An Bord Pleanála Oral Hearing

Irish Water

Greater Dublin Drainage

Response to Questions raised by the Inspector

1. Response to Issues Raised on Breeding and Wintering Birds In Relation to Clonshagh Waste Water Treatment Plant:

Dr. Simon Zisman 27.03.2019

Response to Issues Raised on Breeding and Wintering Birds In Relation to Clonshagh Waste Water Treatment Plant:

Evidence on Biodiversity (Terrestrial and Aquatic):

1 This statement responds to the issues raised on birds around the proposed Waste Water Treatment Plant (WwTP).

2 The first part of the statement addresses the Inspectors comment on nesting birds (including raptors).

3 The second part addresses the wintering bird surveys that were completed for the Proposed Project, including survey method, dates of surveys and a summary of the results to understand the bird usage of the site.

4 Lastly the habitat and current use (intensive horticulture use) of the proposed WwTP site will be discussed in the context of its suitability for brent geese and other Special Protection Area (SPA) qualifying species.

Baldoyle Bay Special Protection Area (SPA) in Relation to the WwTP

5 Baldoyle Bay SPA is over 5km from the Clonshagh WwTP. The WwTP (as explained below) is of no importance for Special Conservation Interest species of this or any other SPA. This includes for brent geese, and also for all other migratory waders and wildfowl. The construction and operation of the WwTP will therefore have no adverse impact on the integrity of the SPA.

Breeding Birds (Including Raptors) at the WwTP

Terrestrial Breeding Bird Surveys (Including Raptors)

6 Breeding bird surveys were carried out along the terrestrial section of the route, as set out in section 11.2.3 of Chapter 11 of the Environmental Impact Assessment Report (EIAR) (Volume 3 Part A) (with underlying terrestrial bird survey data submitted to the Hearing).

7 Breeding bird surveys of the proposed WwTP were carried out in June 2012, April and June 2013, and repeated again between April and June in 2015 and May and June in 2017 using an abridged version of the British Trust for Ornithology's (BTO's) Common Bird Census Technique (Bibby et al. 2000; Gilbert et al. 1998). This method captured data on breeding bird activity within the survey area surrounding the proposed WwTP during the optimal survey window (April to July).

8 The survey extended 250m around each component of the Proposed Project along the route and at Clonshagh.

Results

9 From breeding bird surveys carried out along the proposed route and at Clonshagh WwTP, three raptor species were recorded:- kestrel, sparrowhawk and buzzard. Records were all of birds in flight, and no nests of any of these raptor species were identified in vegetation that would need to be removed for the Proposed Project.

10 From the Inspector's reference to 'large bird of prey', this would have been a buzzard.

11 Buzzards are a common tree-nesting raptor, resident all year round in this kind of farmland habitat.

Baseline Information in the Application

12 Baseline results for breeding birds are presented in section 11.3.5 of Chapter 11 of the Environmental Impact Assessment Report (Volume 3 Part A), including Table 11.12 which gives the birds recorded in 2015 and 2017 at the proposed WwTP site at Clonshagh.

Assessment of Effects from Construction

13 The effects of the Construction Phase of the Proposed Project on breeding terrestrial birds are covered in section 11.4.5 of Chapter 11 of the Environmental Impact Assessment Report (Volume 3 Part A).

14 There is potential risk of disturbance to nesting birds during the Construction Phase. However, this would be mitigated through a combination of pre-commencement nest checks by the Ecological Clerk of Works (ECoW), followed by assessment of any risk of disturbance to nests. This assessment would consider the nature of proposed construction activity (notably noise levels, the number of personnel and plant operating, and the lines of sight from the nest to these personnel and machinery). In order for disturbance to be avoided, the ECoW would therefore ensure the appropriate buffer distance was put in place between construction and nesting, so that the birds were not prevented from nesting successfully by associated noise or activity.

15 These measures are all tried and tested standard ornithological mitigation measures, used successfully in similar construction projects.

16 No impacts are predicted from the Operational Phase of the Proposed Project on this or any other bird species.

Conclusion in Relation to Breeding Birds Including Particular Reference to Raptors

17 The presence of buzzard noted by the Inspector is in line with breeding bird survey findings. Mechanisms are included in the application documentation to mitigate any impacts through identification and enforcement of suitable buffers around nests, to prevent disturbance from construction personnel or machinery. These measures would be implemented by the ECoW, as is standard and well-established practice on similar construction projects.

Winter Birds at the WwTP

<u>Terrestrial Winter Bird Surveys (Including for Brent Geese and Other SPA Special Conservation Interest Species)</u>

18 Winter bird surveys were carried out along the terrestrial section of the route, as set out in section 11.2.3 of Chapter 11 of the Environmental Impact Assessment Report (EIAR) (Volume 3 Part A) (with underlying terrestrial bird survey data submitted to the Hearing) and at the Clonshagh site.

