Our Ref: ABP-301908-18

An Bord Pleanála

Jackie Kelly
Environmental Health
Health Service Executive
Dublin North East
Unit 13F
Blanchardstown Corporate Park
Dublin 15

Date: 27th August 2018

Re: Greater Dublin Drainage Project consisting of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility
Townlands of Clonshagh, Dubber and Newtown, County Fingal and Dublin City

Dear Madam

An Bord Pleanála has received your submission in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter.

The Board will revert to you in due course in respect of this matter.

Please be advised that copies of all submissions / observations received in relation to the application will be made available for public inspection at the offices of Dublin City Council and Fingal County Council and at the offices of An Bord Pleanála when they have been processed by the Board.

Please be advised generally that the fee of €50 as submitted in respect of this submission was not required. A fee refund of €50 will issue to you shortly.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: www.pleanala.ie.

If you have any queries in the meantime, please contact the undersigned officer of the Board. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Kieran Somers
Executive Officer
Direct Line: 01-873 7107

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Enquiries to: Jackie Kelly
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E-mail: jackie.kelly@hse.ie
Date: 16 August 2018

The Secretary,

An Bord Pleanála,

61-64 Marlborough Street,

Dublin 1

D01 V902

Re: Direct Planning Application: Greater Dublin Drainage Project

Class and Nature of Activity:	**Strategic Infrastructure Development; Section 175 of the Planning and Development Act 2000, as amended, and the Planning Development Regulations 2001 as amended; 175(3) of the Planning and Development Act 2000 as amended;**
Type of Facility:	**Proposed construction of a regional wastewater plant, orbital sewer, pumping station and associated outfall pipeline, sludge hub storage centre, regional biosolids storage to a final termination point at seabed level in the Irish Sea.**
Applicant:	**Irish Water**
Location of Facility:	**County Dublin - Fingal & Dublin City**

ABP Case Reference: **PL06F.301908**

EHIS Ref.: **0801**

Please find enclosed the HSE consultation report (as a Statutory Consultee - Planning and Development Acts 2000, and Regulations made thereunder) in relation to the above proposal.

An Bord Pleanala received a direct planning application on the 20 June 2018; notification of the application was received by the office of the Assistant National Director of Environmental Health on the 22 June 2018. In response to the notification of the direct planning application, the following Health Service Executive departments were made aware of the consultation request on 26 June 2018:

- Emergency Planning
- Estates – Environmental Services,
- Assistant National Director for Health Protection
- Community Healthcare Organisation
- National Health Sustainability Office

No responses were received within the timeline set by the office of the Assistant National Director of Environmental Health.

The EH service response to the proposal is in the attached consultation report.

- This office is concerned primarily with highlighting issues of public health and environmental health concern. Our files indicate that this office has received no complaints in relation to this proposed facility.

- The assessment is based on a review of documentation submitted to this office on 22 June 2018 by Jacobs Engineering Ireland Limited. As well as a study of the application, Environmental Impact Statement, Environmental Impact Assessment Reports and associated correspondence and documentation. No additional measurements/investigations were undertaken.

- Environmental Health were included at the Scoping stage of this application and reported to Jacobs/Tobin Jacobs Engineering Ireland Limited on the 11 December 2013.

- All commitments to future actions including mitigation and further testing have been taken as read and all data results have been accepted as accurate.

- This report refers only to those sections of the documents, which are relevant to the HSE.

- The EH service reviewed the EIS in detail under the following headings:

    - Description of facility
    - Water
    - Food Safety
    - Hydrology & Hydrogeology
    - Climate, Air Quality & Odour
    - Roads & Traffic
    - Human Beings (Noise and Vibrations)
    - Waste

Other areas of the EIS were reviewed in less detail.

- We have made observations under the following specific areas:

    - Water
    - Food Safety
    - Hydrology & Hydrogeology
    - Climate, Air Quality & Odour
    - Roads & Traffic
    - Human Beings (Noise and Vibrations)
    - Waste

All correspondence or any queries with regard to this report including acknowledgement of this report should be forwarded to Mr. Jackie Kelly, Principal Environmental Health Officer.

