

15. Air Quality

15.1 Introduction

- 15.1.1 Consideration has been given at scoping stage to the potential effects of the Proposed Development on air quality, in accordance with the Environmental Impact Assessment (EIA) requirements applicable to Significant Infrastructure Projects under the Infrastructure (Wales) Act 2024, as set out in the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (as amended).
- 15.1.2 This section of the Scoping Report sets out the legislative context, baseline considerations and scoping rationale for air quality. It establishes whether a standalone air quality assessment is required within the Environmental Statement (ES).

15.2 Legislation, Policy and Guidance

- 15.2.1 The consideration of air quality effects forms part of the Environmental Impact Assessment required in support of an application for Infrastructure Consent under the Infrastructure (Wales) Act 2024 (Infrastructure (Wales) Act 2024, (Welsh Government, 2024)). The applicable EIA requirements are set out in the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (as amended), which apply to Significant Infrastructure Projects in Wales (Welsh Government, 2017).
- 15.2.2 Air quality in Wales is managed through a statutory framework comprising legislation, national policy and technical guidance (including local air quality management and planning policy), together with relevant local authority plans and reporting. Key documents of relevance to the assessment of air quality effects within EIA include:
- Clean Air Plan for Wales: Healthy Air, Healthy Wales (Welsh Government, 2023);
 - The Air Quality Standards (Wales) Regulations 2007 (WSI 2007 No. 64 (W.6)) (Welsh Ministers, 2007);
 - Local Air Quality Management in Wales: Policy Guidance (Welsh Government, 2022);
 - Planning Policy Wales (Edition 12) (Welsh Government, 2024);
 - Air Quality and Emissions: Guidance for Developers (Natural Resources Wales, 2020);
 - Regulation and Permitting of Air Emissions in Wales (Natural Resources Wales, 2018);
 - Air Quality Annual Status Report (Ceredigion County Council, 2023);
 - Local Development Plan 2007–2022 (as adopted): Policy DM10 – Pollution Control (Ceredigion County Council, n.d.);

- Replacement Local Development Plan – Preferred Strategy: Environmental Protection and Air Quality (Council, Ceredigion County, n.d);
- Environment Act 1995 (Part IV – Air Quality) (UK Parliament, 1995); and
- Environment Act 2021 (UK Parliament, 2021).

- 15.2.3 In practice, these documents are used at scoping stage to confirm the relevant air quality objectives and local context (including whether there are any nearby Air Quality Management Areas (AQMAs) or other sensitivities), and to define proportionate expectations for good practice controls.
- 15.2.4 For onshore wind developments, potential air quality effects are typically limited to construction-phase dust and vehicle emissions (including construction traffic), with operational effects generally limited to infrequent maintenance traffic. Accordingly, where required, air quality considerations are addressed through (i) embedded construction good practice controls secured through the Construction Environmental Management Plan (CEMP), and (ii) the assessment of construction traffic effects within the Traffic and Transport chapter, rather than through a standalone air quality chapter within the ES.
- 15.2.5 Where potential air quality effects are limited in scale, temporary in nature, or adequately controlled through established regulatory regimes and best practice, they are not generally considered to require standalone assessment within an EIA.

15.3 Study Area

- 15.3.1 A discrete study area is not defined for air quality at scoping stage. The consideration of air quality has focused on the Proposed Development site and the local road network, insofar as construction traffic or site activities could influence local air quality conditions.

15.4 Methodology

- 15.4.1 A proportionate, scoping-level air quality assessment has been undertaken to identify whether the Proposed Development has the potential to give rise to likely significant air quality effects during construction or operation. The methodology is designed to determine the need for further detailed assessment within the ES, having regard to the scale and nature of the development, the sensitivity of the receiving environment, and relevant legislative and policy requirements.
- 15.4.2 The scoping assessment considers potential sources of air emissions associated with the Proposed Development, including construction-phase activities (such as earthworks, construction traffic and on-site plant) and operational traffic associated with routine maintenance. The assessment has been informed by baseline air quality conditions and the presence of sensitive receptors, with reference to the applicable air quality objectives set out in the Air Quality Standards Regulations 2010 (UK Government, 2010).
- 15.4.3 The scoping-level air quality methodology focuses on identifying whether construction or operational activities associated with the Proposed Development could give rise to likely

significant effects at sensitive receptors, having regard to baseline conditions and relevant air quality objectives. The approach considers non-traffic sources of emissions, including construction dust, exhaust emissions from on-site plant and equipment, and limited operational activities associated with routine maintenance. The assessment is informed by established UK guidance, including Institute of Air Quality Management (IAQM) guidance, and applies a precautionary, qualitative screening to determine whether detailed quantitative assessment is warranted. (UK Government, 2010).

