Orsted Onshore Ireland Midco Limited

13: MEMORANDUM RESPONSE TO SUBMISSIONS RECEIVED

AIR QUALITY

Proposed Oatfield Wind Farm Project, Co. Clare: ABP Case No. ABP-318782-24

June 2024

CONTENTS

1 AIR QUALITY

1.1 Introduction

The following memorandum has been prepared to address submissions received during the observations and submissions period associated with the Oatfield Wind Farm Planning Application. The planning application for the aforementioned Proposed Development was submitted to An Bord Pleanála on 22nd December 2023 (ABP Case Number: ABP-318782-24). The period for 3rd party submissions and observations was 22nd December 2023 to 19th February 2024.

This is memorandum number 13 in the Oatfield Wind Farm submission response documentation, which addresses common themes identified within the discipline of Air Quality (corresponding to **Chapter 17 of the EIAR**, submitted as part of the planning application made to An Bord Pleanála).

Reference is made to submission responses on Traffic and Transport (memorandum no. 12 of the submission response documentation, hereafter referred to as **memorandum no. 12**).

Responses to common themes in submissions received from the general public are presented in Section 2.

1.2 Statement of authority

This memorandum has been prepared by Phoebe Chan (RSK Environment Ltd.). Phoebe Chan is a senior air quality consultant at RSK Environment Limited. She is an associate member of the Institute of Environmental Science (AMIEnvSc) and an associate member of the Institute for Air Quality Management (AMIAQM). Phoebe has two years' experience as a project manager for air quality consultancy and modelling, pollution prevention and development planning applications. She has prepared environmental impact assessment reports for various solar farms and wind farms.

The content of this memorandum has been reviewed by Robert Clark, a senior air quality consultant at RSK Environment Limited. Robert is an associate member of the Institute of Environmental Science (AMIEnvSc) and an associate member of the Institute for Air Quality Management (AMIAQM) with six years' experience of environmental projects relating to infrastructure development, pollution prevention and control, and air quality assessments.

2 GENERAL PUBLIC

2.1 Theme 1: Study area

Potential air quality effects during construction, operational and decommissioning phases of the Proposed Development were assessed fully in **EIAR Chapter 17 Air Quality** (hereafter referred to as **EIAR Chapter 17**), with reference to relevant air quality legislation, policies and guidance. Based on the Institute of Air Quality Management (IAQM) 2023 construction dust guidance, the study area for human receptors is up to 250m from the red line boundary and the study area for ecological receptors is up to 50m from the red line boundary. The IAQM construction guidance states that the risk of impact from activities carried out on-site during the construction phase can be considered to be negligible beyond these defined study areas. Therefore, receptors beyond the study areas noted above were scoped out of the assessment.

2.2 Theme 2: Assessment of construction effects - dust and exhaust emissions

According to the IAQM 2023 construction dust guidance and the Department for Environment, Food and Rural Affairs (Defra) Local Air Quality Management Technical Guidance (LAQM TG22), both dust emissions from construction activities and exhaust emissions from plant equipment and vehicles during the construction phase are unlikely to be significant, when suitable controls and site management procedures are in place. With the implementation of the proposed mitigation measures presented in Section 17.7.1.1 and 17.7.1.2 of **EIAR Chapter 17**, no significant air quality effects are anticipated during the construction and decommissioning phases of the Proposed Development.

Proposed mitigation measures were documented within the Construction Environmental Management Plan (CEMP) (Appendix 5.1 to **EIAR Chapter 5 Project Description**) and will be agreed with the local authority.

2.3 Theme 3: Assessment of construction effects - traffic

A qualitative screening level assessment was undertaken against the Design Manual for Roads and Bridges (DMRB) screening criteria to assess the impacts on air quality due to construction phase traffic. The estimated heavy good vehicle (HGV) and light good vehicle (LGV) vehicle movements from the Proposed Development did not exceed the DMRB screening criteria and therefore, a detailed quantitative air quality assessment was not required as per the DMRB guidance. Therefore, prior to mitigation, the proposed increase in traffic was not considered to have a significant effect on air quality during the construction phase. However, in line with best practice, any insignificant effects on air quality will further be mitigated by the employment of the proposed mitigation measures (Section 17.7.1.1 and 17.7.1.2 of **EIAR Chapter 17**). Therefore, construction traffic is unlikely to materially impact on local air quality.

As noted in **memorandum no. 12**, a review of the traffic assessment for the Proposed Development has identified that the anticipated worst-case traffic volumes during the construction period will be 96 trips per day rather than 76 trips per day as previously assumed, with no change on the percentage of heavy good vehicle (HGV) (i.e. 62%).

The predicted HGV and light good vehicle (LGV) generation are still below the Design Manual for Roads and Bridges (DMRB) screening criteria (i.e. a change of HGV flow of more than 200 AADT and a change of LGV flow of more than 1,000 Annual Average Daily Traffic (AADT)) and therefore, the increase in vehicle emissions during construction phase is not considered to be significant. The outcome of the air quality construction phase traffic assessment in **EIAR Chapter 17** is still valid.

2.4 Theme 4: Assessment of operational effects - dust and exhaust emissions

Given the nature of the Proposed Development, dust and exhaust emissions during the operational phase was scoped out of assessment as there are no planned activities with the potential for significant emissions to air during this phase; no comments were received by Clare County Council Environment Section through scoping opinion.

2.5 Theme 5: Assessment of operational effects - traffic

The estimated vehicle trips generated by the Proposed Development once operational was anticipated to be minimal as the wind farm is planned to be operated remotely. There will be limited movement of vehicles to the site for maintenance. The increased road traffic emissions resulting from the Proposed Development (i.e during the operational phase is not expected to have a significant effect on air quality.

2.6 Theme 6: Cumulative effects

A comprehensive cumulative impact assessment was undertaken for the Proposed Development (Section 17.9 of **EIAR Chapter 17**) which included other wind farm projects at various stages of planning. The cumulative construction and decommissioning phases effects were not considered to be significant, when appropriate mitigation measures are implemented as per best practice.

As noted above in Section 2.5 the Proposed Development's estimates for traffic volumes during the operational phase are low. Additionally, with the implementation of best practice measures to minimise dust emissions for both the Proposed Development and other developments, exceedance of the relevant air quality standards is considered unlikely and cumulative operational phase effects are considered not significant during the operational phase.

There are eight active quarries within 10km of the Proposed Development and the active quarries are using the same material haul routes as the proposed turbine delivery route (TDR) for the Proposed Development. All developments are expected to follow best practice measures to control and minimise emissions from traffic and therefore the cumulative construction phase effects are considered not significant during the construction phase.