19 The survey method used was the standard Winter Walkover Survey (Bibby et al. 2000; Gilbert et al. 1998). This method captured data on winter bird activity within the survey area surrounding the proposed WwTP during the optimal survey window (September to March).

20 The survey extended 250m around each component of the Proposed Project.

21 The choice and frequency of surveys were informed by desk study and scoping. Surveys were completed by highly experienced professional bird surveyors with extensive knowledge of birds that inhabit this type of farmland landscape in Ireland.

22 The survey method covered migratory waders and wildfowl (including SPA Special Conservation Interest species), as well as other bird species.

23 The survey data have been tabled as part of the precis submitted to the Hearing, at the request of the Inspector following evidence presented by Dr. Simon Zisman. As can be seen from the survey data supplied, the Proposed Project route was covered over a period of days, for each survey round.

24 Four surveys along the Proposed Project route (including the WwTP) were completed overall:

- The first survey was completed in 2015 on the 30th January;
- The second survey was completed in 2017 and comprised visits over the 24th and 27th November;
- The third survey covered the route from 20th to 23rd March and the 27th and 30th March 2017; and
- The fourth survey was completed on the 13th and 14th November 2017.

Baseline Information in the Application

25 Baseline results for winter birds are presented in section 11.3.5 of Chapter 11 of the Environmental Impact Assessment Report (Volume 3 Part A). This confirmed:-

"There were no agglomerations of winter birds, such as geese or other wildfowl, or species reliant on farmland. The Proposed Project study area is therefore of no more than local importance for wintering birds".

26 These findings were consistent with pre-existing desk study results that confirmed the WwTP area was not known as a site of any importance for wintering birds, including any migratory waders or wildfowl (including Special Conservation Interest of SPAs).

27 The sequence of three winter surveys (and corroborated by a fourth), using the industry-standard Winter Walkover Survey method, and completed by experienced professional surveyors over a spread of months through the winter period, and spanning multiple years, therefore generated highly robust baseline data on the birds using the WwTP area, from which to inform the EIAR.

Assessment of Effects on Wintering Birds (Including Waders and Wildfowl)

28 The effects of the Construction Phase of the Proposed Project on wintering birds is covered in section 11.4.5 of Chapter 11 of the Environmental Impact Assessment Report (Volume 3 Part A).

<u>Construction Phase</u>

29 In the case of the proposed WwTP site there will be the permanent loss of habitat, although the great majority of this is again, characteristically, intensively farmed fields chiefly of local importance (lower value)

<u>Operational Phase</u>

30 No operational phase impacts are predicted.

Conclusion in Relation to Wintering Birds Including Waders and Wildfowl

31 The WwTP area has been comprehensively surveyed over successive winter periods. The surveys were completed at Clonshagh using an appropriate survey method, by highly experienced professional bird surveyors, over an appropriate spread of winter months and over multiple years. The site is not used in any meaningful way by any Special Conservation Interest species from Baldoyle Bay or any SPA (including brent geese). Underpinned by the comprehensive site-specific data collected, the assessment shows there are no predicted impacts on wintering birds from either the Proposed Project's Construction or Operational Phase. This includes Special Conservation Interest species from Baldoyle Bay, Irelands Eye or other SPAs.

Description of Habitat the Proposed WwTP site For Breeding and Wintering Birds

32 The limited number and diversity of breeding and winter bird species recorded at the WwTP site is entirely consistent with the habitat characteristics and farming land use at the site.

33 The Phase 1 Habitat Survey results (Figure 11.5 in Chapter 11 and described in 11.3.2) show limited extent of hedgerows on site, and extensive monocultures of arable crops. The dominant habitat is therefore heterogeneous arable fields. During the crop growing season, once plants become established, the area is therefore of negligible value for breeding or wintering birds.

34 As noted in Chapter 19 'Agronomy' of the EIAR, and drawing on discussions with the farmers, the WwTP lands are referred to as being used for intensive horticultural operations, producing a rotation of cabbage, cauliflower and broccoli, with spring-sewn wheat or barley grown as a break crop.

35 As commonly occurs in intensive agricultural operations with high value crops, bird scarers have been deployed to protect crops from foraging birds (as noted during bird surveys completed at the proposed WwTP site). This further restricts the value of this proposed WwTP area for breeding and wintering birds.

Conclusion in Relation to Wintering Birds Including Waders and Wildfowl

36 Given the intensity of agricultural production, the site at Clonshagh is therefore of low value for breeding or wintering birds, including Special Conservation Interest species of Baldoyle Bay or other SPAs.