no visible information about where and how the plume of effluent will move. Their modelling would enable them to show the lowest concentrations as the plume disperses but they've obviously decided they don't want to show that information.

The Board should require Irish Water to release (mapped and raw) the data their model produces showing the dispersal of the effluent plume until it is no longer detectable. The obligation in the EIA process is to assess the impact on the environment, positive, neutral or negative and to supply all relevant information held.

When that analysis is made available then the public and the Board will have a much better understanding of the impact of the proposal.

I can't find any justification of the presentation of only a limited selection of model results in the Response to Submissions.

However I note in the presentation on Marine Water Quality that some further selected model results have been released, showing significant impacts on water quality at two "bathing water sampling points" - at Claremont Beach and Velvet Strand. This 6 diagrams demonstrate that the

model is capable of detailed output of the type required to show how the plume would disperse. They also show that the model is capable of detailed output showing the impacts on waters at Ireland's Eye and Balscadden, which have not been presented.

There is no justification for not presenting the full results of the model, in such a way that the impact of the proposed outfall on all waters in the area is clearly explained. For example, to properly understand the 6 diagrams, it would be important to have the two bathing sampling points mapped and to understand whether they are being modelled because they are existing sampling points, or because they are worst case locations for swimming at these beaches. If the former it would be vital to have the analysis for the worst locations identifiable by the modelling.

#### 4. Location of the outfall

I made the following submission:

The modelling demonstrates that putting the outfall west of Ireland's Eye would be significantly polluting. (Chapter 5 Consideration of Alternatives, <a href="https://www.gddapplication.ie/planning-sites/greater-dublin-drainage/docs/environmental-documents/volume-2a/Chapter%205%20Consideration%20of%20Alternatives.pdf">https://www.gddapplication.ie/planning-sites/greater-dublin-drainage/docs/environmental-documents/volume-2a/Chapter%205%20Consideration%20of%20Alternatives.pdf</a>)

However what Irish Water apparently haven't considered is putting it further east. In public communications, they repeatedly described the location as 6km east of Portmarnock as if Ireland's Eye and Howth didn't exist at all. Irish Water are obliged to consider alternatives in a reasonable manner. In considering alternatives it is not sufficient to merely show that they could have picked a more polluting location for the outfall. To carry out a credible EIA, Irish Water need to demonstrate that the location they have picked is the optimal location and that, combined with the selected treatment methods, it will not lead to any reduction in water quality.

When an analysis of the alternative of locating the outfall further east is presented, the public and the Board will have a much better understanding of the impact of the proposal.

I can't find anything in the Response to Submissions or the presentations to the hearing setting out whether the alternatives of outfalls further east was considered or not, and if not why not, or if so why the analysis of these alternative locations is not being made public. The proper assessment of alternatives is a requirement of the EIA Directive.

# 5. Tertiary Treatment

I made the following observation:

The assessment of alternatives does not consider the use of tertiary treatment, in particular disinfection to reduce the risk of pathogens from the sewage effluent affecting water users or consumers of seafood from the vicinity of the outfall. Given that tertiary treatment is standard in many countries, it is very hard to understand why Irish Water haven't considered it for this effluent. (It is referred to in relation to an alternative outfall further west but there's no consideration of it for this outfall.)

When an analysis of the alternative of tertiary treatment, in particular disinfection, is presented, the public and the Board will have a much better understanding of the impact of the proposal.

I strongly welcome Irish Water's decision to provide UV disinfection.

#### 6. Overflows

I made the following observation:

At a public display associated with the development of the proposal I noticed some of the existing overflows from the sewage network discharging into surface waters were being retained. I specifically remember one which discharges into the Mayne River. I suggested at the time that any overflows whether from the new infrastructure or the existing nearby sewer infrastructure should discharge through the sea outfall.

I have searched through both maps and documents and I can't find any specific information on overflows. Therefore I don't know if existing overflows or any new ones are being diverted into the effluent outfall.

However, the Planning report contains the following general comment:

"The operational phase of the proposed Project, will reduce the extent of overflows from existing sewer networks to local water networks and courses, through the provision of additional waste water treatment capacity and diversion of a proportion of the wastewater loadings from a number of existing WwTPs into the new WwTP, and therefore improve the water quality of these."

This is very important. Overflows from the sewer network are a major cause of pollution to our rivers and streams. They are the main cause of beaches being closed to swimming due to pollution in the Dublin area. Irish Water have been successfully prosecuted for some of these.

The public and the Board are entitled, not to a generalised assurance, but to specific information on which overflows will be reduced in frequency and extent and by how much. The inclusion of further measures to reduce overflows should be part of the consideration of alternatives. The Board should ensure that every reasonable opportunity to reduce the frequency and extent of overflows is being taken.

