EAST PARK ENERGY

East Park Energy

EN010141

Environmental Statement
Volume 1 – Main Report

Chapter 11: Air Quality

Document Reference: EN010141/DR/6.1

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009: Regulation 5(2)(a)

September 2025

Version P01

EAST PARK ENERGY

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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APFP Regulation Reference:	Regulation 5(2)(a)
Planning Inspectorate Scheme Reference:	EN010141
Application Document Number:	EN010141/DR/6.1
Author:	Smith Grant LLP

Version	Date	Status
P01	September 2025	DCO Submission

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11.0 AIR QUALITY

11.1 Introduction

11.1.1 This chapter of the Environmental Statement (ES) presents the findings of an assessment of the likely significant impacts and effects of the Scheme on local air quality. This primarily includes fugitive dust generation and exhaust emissions from additional road traffic and on-site plant and equipment during the construction and decommissioning phases.

11.1.2 The chapter describes the methods used to assess the baseline conditions currently existing at the Site and surroundings, the potential severity of direct and indirect air quality impacts of the Scheme, and the mitigation measures required to prevent, reduce, or offset the impacts and the significance of residual effects.

11.1.3 This chapter is supported by the following appendices in **ES Volume 2 [EN010141/DR/6.2]**:

- **ES Vol 2 Appendix 11-1: Air Quality Assessment Methodology [EN010141/DR/6.2]**;
- **ES Vol 2 Appendix 11-2: Baseline Air Quality Data [EN010141/DR/6.2]**; and
- **ES Vol 2 Appendix 11-3: Construction Dust Assessment [EN010141/DR/6.2];**
- **ES Vol 2 Appendix 11-4: Additional $PM_{2.5}$ Assessment [EN010141/DR/6.2]**.

11.1.4 This chapter is supported by the following figures in **ES Volume 3 [EN010141/DR/6.3]**:

- **ES Vol 3 Figure 11-1: Construction Dust Study Area [EN010141/DR/6.3]**;
- **ES Vol 3 Figure 11-2: On-Road Vehicle Emissions Study Area [EN010141/DR/6.3]**; and

- **ES Vol 3 Figure 11-3: Construction Phase – Vehicle Emissions Screening Assessment [EN010141/DR/6.3]**.

11.1.5 A separate air quality assessment of unplanned emissions from an accidental Battery Energy Storage System (BESS) fire during the operation and maintenance of the Scheme is provided as an appendix to the **outline Battery Safety Management Plan (oBSMP) [EN010141/DR/7.10]**.

Statement of Competence

11.1.6 The chapter has been prepared by Smith Grant LLP, an environmental consultancy specialising in air quality. The author is an environmental scientist with over 25 years' experience in the field of environmental risk management now specialising in the assessment of air emission impacts. The author regularly provides air quality input to planning applications for a wide range of developments including waste management and treatment facilities, mineral extraction, and housing development. The author is a Member of the Institute of Air Quality Management (IAQM).

11.2 Legislation, Policy, and Guidance

Background

11.2.1 Construction and decommissioning activities can give rise to airborne particulate matter, or 'dust'. Dust can give rise to both soiling effects through dust deposition (referred to as 'disamenity dust') and human health effects through suspended particulates. Dust accumulation may also affect sensitive habitats through impacts on vegetation and aquatic ecosystems.

11.2.2 Dust soiling will arise from the deposition of particulate matter in all size fractions but will be associated mostly with particulate matter with an aerodynamic diameter greater than 30µm.

11.2.3 Exposure to suspended particulate matter can give rise to health effects. Particles with an aerodynamic diameter below 10µm (referred to as 'PM_{10}') correspond to the inhalable fraction of particulate matter. Those with a diameter of less than 2.5µm ('$PM_{2.5}$'), and which form a proportion of PM_{10}, have been shown to give a stronger association with observed ill-effects.

11.2.4 The majority of construction dust is larger than 10µm in diameter and hence the key potential effects are associated with soiling effects.

11.2.5 The operation of on-road road traffic, non-road mobile machinery ('NRMM') and on-site plant give rise to combustion emissions. The principal emissions of interest are nitrogen oxides ('NO_x') and PM_{10} (including $PM_{2.5}$). NO_x comprises nitrogen dioxide ('NO_2') and nitric oxide ('NO'). NO itself is not considered harmful to human health. However, on release to the atmosphere it usually oxidises rapidly to NO_2 which is associated with adverse effects on human health, causing inflammation of the lungs at high concentrations. Long term exposure to NO_2 can affect lung function and cause respiratory symptoms.

11.2.6 Road transport is also a major contributor to ambient particulate matter both as direct emissions through vehicle exhausts and as indirect emissions

through tyre and brake wear, re-suspension of particulate matter on the road and road wear (mechanical abrasion and corrosion). Road transport may also be responsible for secondary particulate formed via gas-to-particle conversion.

11.2.7 The following air quality legislation, planning policy and guidance is deemed relevant to the Scheme in relation to the above pollutants.

Strategy and Legislation

Air Quality Strategy

11.2.8 In January 2019 Defra published the Clean Air Strategy which outlined a comprehensive suite of actions required across all parts of Government to improve air quality and maximise public health benefits. This included national regulations to reduce emissions from domestic burning, industry and farming, alongside stronger powers, and an improved framework for local government to tackle more localised issues, as well as a commitment to set a legally binding target for $PM_{2.5}$ which has since been established.

11.2.9 Under the Environment Act 1995, as amended by the Environment Act 2021, the UK Government and the devolved executives are required to produce a national air quality strategy ('AQS') every 5 years. The AQS is to provide an over-arching strategic framework for air quality management in the UK setting out a framework to enable local authorities to contribute to long-term air quality goals and setting out standards, objectives and measures for improving ambient air quality.

11.2.10 In April 2023 the UK Government published the 2023 Air Quality Strategy ('2023 AQS')[1] which superseded an earlier 2007 AQS (in respect of England only). The 2023 AQS includes previously established standards that have been set for specific pollutants deemed to pose a risk for human health or other receptors. A number of these were derived from the EU limit and target values, although requirements for compliance varied. The strategy also includes new standards for $PM_{2.5}$ established under the Environment Act

2021 and the Environmental Targets (Fine Particulate Matter) (England) Regulations 2023.

