

Appendix 6.1

Request for Comments on the Proposed Air Quality Assessment



Our ref: 445484-01-MS

24th May 2024

Steve Braund
Buckinghamshire Council

Sent by email to: Steve.Braund@buckinghamshire.gov.uk

Request for Comments on the Proposed Air Quality Assessment for Rosefield Solar Farm

Dear Mr Braund,

RSK Environment Ltd (RSK) has been commissioned to undertake an assessment of the potential air quality impacts associated with the proposed Rosefield Solar Farm. The proposed development comprises the construction, operation and decommissioning of solar photovoltaic (PV) generating station, energy storage facilities, and grid connection infrastructure to allow export to the National Grid. The approximate grid reference of the centre of the site is 470453, 224081 (British National Grid). The proposed site location is shown in Appendix A, for reference.

The site is within the administrative area of Buckinghamshire Council (BC). There are currently nine Air Quality Management Areas (AQMA) declared within the district. The closest AQMA is located in the administrative area of Cherwell District Council in Bicester approximately 14 km from the Proposed Development. Therefore, the Proposed Development is not located within or close to an AQMA.

The following document outlines RSK's proposed approach to assessing potential air quality impacts associated with the proposed development. We would be grateful for your comments on our proposed assessment methodology.

1. Baseline Air Quality

According to the BC's 2023 Air Quality Annual Status Report (ASR), there was two automatic monitoring stations and a network of 149 nitrogen dioxide (NO₂) diffusion tubes across the district in 2022.

The nearest monitoring location is a NO₂ diffusion tube location (Buckinghamshire Council ref: AV8 - 29 High Street, Winslow) situated approximately 7.5 km from the Site. The measured annual average NO₂ concentrations at this diffusion tube site, for years 2017 - 2021, ranged between 23.0 µg/m³ and 28.8 µg/m³, which are well below the annual mean NO₂ Air Quality Objective results for this tube are reproduced in table 1 below.

Table 1: Annual Mean NO₂ Concentrations at the Diffusion Tube Locations within 3km of the Proposed Development Site

Site ID	Location	Site type	Approximate Distance from Site (km)	Annual Mean NO ₂ Concentrations (µg/m ³)				
				2018	2019	2020	2021	2022
AV8	29 High Street, Winslow	Roadside	7.5	28.8	27.3	21.8	22.7	23.0

2. Estimated Background Data

In addition to the local monitoring data, estimated background air quality data available from the LAQM-Tools website, may also be used to establish likely background air quality conditions at the proposed development site.

This website provides estimated annual average background concentrations of NO₂, PM₁₀ and PM_{2.5} on a 1km² grid basis. Table 2 identifies estimated annual average background concentrations for the grid square containing the proposed development site for years from 2024 to 2026. No exceedances of the NO₂, PM₁₀ or PM_{2.5} annual mean AQSs are predicted. As background concentrations are predicted to fall with time, background concentrations in future years would not be expected to exceed their respective annual mean standards.

Table 2: Estimated Background Annual Average NO₂, PM₁₀ and PM_{2.5} Concentrations at Proposed Development Site

Assessment Year	Estimated Annual Average Pollutant Concentrations Derived from the LAQM Website (µg/m ³)		
	Annual Average NO ₂	Annual Average PM ₁₀	Annual Average PM _{2.5}
2024	6.7	13.7	8.4
2025	6.5	13.6	8.3
2026	6.4	13.6	8.3
AQS	40	40	20

Note: Presented concentrations for 1 km² grid centred on 470500, 224500; approximate centre of development site is 470453, 224081.

3. Outline of Assessment Approach

The assessment will address potential impacts during both the construction, operational and decommissioning phases of the proposed development.

During construction and decommissioning, air quality impacts are likely to be local to the development and will be temporary in nature (i.e. during the construction and decommissioning phases only). A qualitative study, based on the Institute of Air Quality Management (IAQM) 'Guidance on the assessment of dust from demolition and construction V2.2' document, will be undertaken to assess potential construction and decommissioning phases impacts. The assessment will identify a range of mitigation measures aimed at minimising construction and decommissioning impacts (fugitive dust emissions).

A screening level qualitative assessment will be undertaken with reference to the Environmental Protection UK (EPUK) and IAQM guidance entitled '*Land-Use and Development Control: Planning for Air Quality*' to assess the potential impacts of construction and decommissioning phases traffic exhaust emissions.

Given the nature of the proposed development, no site activities resulting in significant emissions to air are anticipated during operation and there will only be limited movement of vehicles to the site for maintenance. Operational phase will be scoped out from the assessment.

4. Interpretation

The qualitative assessment results will be interpreted with reference to national and local legislation, policy and guidance including guidance provided by the IAQM, EPUK and the National Air Quality Strategy. A preliminary environmental information report and an environmental statement will be produced for submission with the planning application for the proposed development. The assessment will also be interpreted with reference to relevant National Policy Statements, specifically: NPS EN-1 with reference to Section 5.2 outlines the planning policy for air quality, including guidance on undertaking relevant parts of the EIA and NPS EN-3 with reference to Section 2.10 gives specific consideration to solar development including assessment of traffic and transport impacts.

We would like to address any of your comments or concerns in the air quality assessment for the proposed development and would be grateful for your feedback. Please do not hesitate to contact the undersigned if you would like to discuss any aspects of the proposed methodology detailed above.

Yours sincerely,

For RSK Environment Ltd

Prepared by:



Robert Clark
Senior Air Quality Consultant

Reviewed by:



William Franklin
Associate Director

Appendix A

Figure 1: Location of the Proposed Development Site