I can't find any reference to this observation in the Response to Submissions. I would respectfully request that the Inspector ask Irish Water whether overflows are being directed into the effluent outfall, if not why not, what provisions are being made for overflows, and what further measures to prevent overflows are included in the proposal.

### 7. Dredging Sediments

I made the following observation:

The Marine Biodiversity chapter of the EIA (<a href="https://www.gddapplication.ie/planning-sites/greater-dublin-drainage/docs/environmental-documents/volume-3a/Chapter%209%20Biodiversity%20(Marine).pdf">https://www.gddapplication.ie/planning-sites/greater-dublin-drainage/docs/environmental-documents/volume-3a/Chapter%209%20Biodiversity%20(Marine).pdf</a> ) and the surveys done for it identify that the reefs at Ireland's Eye are already being affected by the deposition of sediments and that the planned dredging will have a further negative impact on these protected reefs.

The consideration of alternatives does not include consideration of continuing the tunnelling along more of, or the entire length of, the outfall pipeline.

This appears to be contrary to the requirement the Habitats Directive.

Irish Water respond to this observation in their Response to Submissions, but do not address the alternative of continuing the tunnelling along more of or the entirety of the outfall pipeline.

#### 8. Water Framework Directive compliance

I made the following observation:

Much of the missing information identified above is required to determine whether the application is in compliance with the Water Framework Directive (WFD).

The Directive requires that water bodies which are not currently meeting good status be brought up to that level. The rivers and transitional waters in the affected sewage catchments are not at good status. Therefore the proposal must be assessed in terms of whether it is doing what it should to achieve the WFD obligations (e.g. in reducing overflows.)

The Directive also requires that water bodies at high quality be maintained at that status. The proposal must be assessed against this obligation. The information necessary to make this assessment must be provided and made available to the public for comment.

The impacts on water quality which I refer to above are relevant to the legal obligations imposed by the Directive including those clarified in the Weser judgement, which I know the Board is familiar with.

## 9. Doldrum Bay

I made the following observation:

Irish Water continue to discharge a mixture of raw sewage and septic tank effluent into the sea at Doldrum Bay in Howth. Their EPA licence requires them to have ended this discharge by the end of 2011.

The maps they have supplied with this application are misleading in that they do not show the outfall (<a href="https://www.gddapplication.ie/planning-sites/greater-dublin-drainage/docs/environmental-documents/volume-">https://www.gddapplication.ie/planning-sites/greater-dublin-drainage/docs/environmental-documents/volume-</a>

 $\frac{5a/Figure\%\,208.8\%\,20Wastewater\%\,20Treatment\%\,20Plant\%\,20Outfall\%\,20Locations.pdf}{and they do not show the sewer network catchment which leads to this outfall (<a href="https://www.gddapplication.ie/planning-sites/greater-dublin-drainage/docs/environmental-documents/volume-5a/Figure\%\,203.3\%\,20Potential\%\,20Secondary\%\,20Catchments.pdf}.)$ 

This lack of compliance with the law and misleading information in the application should be taken into account by the Board.

I welcome the news that Irish Water is now taking steps to comply with the licence condition which required this discharge to be ended by 2011. I ask the Board to note that the anticipated date of compliance is approximately 10 years after the date in the licence condition and that the current activity is due to relentless campaigning by a local resident, rather than any voluntary compliance by Irish Water.

### 10. Impact on biodiversity at the NCT Centre and Sillogue Golf Club

Since preparing my original submission, I have become aware of the potential impact of the proposed sewer pipeline on the very significant biodiversity value at Ballymun. I have a report from Michael Keating of Ballymun Wildlife Group which sets out the value of these lands and wetlands for a wide range of species and the flaws in Irish Water's application as regards compliance with biodiversity protection objectives in Fingal County Development Plan. It seems that a more sensitive routing for the sewer could avoid or minimise most of the impacts.

#### 11. Conclusions

I welcome the decision to include tertiary treatment in the application.

I remain concerned that the location of the outfall has not been properly assessed in terms of its impacts on water users and the environment and that the alternative of an outfall further out to sea has apparently not been assessed at all.

The application and EIAR still lack many important pieces of information required to enable a proper assessment of the application, to comply with legislation on EIA, WFD and Natura 2000, and to ensure the most sustainable options are chosen.

The impact on biodiversity in Ballymun townland, in the area of Sillogue Golf Course, the NCT centre and Northpoint has not been properly assessed and should be avoided.

I again urge the Board to seek the necessary further information and ensure that the public is able to participate in considering it.