Air Quality Standards for Human Health

11.2.11 Ambient air quality standards in the UK have been established for several pollutants through the combination of a transposition of European legislation and additional UK legislation and requirements. This includes NO_2 and suspended particulate matter.

11.2.12 Following the exit of the UK from the EU the air pollution limits established under EU requirements remain in place having been enshrined in UK law, the principal legislation being the Air Quality Regulations 2010 (as amended).

11.2.13 In addition, Part IV of the Environment Act 1995 imposes a duty on local authorities in the UK to review existing and projected air quality in their area. Any location likely to exceed the UK Air Quality Objectives ('AQOs') must be declared an Air Quality Management Area ('AQMA') and an Action Plan prepared and implemented, with the aim of achieving the objectives. This process is referred to as Local Air Quality Management ('LAQM'). The LAQM process is supported by national statutory policy[2] and technical guidance[3] provided by Defra.

11.2.14 The applicable air quality standards relevant to the Site and Scheme with regards to protection of human health are summarised in Table 11.1 below. These are referred to in this report as Air Quality Assessment Levels ('AQALs').

Table 11.1: Air Quality Assessment Levels

Pollutant	AQAL	Averaging Period
Current standards		
NO_2	40 µg/m^3	hourly mean, not to be exceeded more than 18 times per annum
	200 µg/m^3	annual mean

Pollutant	AQAL	Averaging Period
Current standards		
PM_{10}	40 µg/m^3	24-hour mean, not to be exceeded more than 35 times per annum
	50 µg/m^3	annual mean
$PM_{2.5}$	20 µg/m^3	annual mean
	% reduction relative to average exposure indicator (AEI), dependant on initial concentration; to at least 10 µg/m^3	hourly mean, not to be exceeded more than 18 times per annum
Future standards		
$PM_{2.5}$	12 µg/m^3 (interim target; *to be achieved by 2028)*	annual mean
	reduction in population exposure of 22% compared to 2018 *by 2028*	annual mean
	10 µg/m^3 (legal target; to be achieved by 2040)	annual mean
	reduction in population exposure of 35% compared to 2018 *by 2040*	annual mean

1: $PM_{2.5}$ – responsibility for meeting the $PM_{2.5}$ target sits with national government.

11.2.15 For the purposes of the AQOs ambient air refers to the outdoor air and excludes workplaces where members of the public do not have regular access as summarised in Table 11.2 below:

Table 11.2: Summary of Where the AQOs Should Apply

Averaging Period	Locations where the objective should apply
Annual mean	all locations where members of the public might be regularly exposed; including facades of residential properties, schools, hospitals, care homes etc

Averaging Period	Locations where the objective should apply
24-hour mean, and 8-hour mean	all locations where the annual mean objectives apply together with hotels and gardens of residential properties
1-hour mean	all locations where the annual mean, 24-hour and 8-hour means apply; also kerbside sites, parts of car parks, bus stations and railway stations which are not fully enclosed and any outdoor locations where members of the public might reasonably be expected to spend 1 hour or longer.
15-min mean	all locations where members of the public may be reasonably exposed for a period of 15 minutes

Note: The AQOs do not apply at building facades or other places of work where members of the public do not have regular access.

Air Quality Standards for Ecological Sites

11.2.16 Additional statutory ambient air quality standards (termed 'Critical Levels') that are to be applied at nature conservation sites are also provided by the 2023 AQS. Other non-statutory standards are provided as described in the Institute of Air Quality Management (IAQM) guidance on the assessment of air quality impacts on nature conservation sites (June 2019)[4].

11.2.17 Applicable standards for this assessment are detailed in Table 11.3 below:

Table 11.3: Additional Critical Levels for Protection of Vegetation and Ecosystems

Pollutant	Concentration (µg/m^3)	Measured as
nitrogen oxides (as NO_2)	30	annual mean
	75 / 200[1]	daily mean

1: IAQM guidance is that 200 µg/m^3 is the most appropriate as the short-term NO_x critical level due to typically low sulphur dioxide concentrations in the UK

11.2.18 In addition, 'Critical Loads' have been developed for nitrogen nutrient and acidity deposition. These are dependent on the specific habitat and location and are provided in detail on the Air Pollution Information Service (APIS) website[5]. Any relevant Critical Loads to a specific nature conservation site or

habitat feature are provided in the relevant sections of this assessment if applicable.

Dust Standards and Control

11.2.19 Larger particulate matter can cause loss of amenity through the soiling of surfaces. Ecological receptors can also be affected by dust soiling, both directly on vegetation and aquatic ecosystems or indirectly on fauna. Deposition dust as such is not regulated as a pollutant under the above requirements. There are no UK statutory or recommended levels that define the point when deposited dust causes annoyance or disamenity ('disamenity dust') although standard 'custom and practice' thresholds are referred to.

11.2.20 Public concerns in relation to dust accumulation and soiling may be related to a range of factors including the nature of a site and locality and baseline levels. Controls of soiling and annoyance impacts are typically achieved through conditions within planning permissions and / or environmental permits requiring the implementation of a dust management plan to prevent amenity impacts. Deposited dust may also give rise to 'nuisance' as statutory, private and public nuisance as defined in environmental law and insofar as nuisance relates to unacceptable effects of emissions.

Other Relevant Legislation

11.2.21 The Non-Road Mobile Machinery (Type-Approval and Emission of Gaseous and Particulate Pollutants) Regulations 2018 implemented EU regulations 2016/1628 and impose increasingly stringent emission limits to the engines of NRMM and power plant with the aim of progressively reducing emissions and phasing out polluting equipment from 2019.

Policy

National Policy

11.2.22 The following National Policy Statements (NPSs) set out national planning policies in relation to nationally significant solar photovoltaic generation developments and electricity networks:

- Overarching NPS for Energy (EN-1)[6]; and
- NPS for Renewable Energy Infrastructure (EN-3)[7].

11.2.23 Although it is relevant to the Scheme, there are no specific policies within the NPS for Electricity Networks Infrastructure (EN-5) which relate to air quality and the Scheme.

11.2.24 The National Planning Policy Framework (NPPF)[8], and the accompanying online Planning Practice Guidance (PPG)[9] are also important and relevant but are not the key policy documents against which the application will be determined.