Yours Sincerely

Jackie Kelly

Jackie Kelly
Principal Environmental Health Officer

Enquiries to: Jackie Kelly
Direct Line: 01-8605871
E-mail: jackie.kelly@hse.ie

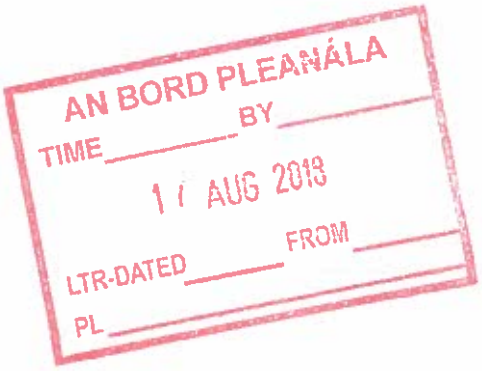
The Secretary,

An Bord Pleanála,

61-64 Marlborough Street,

Dublin 1

D01 V902



Date: 16 August 2018

Re: Direct Planning Application: Greater Dublin Drainage Project

Type of Facility:	**Proposed construction of a regional wastewater plant, orbital sewer, pumping station and associated outfall pipeline, sludge hub storage centre, regional biosolids storage to a final termination point at seabed level in the Irish Sea.**
Applicant:	**Irish Water**
Class and Nature of Activity:	**Strategic Infrastructure Development; Section 175 of the Planning and Development Act 2000, as amended, and the Planning Development Regulations 2001 as amended; 175(3) of the Planning and Development Act 2000 as amended;**
Location of Facility:	**County Dublin - Fingal & Dublin City**
ABP Case Reference:	**PL06F.301908**
EHIS Ref.:	**0801**

1. General Introduction:

This report only comments on the Environmental Health (EH) impacts of the proposed development as outlined in the Environmental Impact Assessment Reports (EIAR) Scoping document and the adequacy of the EIAR Scoping document from an EH viewpoint.

We have made observations and submissions on the following specific EH areas;

- Water
- Food Safety

- Hydrology & Hydrogeology
- Climate, Air Quality & Odour
- Roads & Traffic
- Human Beings (Noise and Vibrations)
- Waste

Details of the timeframe of the project have not been addressed.

2. Principle of the Project:

The key elements of the Greater Dublin Drainage project are to safely deliver through the planning process a:

- Regional Wastewater Treatment Plan (WwTP) at Clonshagh (Clonshaugh) Dublin 17 and an associated marine outfall location. It is proposed to locate a Sludge Hub Centre (SHC) at the Clonshagh site.
- Orbital sewer pipeline corridors from identified load centres to the WwTP and outfall pipeline corridors from the Regional WwTP to the marine outfall location.

3. Later Consents Required:

Not applicable.

4. Public Consultation:

Public consultation is noted to be very comprehensive. It is recommended that meaningful and continual consultation take place with residents and local businesses along the route of the scheme. A dedicated communications officer should be put in place and the details of how to contact this person should be made available through local media outlets. It is recommended that the person liaise with the Environmental Health Service as well as local residents and businesses on matters that will impact on Human Beings throughout the phases of the project. The Health Service Executive (HSE) EHS should be contacted in the possible event of there being interruptions to water or electricity supply to allow advice to be given food business operators if needed. Disruption to such supplies or services should be avoided during business hours where possible. The outcomes of public consultation should also be integrated into any decision-making processes.

5. Description of the Project:

Greater Dublin Drainage is about providing long-term sustainable wastewater drainage and treatment for the Greater Dublin Area (GDA).

The GDD project is essential to the growth and development of communities and businesses within greater Dublin and it will provide the future wastewater treatment capacity the area needs

To meet the needs of our growing population, the GDD project solution is:

- A sewer to divert part of the North Fringe Sewer to the new treatment facility;
- An outfall pipe from the wastewater treatment facility discharging the treated water to the Irish Sea; and
- A regional biosolids storage facility located at Newtown/Kilshane, Dublin 11.
- A regional proposed WwTP to be located on a 29.8 ha site in the townland of Clonshagh;