- 15.4.4 Embedded mitigation measures forming part of standard good practice for construction activities (such as dust suppression, site management controls, and appropriate plant standards) are assumed within the methodology to reflect a realistic worst-case scenario. (Institute of Air Quality Management, 2017).
- 15.4.5 Cumulative air quality effects are considered at scoping stage by reviewing whether emissions from the Proposed Development could combine with other relevant committed developments or background sources to materially affect air quality at sensitive receptors. Where this initial screening indicates a low potential for likely significant effects, no further standalone air quality assessment is proposed within the ES.

15.5 Baseline Context

- 15.5.1 The Proposed Development site is located within a rural area characterised by low baseline traffic flows and the absence of significant industrial emission sources. There are no Air Quality Management Areas (AQMA) within the vicinity of the Proposed Development with the closest being along the length of the A483 from the roundabout junction of A483 with A476 Ffairfach north along Towy Terrace across Llandeilo Bridge into Bridge Street then Rhosmaen Street through the town centre until the roundabout junction of the A483 with the A40 by Llandelilo located some 45km to the south.
- 15.5.2 It is noted that turbine components would be delivered via Swansea Port, which is located within an AQMA (Swansea AQMA) which covers the west bank of the Tawe river covering the Hafod District as well as Sketty and Fforestfach; however, the Proposed Development would represent a small contribution to port-related activity within an established operational environment.
- 15.5.3 On this basis, no material change to baseline air quality conditions is anticipated in relation to the Proposed Development. Should further consideration of off-site transport-related air quality effects be required, this would be addressed proportionately within the Other Environmental Effects chapter.
- 15.5.4 Baseline air quality is therefore considered to be typical of rural mid-Wales locations and does not indicate existing sensitivities that would be likely to be exacerbated by the Proposed Development.

15.6 Consideration of Potential Air Quality Effects

Construction

- 15.6.1 During construction, potential air quality effects could arise from construction traffic movements and, to a lesser extent, dust generation from earthworks. These effects are temporary, localised and are managed through standard construction best practice and environmental management measures.

Operation

- 15.6.2 During operation, air quality effects are limited to infrequent vehicle movements associated with maintenance activities. These movements are negligible in the context of the local road network and are not expected to give rise to significant air quality effects.

Decommissioning

- 15.6.3 Potential air quality effects during decommissioning are similar to those during construction and are temporary and reversible.

15.7 Scoping Assessment

- 15.7.1 The Proposed Development is not expected to give rise to significant air quality effects during construction, operation or decommissioning.
- 15.7.2 Potential air quality effects associated with construction activities, including construction traffic, on-site vehicle movements and other temporary emission sources, will be considered as part of a proportionate assessment of other environmental effects. The assessment will apply qualitative screening against baseline conditions and relevant air quality objectives, informed by established UK guidance and assuming the implementation of standard construction environmental management measures. This approach ensures that any potential air quality effects are appropriately identified and addressed at scoping stage, without the need for detailed quantitative assessment where the potential for likely significant effects is limited.
- 15.7.3 The Proposed Development does not involve significant combustion sources or operational processes that would materially affect air quality.
- 15.7.4 On this basis, air quality is proposed to be scoped out as a standalone topic from the ES.

Table 15.1 - Matters to be scoped out of the assessment

Matters to be scoped out of the assessment	
Matter	Rationale
Operational air quality effects	No significant emission sources associated with operation
Construction dust	Temporary and controlled through best practice measures
Traffic-related emissions	Addressed within the Other Environmental effects chapter

Matters to be scoped out of the assessment	
Cumulative air quality effects	No evidence of cumulative impacts requiring separate assessment

15.8 Summary of Scoping position

- 15.8.1 The Proposed Development is not expected to result in significant effects on air quality. Air quality is therefore proposed to be scoped out of the ES as a standalone topic, with any relevant considerations addressed through other topic-specific assessments.
- 15.8.2 Potential air quality effects arising from construction and operational traffic associated with the Proposed Development have been considered as part of the Traffic and Transport assessment using established methodologies. On this basis, traffic-related air quality effects are addressed within this chapter and do not warrant a separate standalone air quality assessment.
- 15.8.3 Construction-related dust and air quality effects are temporary and are managed through standard good practice measures implemented via the CEMP. These effects do not give rise to significant air quality impacts requiring standalone assessment within the ES.

15.9 References

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