11.2.25 Relevant sections of these policies in relation to air quality are:

Table 11.4: Summary of National Planning Policy

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
NPS EN-1	Section 5.2.8	Where the project is likely to have adverse effects on air quality the applicant should undertake an assessment of the impacts of the proposed project as part of the ES	Section 11.8 of this chapter describes the assessment that has been undertaken to determine the potential air quality impacts that may occur during the construction and decommissioning phases of the Scheme. These assessments have considered construction dust, vehicle exhaust emissions and non-road mobile machinery exhaust emissions. Assessment of potential impacts during the operational phase have been scoped out (see Table 11.6).

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
	Section 5.2.9	The ES should describe: • existing air quality concentrations and the relative change in air quality from existing levels; • any significant air quality effects, mitigation action taken and any residual effects, distinguishing between the project stages and taking account of any significant emissions from any road traffic generated by the project; • the predicted absolute emissions concentration change and absolute concentrations as a result of the proposed project, after mitigation methods have been applied; and • any potential eutrophication impacts.	See Section 11.6 for details of the existing local air quality concentrations. Section 11.8 describes the air quality assessment undertaken which takes into account the mitigation that is embedded in the Scheme, including the **outline Construction Environmental Management Plan (oCEMP) [EN01041/DR/7.3]** and **outline Construction Traffic Management Plan (oCTMP) [EN01041/DR/7.4]** which are to be secured by the DCO. The screening assessments undertaken concluded that further detailed assessment, such as encompassing atmospheric dispersion modelling, were not required and hence absolute pollutant concentration changes have not been predicted.
	Section 5.2.10	In addition, applicants should consider the Environment Targets (Fine Particulate Matter) (England) Regulations 2022 and associated Defra guidance.	Consideration of the Defra interim planning guidance on the Environment Targets (Fine Particulate Matter) (England) Regulations 2022 is set out in **ES Vol 2 Appendix 11-4: Additional PM2.5 Assessment [EN010141/DR/6.2]**.
	Section 5.2.11	Defra publishes future national projections of air quality based on estimates of future levels of emissions, traffic, and vehicle fleet. Projections are updated as the evidence base changes and the applicant should ensure these are current at the point of an application.	The Defra published national projections of air quality are summarised in Section 11.6 and detailed in **ES Vol 2 Appendix 11-2: Baseline Air Quality Data [EN010141/DR/6.2].** These are current at the time of preparation of the ES.

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
		The applicant's assessment should be consistent with this but may include more detailed modelling and evaluation to demonstrate local and national impacts. If an applicant believes they have robust additional supporting evidence to the extent they could affect the conclusions of the assessment, they should include this in their representations to the Examining Authority along with the source.	
	Section 5.2.12	Where a proposed development is likely to lead to a breach of any relevant statutory air quality limits, objectives or targets, or affect the ability of a non-compliant area to achieve compliance within the timescales set out in the most recent relevant air quality plan/strategy at the time of the decision, the applicant should work with the relevant authorities to secure appropriate mitigation measures to ensure that those statutory limits, objectives or targets are not breached	The assessments as set out in Section 11.8 have not determined any likelihood that the Scheme would lead to a breach of any relevant statutory air quality limits, objectives or targets, or affect the ability of a non-compliant area. Specific mitigation measures to ensure that any statutory limits, objectives or targets are not breached are not required. However, the application is accompanied by an **outline Construction Environmental Management Plan (oCEMP) [EN01041/DR/7.3]** and **outline Construction Traffic Management Plan (oCTMP) [EN01041/DR/7.4]** which are to be secured by the DCO.
	Section 5.2.13	The Secretary of State should consider whether mitigation measures are needed both for operational and construction emissions over and above any which may form part of the project application. A construction management plan may help	No additional mitigation measures to those that form part of the application have been identified as being necessary.

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
		codify mitigation at this stage. In doing so the Secretary of State should have regard to the Air Quality Strategy in England, or the Clean Air Plan for Walesin Wales, or any successors to these and should consider relevant advice within Local Air Quality Management guidance and PM2.5 targets guidance.	
	Section 5.2.14	The mitigations identified in Section 5.14 on traffic and transport impacts will help mitigate the effects of air emissions from transport.	The application is accompanied by an **outline Construction Traffic Management Plan (oCTMP) [EN01041/DR/7.4]** which is to be secured by the DCO. The oCTMP has been considered in the assessment of potential vehicle emission impacts as set out in Section 11.8.
	Section 5.4	Deals with Biodiversity and Geological Conservation. Sets out the protection to be afforded to nature conservation sites and that the ES should set out any effects on internationally nationally and locally designated sites of ecological conservation importance, mitigation measures and the decision making process. There are no specific references to air quality within the section.	The air quality / dust assessment described in Section 11.8 of this chapter includes an assessment of potential impacts on nature conservation sites. The assessment takes into account mitigation that is embedded in the Scheme design, including the **outline CEMP [EN010141/DR/7.3]** and **outline CTMP [EN/010141/DR/7.4]** which are secured by the DCO**.**
	Section 5.7.1 and 5.7.2	During the construction, operation and decommissioning of energy infrastructure there is potential for the release of a range of emissions such as odour, dust, steam, smoke, artificial light and infestation of insects. All have the potential to have a detrimental impact on	Section 11.8 includes an assessment of potential amenity impacts that may arise from dust as a result of the Scheme, taking into account mitigation that is embedded in the Scheme design, including the **outline CEMP [EN010141/DR/7.3]** and **outline CTMP**

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
		amenity or cause a common law nuisance or statutory nuisance under Part III, Environmental Protection Act 1990. However, they are not regulated by the environmental permitting regime, so mitigation of these impacts will need to be included in the Development Consent Order. Note that pollution impacts from some of these emissions (for example dust, smoke) are covered in the Section 5.2 on air emissions.	**[EN010141/DR/7.4]** which are secured by the DCO.
NPS EN-3	Section 2.10	Deals with Solar Photovoltaic Generation; sets out criteria for good design and potential impacts including biodiversity, water management, landscape, visual and residential amenity.	*n/a – no specific sub-sections in relation to air quality and / or dust*
NPPF	Para. 187	Sets out that planning policies and decisions should prevent new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of air pollution. Development should, wherever possible, help to improve local environmental conditions such as air quality.	The risk of existing development being adversely impacted by unacceptable levels of air pollution arising from the proposals is assessed in Section 11.8 of this chapter.
	Para. 199	Sets out that planning policies and decisions should sustain and contribute to compliance with relevant limit values and national objectives for pollutants, taking into account AQMAs, Clean Air Zones, and cumulative impacts. Opportunities for air quality improvement or impact mitigation should be identified and considered when making planning decisions.	Section 11.8 includes an assessment regarding the baseline status of the local air quality environment, including presence of AQMAs (see Section 11.6), and impacts in compliance with relevant limit values or national objectives for pollutants.