- A Sludge Hub Centre to treat wastewater sludges, which are a by-product generated because of the treatment of wastewater. The Sludge Hub Centre will be co-located at the same site as the proposed WwTP;
- A pumping station to be located in the grounds of the National Sports Campus at Abbotstown;
- An underground orbital sewer from the existing main sewer in Blanchardstown to the proposed Abbotstown pumping station and, from there, on to the proposed WwTP at Clonshagh. In total, approximately 13.7km in length of orbital sewer;
- An odour control unit (OCU) to be located adjacent to the R122 at the interface of the rising main and gravity sewer sections of the orbital sewer.
- A diversion sewer (approximately 600m long), diverting flow from the current NFS to the proposed WwTP;
- An underground outfall pipeline (land based section) consisting of a pipeline (approximately 5.4km) from the proposed WwTP at Clonshagh to Baldoyle;
- An underground outfall pipeline (marine section) (approximately 6.0km) that will run from Baldoyle to its discharge point approximately 1km northeast of Ireland's Eye.
- At its discharge point, the proposed outfall pipeline (marine section) will extend up to sea bed level to discharge the treated wastewater to the Irish Sea; and
- The proposed RBSF to be located on an 11ha site at Newtown, Dublin 11.

The GDD project will treat wastewater arising in Fingal (areas from Blanchardstown to Clonshagh (Clonshaugh) including from the Dublin Airport Zone), from northern parts of Dublin City, from southeast Meath and from northeast Kildare.

6. Consideration of Alternatives:

The applicant has considered alternatives to the proposal as part of the Greater Dublin Strategic Drainage Study. These alternatives included reducing storm water and groundwater contributing to the sewer network and upgrading the existing sewer network.

7. Description of Physical Environment:

The proposed project is approximately 25km long passing through diverse physical environments including marine, river, beach/sand dune, tidal marsh and urban.

For example, the Clonshagh site comprises tilled earth, a hedgerow network and adjacent watercourses, which provide good potential for occurrence of protected species, notably badger. The northern boundary of the Clonshagh site is bounded by the Cuckoo Stream, which is a tributary of the Mayne River, while the main channel of the Mayne River lies adjacent to the southern boundary of the site.

The site is located 4.6km upstream of Baldoyle Bay Special Protection Area (SPA) and Special Area of Conservation (SAC) with a potential pathway of effect available via the Mayne River. The Mayne River constitutes a non-salmonid system. It was noted that along with the EIAR, a Natura Impact Statement (NIS) has been carried out in line with the requirements of the European Union (EU) Habitats Directive to assess potential negative impacts on European sites (SPAs and SACs) near the Proposed Project. It is also noted that mitigation measures have also been designed. The applicant states that with effective implementation of these measures, no significant remaining negative impacts are anticipated. The submitted documentation also states that computer modelling of the discharge of treated wastewater from the marine discharge point showed that there would see no impact on marine flora or fauna.

The applicant has provided detailed Ordnance Survey maps.

8. Human Beings - Noise and Vibration:

It is recommended that regular monitoring be carried out during construction and operational phases of the proposed development particularly at vibration sensitive locations.

Noise from the proposed development is likely during the demolition, construction and operational phases of the project. The applicant has quantified the potential noise pollution that may be produced during the construction and operational phases of the proposed facility. It is recommended that noise monitoring be carried out at the proposed development sites and regular noise monitoring be carried out during construction and operational phases of the proposed project particularly at noise sensitive locations, vibration sensitive locations and during night time and out of hours periods. The findings of noise monitoring must be crosschecked against the predictive monitoring and background baseline noise monitoring carried out as part of the EIAR; mitigation must be implemented if exceedances are found. Mitigation and monitoring measures have been being identified within the EIAR and should be implemented.

The EIAR states that noise levels along the proposed project route will have imperceptible impact significance during the operational phase. The proposed operations will be in accordance with EPA noise guidelines.

The EIAR states that waste and wastewater treatment plant is not predicted to cause any significant noise and/or vibration impact to the surrounding environment.

The applicant in the EIAR describing the potential impacts to noise sensitive locations (NSL's) from the proposed development assessed noise and vibration. The EIAR states that the assessment considers the impact of the noise generated by all construction and normal operations associated with the plant on the NSL's and was undertaken in conjunction with the relevant standards and guidance.

The baseline noise environment was also assessed within the EIAR.