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
		Development should be consistent with local Air Quality Action Plans.	
PPG	PPG-Air Quality[10]	Provides guiding principles on how planning can take account of the impact of new development on air quality. Includes what specific issues may need to be considered, detail of an air quality assessment and mitigation measures.	Section 11.8 includes an assessment regarding the baseline status of the local air quality environment and impacts that might occur as a result of the Scheme, taking into account mitigation that is embedded in the Scheme design, including the **outline CEMP [EN010141/DR/7.3]** and **outline CTMP [EN010141/DR/7.4]** which are secured by the DCO.

11.2.26 In addition, Defra is developing guidance for developers and planning authorities on how to consider the new legal air quality targets for $PM_{2.5}$ in planning decisions. A consultation on the new approach and guidance is expected to be published in 2025. In the meantime, Defra has issued interim guidance to provide developers and planning authorities with clarity on how to consider the new targets whilst the full guidance is under development[11].

11.2.27 The interim guidance sets out that whilst achievement of the targets will be assessed at relevant monitoring sites across the UK, the targets apply to ambient air across the UK. Applicants and Local Planning Authorities should therefore consider the impact of developments on air quality in all ambient air, whether or not a monitor is in place. The interim guidance sets out a series of questions to be used as prompts to support the interim process. This interim guidance is considered further in **ES Vol 2 Appendix 11-4: Additional PM2.5 Assessment [EN010141/DR/6.2].**

Local Policy

11.2.28 The Scheme lies within the administrative boundaries of Bedford Borough Council (BBC) and Huntingdonshire District Council (HDC), with HDC being

a two-tier authority with Cambridgeshire County Council (CCC). Planning policy of relevance to the assessment that has been considered includes:

- Bedford Borough Local Plan 2030[12]; and
- Huntingdonshire Local Plan to 2036[13].

11.2.29 Local planning policies from the above documents that are relevant to air quality are summarised in Table 11.5.

Table 11.5: Summary of Local Planning Policy

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
Bedford Borough Local Plan 2030	Policy 32	Development applications should consider pollution likely to be generated. Developers will be required to implement, or contribute towards, mitigation measures of adverse impacts.	The potential air quality impacts that might occur as a result of the Scheme are assessed in Section 11.8 of this chapter**.** The assessment takes into account mitigation that is embedded in the Scheme design, including the **outline CEMP [EN010141/DR/7.3]** and **outline CTMP [EN010141/DR/7.4].**
	Policy 47S	All developments must be locationally appropriate, prevent significant emissions, and reduce air pollution impacts as far as reasonably practicable.	Section 11.8 of this chapter sets out an assessment regarding the baseline status of the local air quality environment and impacts that might occur as a result of the Scheme, taking into account mitigation that is embedded in the Scheme design, including the **outline CEMP [EN010141/DR/7.3]** and **outline CTMP [EN010141/DR/7.4].**
	Policy 88	Applications must demonstrate that the effect of development traffic has been considered in terms of the impacts on AQMAs and air quality.	Section 11.8 of this chapter includes an assessment regarding the baseline status of the local air quality environment, including presence of AQMAs, and

Document	Policy / Paragraph Reference	Summary of Policy / Paragraph	Where addressed in the ES?
			impacts in compliance with relevant limit values or national objectives for pollutants.
Huntingdonshire Local Plan to 2036	Policy LP 14	New development is supported where it provides a high standard of amenity for Site users, maintains amenity for neighbouring users, and has no unacceptable adverse impacts on air pollution levels.	Section 11.8 of this chapter includes an assessment of potential impacts on local air quality.
	Policy LP 36	Sets out when an air quality assessment is required, what it should assess, and when a low emissions strategy is required.	The Scheme forms a 'large scale' major development and an air quality assessment is set out in Section 11.8 of this chapter.

Guidance

11.2.30 The IAQM Planning for Air Quality (January 2017)[14] document provides specific non-statutory guidance on air quality and the planning system for new development. The guidance clarifies when an air quality assessment is required, what it should contain and how impacts should be described and assessed. The guidance sets out a recommended approach to assess the significance of the air quality impacts and sets out suggested approaches to reducing emissions and impacts.

11.2.31 The IAQM Guidance on the Assessment of Dust from Demolition and Construction (January 2024)[15] document provides specific non-statutory guidance in relation to dust and emissions from construction and demolition.

11.2.32 The IAQM Guidance on Air Quality Impacts on Designated Nature Conservation Sites (June 2019)[5] document provides specific non-statutory guidance on thresholds used by regulators to conclude that air quality impacts will not have a significant effect, and how to determine the significance of air

quality impacts and effects on protected wildlife sites when thresholds are exceeded.

11.2.33 The detailed methodology followed in undertaking the air quality assessment is set out in **ES Vol 2 Appendix 11-1: Air Quality Assessment Methodology [EN010141/DR/6.2]**. The methodology follows the frameworks describes in the above guidance documents.

11.2.34 The Highways England Design Manual for Roads and Bridges (LA 105, June 2024)[16] sets out the requirements for assessing and reporting the effects of highway projects on air quality. This document is not directly relevant to the proposals but is referred to in order to inform the approach to the air quality assessment methodology.

11.3 Consultation and Engagement

Scoping

11.3.1 Scoping of this air quality assessment was undertaken as part of a wider EIA scoping exercise, the findings of which were recorded in **ES Vol 2 Appendix 4-1: EIA Scoping Report [EN010141/DR/6.2]** that was submitted in October 2023.

11.3.2 A Scoping Opinion was received in December 2023 as presented in **ES Vol 2 Appendix 4-2: EIA Scoping Opinion [EN010141/DR/6.2]**. The feedback received from PINS and stakeholders within the Scoping Opinion has been reviewed and the points relating to this chapter are summarised in Table 11.6 below.

Table 11.6: Scoping responses with respect to air quality

Consultee	Summary of Comments	Response
PINS	**3.2.2:** The Applicant proposes to scope out construction, operational and decommissioning effects of the Proposed Development on national statutory designated sites on the basis that embedded avoidance and mitigation measures proposed would prevent significant effects on the sites or associated qualifying features. Figure 8.1 indicates that there are several national designated sites within the established 5km ZOI. In the absence of information detailing the avoidance and mitigation measures proposed, the Inspectorate considers that the ES should provide an assessment of the potential effects of the Proposed Development on all national designated sites located within 5km of the DCO boundary or provide a justification as to the absence of LSE including evidence of agreement with relevant consultation bodies.	Assessment of any national statutory designated sites within relevant Air Quality Study Areas is included where applicable in relation to construction, operational and decommissioning effects; none have been identified as set out in Section 11.6.

Consultee	Summary of Comments	Response
PINS	**3.2.3:** The Applicant proposes to scope out construction, operational and decommissioning effects of the Proposed Development on non-statutory designated sites on the basis that embedded avoidance and mitigation measures proposed would not lead to significant effects on the sites or associated qualifying features. In the absence of information detailing the avoidance and mitigation measures proposed, the ES should provide an assessment of the potential effects of the Proposed Development on all non-statutory designated sites located within 2km of the site or provide evidence to demonstrate the absence of LSE including agreement with relevant consultation bodies.	Assessment of any non-statutory designated sites within relevant Air Quality Study Areas is included where applicable in relation to construction, operational and decommissioning effects as set out in Section 11.8.
PINS	**3.10.1:** The Inspectorate does not agree that emissions from NRMM can be scoped out as no information has been provided on the type, number and location of such machinery within the Proposed Development site. In the absence of information such as evidence demonstrating clear agreement with relevant statutory bodies, the Inspectorate is not in a position to agree to scope this matter from the assessment. Accordingly, the ES should include an assessment of this matter, or the information referred to demonstrating agreement with the relevant consultation bodies and the absence of LSE.	Assessment of possible effects associated with NRMM emissions included within Section 11.8 of this chapter.
PINS	**3.10.2:** The Inspectorate agrees that operational vehicle emissions may be scoped out from further assessment, subject to the description of development demonstrating that vehicle numbers are sufficiently low as to not trigger the thresholds for an air quality assessment.	Vehicle movements to / from the Site during the operational phase would be well below relevant screening thresholds as set out in Section 11.8 of this chapter.

Consultee	Summary of Comments	Response
PINS	**3.10.3:** The Inspectorate agrees that once operational, the Proposed Development is unlikely to result in significant air quality effects as the components of the Proposed Development do not generate dust emissions. The Inspectorate agrees that this matter can be scoped out of further assessment on this basis.	No assessment provided.
PINS	**3.10.4:** The Scoping Report states that potential air quality effects during decommissioning are anticipated to be of lesser magnitude than the construction phase and proposes to scope this matter out. However, limited details regarding the potential decommissioning activities have been provided in the Scoping Report. In the absence of information such as evidence demonstrating that decommissioning activities would not result in dust and on-road exhaust emission effects greater than construction or clear agreement with relevant statutory bodies, the Inspectorate is not in a position to agree to scope these matters from the assessment. Accordingly, the ES should include an assessment of these matters or provide information demonstrating agreement with the relevant consultation bodies and the absence of LSE.	Assessment of possible effects associated with dust and on-road and NRMM emissions associated with the decommissioning phase included within Section 11.8 of this chapter.
PINS	**3.10.5:** As stated in ID 3.10.2 to 3.10.4 above, additional information is required from the Applicant to confirm that there will not be significant effects in the operational and decommissioning phases. The ES should provide information on the cumulative nature of traffic movements with other developments during the operational and decommissioning phases and confirm these projections fall below the relevant thresholds set out in guidance. In the absence of this information, the Inspectorate is not a position to	An assessment of cumulative effects with other projects is provided in **ES Volume 1 Chapter 17: Cumulative and In-Combination Effects [EN010141/DR/6.1].**

Consultee	Summary of Comments	Response
	scope these matters out at this stage. Accordingly, the ES should include an assessment of these matters or provide information demonstrating agreement with the relevant consultation bodies and the absence of LSE.	
PINS	**3.10.6:** The Inspectorate notes that it is intended for the study area relating to vehicle exhaust emissions to account for receptors within 200m of the access/ egress points off the public highway. However, the Inspectorate notes that it is intended for the Proposed Development to utilise a temporary haul road through the site. The Inspectorate is of the view that this haul road should also be considered with regards to construction vehicle emissions, and any potential receptors located within 200m of the haul road should be included in the assessment.	Assessment has included consideration of construction phase vehicle movements within the Site along internal access roads as set out in Section 11.8.
PINS	**3.10.7:** The Scoping Report states that ambient air quality monitoring is not considered necessary to inform the air quality assessment in the ES but is subject to review and confirmation. Efforts should be made to reach agreement regarding the requirement and extent of air quality monitoring with the relevant Local Planning Authorities.	Available existing background data has been summarised within Section 11.6 and included in detail in **ES Vol 2 Appendix 11-2: Baseline Air Quality Data [EN010141/DR/6.2].** Air quality monitoring has been discussed with the local planning authority and it was agreed that additional monitoring was not required.
PINS	**3.10.8:** The ES should be accompanied by an appropriate plan illustrating the location of sensitive air quality receptors within the vicinity of the Proposed Development to aid understanding of the extent of effects.	Plans of sensitive air quality receptors within the Air Quality Study Areas is provided with figures accompanying the ES (**ES Vol 3 Figure 11-1: Construction Dust Study Area [EN010141/DR/6.3]** and **ES Vol 3 Figure 11-2: On-Road Vehicle Emissions Study Area [EN010141/DR/6.3].**
PINS	**3.10.9:** Paragraph 16.6.2 of the Scoping Report sets out the factors that will be considered in order to determine whether a predicted effect is significant. However, the Scoping Report does not refer to	Methodology for assessing significance of air quality effects is provided in the ES as set out in Section 11.4 and **ES Vol 2 Appendix 11-1: Air Quality**

Consultee	Summary of Comments	Response
	any guidance regarding assessing significance of air quality effects. The ES should explain how air quality impacts have been identified and the methodology that will be used to determine the significance of effects, including reference to any relevant guidance. Any use of professional judgement to assess significance should be fully justified within the ES.	**Assessment Methodology [EN010141/DR/6.2**].