The operational noise assessment within the EIAR has stated that the noise generated by all fixed plant associated with the development is not predicted to cause any significant noise and/or vibration impact to the surrounding climate.

Details should be provided by the applicant in the construction management plan to this department regarding

Who will undertake to noise and vibration monitoring and
What noise sensitive locations will be monitored along the route?

It should also be clarified whether monitoring will be undertaken at locations of any complaints if or when they are received.

9. Air Quality:

It is recommended that regular monitoring be carried out during construction and operational phases of the proposed development particularly of dust during construction. The detailed mitigation measures identified during the Environmental Impact Assessment phase should be fully implemented to ensure air quality standards are not breached from operational emissions and dust does not become a public health nuisance. Assessment of baseline air quality data and odour and ambient air quality modelling has been carried out to determine the level of odour scrubbing or treatment of odours necessary prior to emission.

A program of regular monitoring to be carried out during the construction and operational phase of the proposed project particularly of dust, odours and impacts of traffic on air quality has been set out in the EIAR. Mitigation measures have been identified during the EIAR phase. Based on the submitted documentation the applicant aims to ensure air quality standards are not breached and dust does not become a public health nuisance. Assessment of baseline air quality data, odour and ambient air quality modelling have been conducted to ascertain levels of odour following scrubbing and treatment, and prior to

emissions. The potential air pollutant, smells, noxious emissions, dust and airborne particles that may be produced during the demolition, construction and operation of the proposed facility have been quantified in the EIAR.

Dust impact will be mitigated by the continued application of best practice dust suppression and containment techniques including the prevention of dust accumulation. A dust minimisation and an Aspergillus prevention plan will further ensure no significant dust impact will occur at the facades of surrounding buildings. Dust control measures, which will be employed, will include where necessary:

- Vehicles should have upward-directed exhausts to reduce disturbance;
- Existing trees and shrubs provide filtering of wind-borne dust and reduce near-ground wind speeds (and subsequent dust entrainment).

For all operational modelling scenarios, it has been assumed that the CHP is continually in operation for the full year as a worst-case assumption. The scenarios modelled lead to emission concentrations of NO2, SO2, PM10/PM2.5 and CO, which comply with the relevant EPA air quality standards limit values at the worst-case off-site location. In relation to odour, all emission will comply with the relevant limit values at the worst-case off-site location.

In the light on the requirements of EIA Directive 2014/52 and the requirements for post construction monitoring of potential impacts, it is recommended that monitoring or emissions, potential air pollutants and odours be carried out.

Following review the EH service considers the EIAR addresses the above adequately.

10. Water:

The impact of any discharges to watercourses, wastewater or sewage system have been quantified by the applicant. It is recommended that regular water quality monitoring and sampling of any surface water bodies, watercourses, streams, ditches, groundwater along the proposed project route be conducted during demolition, pre construction, construction and operational phases of the proposed development. Mitigation measures have been identified during the Environmental Impact Assessment process. Water bodies must be protected from any overflow or blockages from the proposed development.

The Environmental Impact Assessment has considered the protection from contamination of reservoirs and water bodies. Reservoirs and water bodies shall be protected from any overflow or blockages etc from the proposed development. Pump stations, wastewater storage systems, overflow systems etc shall be designed to discharge below reservoirs and water bodies.

The Environmental Impact Assessment has considered the safe processing, recovery and management of sludge, phosphate and any other residual semi-solid material generated from sewage or wastewater treatment processing. Sludge from human waste should be treated at the Wastewater Treatment Plant (WwTP) and not sent to farmers unless it has been fully treated and pelleted or dried.

The safe storage and disposal of any waste materials arising from construction and operational activities must be considered so as not to pollute watercourses/aquifers.

Consideration should be given to accidental spillages (fuel and oil) that may occur and that may enter the groundwater system. Detailed mitigation measures should be identified during the Environmental Impact Assessment.

Following review the EH service considers the EIAR addresses the above adequately and therefore have no additional comments to make.

11. Food Safety:

Mitigation measures are to be considered from dust during the construction phase and how they may impact on local food premises. Consideration should be given to food businesses during the construction; it is recommended that they be considered in the dust minimisation plan.