11.3.3 Following receipt of the scoping opinion, the Applicant engaged with the host authorities to agree matters relevant to the air quality assessment.

11.3.4 Under the terms of a Planning Performance Agreement (PPA) between the Applicant, Bedford Borough Council (BBC), Huntingdonshire District Council (HDC) and Cambridgeshire County Council (CCC), the Councils have a memorandum of understanding that the Environmental Protection Officer (EPO) at HDC can act on behalf of each Council as a 'single voice' with regards the Scheme.

11.3.5 A meeting was therefore held in March 2024 where the following matters were agreed:

- the construction phase vehicle movements would be reviewed with respect to numbers, duration, routing and location of receptors and background air quality. If further detailed assessment was considered necessary requiring atmospheric dispersion modelling the scope would be set out and agreed in advance with the Officer;
- it was agreed ambient air quality monitoring was not required to inform the assessment; and
- it was considered that if the construction dust assessment concluded that baseline dust monitoring was considered necessary this could be carried out prior to the works commencing under a DCO Requirement. This is discussed further in Section 11.9.

Statutory Consultation

11.3.6 Statutory consultation on the Scheme took place between September 2024 and October 2024. This included consultation on the Preliminary Environmental Information Report (PEIR) which contained a preliminary assessment of air quality effects. The feedback received from statutory consultees is summarised within Table 11.7.

Table 11.7: PEIR consultation responses with respect to air quality

Consultee	Summary of Comments	Response
BBC	1.The air quality assessment methodology is acceptable and in accordance with IAQM guidance. 2. It is acknowledged that further consideration of vehicle emissions encompassing atmospheric dispersion modelling is not required. 3. It is acknowledged that the proposal is unlikely to cause an exceedance of any Air Quality Objective. 4. The Host Authorities agree that further work is required in relation to air quality assessment.	Further work in relation to air quality assessment has been presented within this chapter, as set out below.
	5. BBC agree that there is very low potential for significant environmental effect on air quality to occur in the Operational Phase of the Development (excluding the Operational Phase – Replacement), therefore, only the construction and decommissioning phases have been considered.	Assessment has included construction and decommissioning phases as set out in Section 11.8; operational phase has been scoped out as set out in Section 11.4.
	6. PEIR Chapter 11 (Air Quality) states further assessment will be completed prior to submission of any future Application made, and will include: a) Refinement of the Construction Phase dust assessment through further detailed review of specific activities and locations within the Site;	The air quality assessment presented in the PEIR has been refined for the assessment in this chapter, including: a) Construction phase dust assessment has been refined through review of set-back distances of proposed working areas to the Order Limits, including areas where proposed solar development has been removed as shown on **ES Vol 3 Figure 3-3:**

Consultee	Summary of Comments	Response
	b) Refinement of the Construction Phase vehicle emissions assessment in relation to movements both within the Site and on the wider road-network; c) Refinement of the assessment of Non-Road Mobile Machinery (NRMM) and on-site plant emissions through review of quantity, operating locations and duration of operation; d) Refinement of the cumulative assessment of dust, on-road vehicles, NRMM and on-site plant emissions and impacts; e) Provision of additional assessment with regards the Decommissioning Phase; f) Development of a proposed dust monitoring plan for during the Construction Phase; and, BBC would expect these to be reviewed and approved by the relevant body prior to permission being granted.	**Indicative Zoning Plan [EN010141/DR/6.3]**; b) Construction phase vehicle emissions assessment has been refined through detailed review of predicted movements on internal haulage routes within the Site and on the wider road network; c) NRMM and on-site plant assessment has been refined through review of set-back distances of proposed working areas to the Order Limits, including areas where proposed solar development has been removed as shown on **ES Vol 3 Figure 3-3: Indicative Zoning Plan [EN010141/DR/6.3]**; d) additional cumulative assessment of dust, on-road vehicle emissions, NRMM and on-site plant emissions and impacts has been provided; e) additional assessment with decommissioning phase has been provided through review of potential decommissioning works, likely dust generating potential and set-back distance of working areas from Order Limits; f).An outline Dust Management Plan (including monitoring requirements) for the construction phase has been provided as Appendix A of the **outline Construction Environmental Management Plan [EN010141/DR/7.3]**.
	7. Notwithstanding the comment made by the Promotor regarding 'very low potential for significant environmental effect on air quality to occur in the operational phase' it is specifically noted that, while BESS fires are rare, should they occur, they can have a significant effect on the public health of the surrounding community in terms of release of toxic fumes into the air for a prolonged period of time […]. It is therefore noted that this low	A separate air quality assessment of unplanned emissions from an accidental BESS fire during the operation and maintenance phase of the Scheme is provided as an Appendix to the oBSMP **[EN010141/DR/7.10]**

Consultee	Summary of Comments	Response
	probability/ significant effect should be addressed in the Promotor's submission.	
HDC	This chapter has been reviewed by HDC's Environmental Health Officer who has the following comments to make: "The air quality assessment methodology is acceptable and in accordance with IAQM guidance. It is acknowledged that further consideration of vehicle emissions encompassing atmospheric dispersion modelling is not required. It is acknowledged that the proposal is unlikely to cause an exceedance of any Air Quality Objective. We agree with the further work required in relation to air quality assessment."	See rows above for consultation responses from BBC
CCC	The Council is not the statutory consultee for this subject area and so would expect the promoter to consult HDC and BBC on this matter regarding the site and any associated infrastructure that falls within the relevant council's boundary. CCC defers to HDC and BBC for a detailed response.	See rows above for consultation responses from BBC and HDC

11.4 Assessment Methodology

Scope of Assessment

11.4.1 The scope of the assessment was based on consideration of the Scheme and likely effects on the local environment as set out in the scoping report[17]. As set out in the scoping report the following matters have been considered in the assessment:

- **Dust:** potential effects of deposition dust and suspended particulate matter (PM_{10} and $PM_{2.5}$) arising during construction and decommissioning activities; and
- **On-road vehicle exhaust emissions:** potential effects of vehicle exhaust emissions arising from traffic generated during construction and decommissioning phases;
- **Non-road mobile machinery (NRMM) and combustion plant exhaust emissions:** potential effects of exhaust emissions arising from machinery and plant used during the construction and decommissioning phases.

11.4.2 In undertaking this assessment, the following activities have been carried out:

- Visit to view the Site, surrounding environs and local road network;
- Review of baseline local air quality data;
- Review of local wind speed and direction data;
- Identification of potentially sensitive human and ecological receptors;
- Review of Scheme information including layout, phasing, proposed activities and traffic movements and routing;
- Review of in-design mitigation measures incorporated within the Site layout and design;
- Qualitative construction and decommissioning dust assessment;
- Qualitative screening assessment of on-road vehicle movements during the construction and decommissioning phases;
- Qualitative screening assessment of on-site NRMM and plant use during the construction and decommissioning phases;

- Overall assessment of potential impacts on human and ecological receptors and significance of effects; and
- Provision of recommendations for additional mitigation measures and assessment of residual effects.

Scoped Out Matters

11.4.3 Due to the nature of the Scheme no emissions that may impact local air quality are anticipated from the on-site infrastructure.

11.4.4 With regards to on-road vehicle movements NPS EN-3 paragraphs 2.10.161 and 2.10.162 states that:

> *Once solar farms are in operation, traffic movements to and from the site are generally very light, in some instances as little as a few visits each month by a light commercial vehicle or car. Should there be a need to replace machine components, this may generate heavier commercial vehicle movements, but these are likely to be infrequent.*
>
> *The Secretary of State is unlikely to give may more than limited weight to traffic or transport noise and vibration impacts from the operational phase of a project.*

11.4.5 As detailed in **ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1]** it is anticipated there would be around 20 Full-Time Equivalent (FTE) staff on-site at any one time during the operational phase. There will also be a small number of visitor trips per week for deliveries and servicing of equipment. Staff and maintenance vehicles will primarily be four-wheel drive vehicles or vans with the requirement for Heavy Goods Vehicle (HGV) access to the Site during the operational phase being rare. As such any vehicle movements to / from the Scheme during the operational phase would be low and well below relevant IAQM screening thresholds.

11.4.6 Further assessment of air quality impacts during the operational phase has therefore been **scoped out** of the ES. This approach was confirmed by the Planning Inspectorate in the scoping opinion as detailed in Table 11.6.

11.4.7 However, as noted above a separate air quality assessment of unplanned emissions from an accidental Battery Energy Storage System (BESS) fire during the operation and maintenance of the Scheme has been undertaken. This is provided as an appendix to the **outline Battery Safety Management Plan (oBSMP) [EN010141/DR/7.10]**.

11.4.8 The assessment has been undertaken using an atmospheric dispersion model (ADMS-6) to determine the determine the likely effects on human health from a potential BESS fire. Given a potential BESS fire would be a relatively short-term incident, the assessment compares predicted concentrations against Acute Exposure Guidance Levels (AEGLs), which have higher threshold concentrations than the national air quality objectives discussed above in Section 11.2 and are relevant to short term releases. In addition, a high-level visibility assessment has also been undertaken using the modelled particulates results to determine the effect of BESS fire emissions on visibility on the local road network.

11.4.9 The assessment concludes that based on the factors of distance to the nearest locations of human exposure and the anticipated short-term nature of a fire incident, there would be no significant air quality effects as a result of a BESS fire incident. Full details of the assessment methodology, findings, proposed mitigation measures and conclusions are provided in the oBSMP and are not discussed further in this Chapter.

Surveys and Information Sources

11.4.10 The baseline data has been gathered through a desktop study and site visit. The principal sources of information consulted in the preparation of this report include:

Table 11.8: Information Sources

Reference	Author and Source	Purpose and Content
Background and Topographical Information		
Promap	Ordnance Survey	General mapping information including topographic data,

Reference	Author and Source	Purpose and Content
Background and Topographical Information		
		ground features, rights of way, communications etc
Aerial satellite imagery	Aerial photography (various)	Site setting
www.magic.gov.uk	Multi-agency	Web-based interactive map containing information on nature conservation sites
Air Quality Information		
Bedford Borough Council 2024 Air Quality Annual Status Report, August 2024[18], *and previous reports*	Bedford Borough Council	Update of local authority air quality monitoring and assessment in fulfilment of LAQM requirements; includes data until the end of 2023
Huntingdonshire District Council 2025 Air Quality Annual Status Report, June 2025[19], *and previous reports*	Huntingdonshire District Council	Update of local authority air quality monitoring and assessment in fulfilment of LAQM requirements; includes data until the end of 2024
www.uk-air.defra.gov.uk	Defra	Local authority air quality management support; background pollutant maps; details and maps of AQMAs

All websites were viewed during July 2025 unless stated otherwise.

1: At the time of preparation of this chapter the BBC 2024, HDC 2025, and CBC 2025 Air Quality Annual Status Reports ('ASRs') were the most up-to-date made available

11.4.11 The traffic data used within this chapter has been provided by the project Transport Consultants, Axis.

11.4.12 Ecological information referred to within this chapter has been provided by the project ecological consultants, Avian Ecology.

Site Inspection

11.4.13 A walkover of accessible areas of the Site and surrounding areas (confined to roads and public rights of way) was undertaken by an environmental consultant on 8th February 2024.

Assessment Methodologies

11.4.14 Potential air quality impacts that may arise from the Scheme could be changes in airborne concentrations and / or dust deposition. Resulting effects would be the consequence of such impacts. Such effects may be annoyance due to soiling, increased morbidity or mortality due to exposure to increased pollutant concentrations, plant dieback due to reduced photosynthesis or ecological damage due to nutrient enrichment.

11.4.15 The assessment of potential pollutant impacts uses the source-pathway-receptor concept and considers the potential magnitude of a release (the source potential), the effectiveness of the pathway (i.e. dispersion of a pollutant towards a receptor), and the sensitivity of the receptor.

11.4.16 The assessment considers the location of the Scheme, and associated transport routes in relation to sensitive receptors, and the control measures to be implemented, to assess the probability of significant adverse air quality impacts, and subsequent adverse effects, occurring during normal operations. Consideration is made of the orientation and distance of receptors to the Site and the prevailing weather conditions.

11.4.17 The assessment methodologies are summarised below. Full details are provided in **ES Vol 2 Appendix 11-1: Air Quality Assessment Methodologies [EN010141/DR/6.2]**.