During the construction phase when earthwork excavation is to be carried out, this phase may result in a displacement of rodents possibly increasing a risk of infestation of rats for food businesses in the vicinity. It is recommended that adequate Pest Control measures are considered and that a comprehensive Pest Control Plan is formulated and implemented fully by a competently qualified professional. The recommended communications officer should liaise to address complaints regarding infestations.

Disruption to electricity, gas and mains water must be avoided during business hours, where utilities such as potable water (e.g. sanitation and hand washing) and electricity (cold storage facilities such as refrigeration of foodstuffs to maintain the cold supply) are essential for food businesses to operate under hygienic conditions.

12. Hydrology & Hydrogeology:

Regular sampling will be undertaken at all proposed facilities.

The data available of the site is considered sufficiently detailed to adequately characterise the surface water and groundwater characteristics of the site. All projects and developments that require an EIAR are of a scale or nature that they have the potential to have an impact on the environment. The potential impact on the surface water and groundwater environment resulting from the Waste and Wastewater treatment is assessed and mitigation measures are proposed to reduce any significant impacts. Based on the mitigation measures proposed the significance of the predicted impact on the hydrological environment is determined.

The design of all facilities should take account of the potential impacts of the development and the risks to the surface water environment. Discharges from all sites to the receiving environment should be regulated.

It was noted that a pipeline route passed through a number groundwater well sources. The affected groundwater wells must be closely and adequately protected and monitored during the construction and operational phases of the project.

The public should be made aware of the potential risk to private water supplies in the area and if they are on a private water supply and have concerns, they should be advised to contact the recommended communications officer.

Based on the results of previous monitoring at existing facilities during the operation of the waste and wastewater operation, the risk to the surface water environment following treatment within the drainage infrastructure is a minor to moderate beneficial impact.

Following review the EH service considers the EIAR addresses the above adequately and therefore have no additional comments to make.

13. Roads & Traffic:

Potential additional volumes of traffic at all sites both during construction and operational must be closely monitored and proactive action plans implemented where unforeseen congestion has occurred.

Following review the EH service considers the EIAR addresses the above adequately and therefore have no additional comments to make.

14. Waste Removal Services:

A Traffic Management Plan has been formulated within the EIAR. Subsequent road diversions should not affect or disrupt waste collection vehicles accessing residential and food businesses for the removal of waste material particularly food waste. If this service is disrupted and waste generated from food businesses is allowed to accumulate, it will cause a nuisance to the public and attract pests and rodents.

All safety precautions required for the safe removal of all hazardous materials and substances encountered during the demolition phase, construction phase, storage and disposal must be implemented fully.

Following review the EH service considers the EIAR addresses the above adequately and therefore have no additional comments to make.

15. Environment and Health submissions:

It is recommended that a company procedure for dealing with public queries or complaints arising from the construction or operation phases of the proposed development be put in place.

16. Construction Site

Facilities for staff working on the construction must be provided in the compound including:

- Appropriate sanitary accommodation, it is required that sanitary units be serviced by a licenced waste haulier or connected to a public sewer.
- The construction management plan should provide details of specified frequency for the removal of waste from sites and the name of licensed hauliers.
- Any food services provided on site must be registered with Health Service Executive if applicable; the EHS should also be notified of the levels and details of the type of food provided, and the food service operator must comply with the relevant food safety regulations.
- Site facilities should be serviced by a potable water supply that complies with S.I. No. 122/2014 - European Union (Drinking Water) Regulations 2014.
- Details should be provided of the method to be used to secure the area proposed for storage of chemicals and liquid fuels to reduce the risk of accidental spillages and any potential subsequent contamination to groundwater.

17. Recommendations and conclusions:

Please note where areas have not been commented on by the EHS it is taken that the applicants provided mitigation measures will be adhered to as per the EIAR and as per the recommended measures outlined in this report.

*** All correspondence or any queries with regard to this report including acknowledgement of this report should be forwarded to Ms. Jackie Kelly, Principal Environmental Health Officer, Environmental Health Services, Health Service Executive - Dublin North East, Unit 13F, Blanchardstown Corporate Park, Blanchardstown, Dublin 15, D15 E039.**

-END-