Construction and Decommissioning Phases

Dust Assessment

11.4.18 The assessment of potential impacts and effects associated with fugitive dust arising from the construction and decommissioning phases has been

undertaken in accordance with an approach based on the IAQM guidance in relation to construction dust[5]. This sets out methodologies for assessing the potential risk of impacts from dust soiling and increased ambient PM_{10} concentrations arising from construction activities; provides recommended mitigation measures for different scale developments; and outlines approaches to assessing the overall significance of effects.

11.4.19 The IAQM methodology assesses the potential risks of impacts occurring in the absence of mitigation to then determine the level of site-specific mitigation that should be employed to ensure there are no resulting significant effects. The assessment has therefore informed the **outline Construction Environmental Management Plan (oCEMP) [EN010141/DR/7.3]** which is provided with this application for development consent. The oCEMP includes appropriate dust management and monitoring measures to be employed based on the recommendations of the IAQM guidance, including an outline Dust Management Plan at Appendix A of the oCEMP. If the DCO is granted, the oCEMP will be developed into a final Construction Environmental Management Plan (CEMP) once a contractor is appointed. The final CEMP will be in substantial accordance with this oCEMP (as set out in a Requirement of the **draft DCO [EN010141/DR/3.1]**) and approval by the LPAs prior to construction.

On-Road Vehicle Emissions Assessment

11.4.20 The vehicle exhaust emissions assessment has been undertaken through reference to the IAQM guidance on air quality and planning[4] and nature conservation sites[6]. The level of assessment was determined through an initial screening review taking into account the predicted number of vehicle movements associated with the proposed operations, the consequent changes in traffic flows along the local road network and the locations of sensitive receptors.

NRMM Assessment

11.4.21 The NRMM Assessment (including on-site plant) has been undertaken through reference to the IAQM guidance on air quality, planning, construction and nature conservation sites. The level of assessment was determined through an initial screening review taking into account the predicted number and locations of NRMM and on-site plant to be used during the construction phase.

$PM_{2.5}$ Assessment

11.4.22 In light of the interim planning guidance issued by Defra on $PM_{2.5}$ further information has been provided in **ES Volume 2 Appendix 11-4**: **Additional $PM_{2.5}$ Assessment [EN010141/DR/6.2.** This sets out responses to the series of questions provide in the interim guidance.

Receptors

11.4.23 Receptors considered in this assessment comprise:

- **human receptors:** locations where a person or property may experience adverse impacts of airborne dust or exposure to ambient pollution (e.g. residential, leisure, amenity and sensitive commercial use); and
- **ecological receptors**: where this refers to any sensitive habitat that may be affected by dust soiling or increased ambient pollution (e.g. locations with an international, national or local designation and sensitive habitat features).

11.4.24 The sensitivity of the receptors to potential impacts from aerial emissions, whether changes in pollutant concentrations or dust soiling, has been determined as detailed in the relevant guidance described below.

Study Area

11.4.25 The study area includes features likely to be at risk from possible direct and indirect impacts that may arise from the Scheme. Different study areas are adopted for different sources of aerial emissions due to the differing spatial extents at which likely significant effects could potentially arise.

11.4.26 As detailed in **ES Vol 1 Chapter 2: The Scheme [EN010141/DR/6.1]**, the principal development and construction areas would be the solar development area across East Park Site A to Site D. Construction works would also be required to provide the cable route corridors between these areas and the grid connection from Site D to the Eaton Socon substation. To enable construction of the Scheme, upgrading of existing tracks / access roads along with construction of new tracks and crossing points over drainage ditches would be required.

11.4.27 Access would be gained to the construction areas via the B645 Kimbolton Road off the A1 to the north-west of St Neots at Eaton Socon. The main construction compound would be sited in East Park Site D. The main site access is to be provided off the B645 to Site D where the main construction compound would be sited. Satellite compounds would be sited in East Park Sites A, B and C which would be accessed via existing tracks, new temporary access roads and short stretches of the public highway. The wider parts of Sites A, B, C and D would then be accessed from these compounds by a network of tracks. The Order Limits include the access points off the public highway and the internal access roads to the construction areas.

11.4.28 The study areas for this assessment are summarised below and illustrated on **ES Vol 3 Figures 11-1, 11-2 and 11-3 [EN010141/DR/6.3]**.

Dust Assessment

11.4.29 The dust assessment study area has been defined as follows:

- 250m from the Order Limits (used to define the area within which construction works could occur); and / or,

- 50m from edges of roads used for construction traffic, up to 250m from any points of exit from construction works onto the local road network.

11.4.30 This follows the methodology of the most recent IAQM Guidance[5] which was published in January 2024. This varies to that provided in the scoping report which was based on an earlier version of the IAQM Guidance[20]. The previous guidance referred to a screening distance of 350m from an area where construction works could occur and the point of exit from construction works onto the local road network. Use of the most up to date published guidance is considered appropriate as the screening distances are designed to be conservative. This was also the approach taken for the preliminary environmental information report.

On-Road Vehicle Emissions

11.4.31 IAQM guidance on planning and air quality assessments does not provide assessment distances in relation to vehicle exhaust emissions. However, pollution concentrations fall rapidly away from the roadside and are expected to return to background levels within 100m of a roadside. For the purposes of the assessment reference is made to Highways England (HE) (now National Highways) Design Manual for Roads and Bridges guidance[22] which requires assessment of receptors within 200m of affected roads. The vehicle emissions study area therefore extends up to 200m from the Order Limits and edges of off-site roads to be used by vehicles accessing the Site during the construction phase.

11.4.32 The impact from vehicles accessing the Site during the construction phase would largely be experienced on the B645 between the A1 and the main site access. There are also some isolated locations where the temporary internal access road crosses or utilises short sections of the local highway network. Movements would also be experienced within the Site itself, primarily between the main construction compound in Site D and the satellite compounds in Sites, A, B and C.

11.4.33 The study area for vehicle emissions therefore extends to within 200m of:

- Order Limits;
- B645 from the main site access to the A1;
- Stretches of public highway to be used as part of internal access road from Site C to Site B (Great Staughton Road) and from Site B to Site A (B660);
- A1 northbound slip roads / B645 Kimbolton junction;
- A1 southbound slip roads / B645 Crosshall Road mini roundabout junction.

NRMM

11.4.34 There is no specific guidance on the assessment of NRMM or assessment distances. As for on-road vehicles pollution concentrations would fall rapidly away from the source and a 200m assessment distance would be appropriate. The NRMM study area therefore extends up to 200m from the Order Limits and edges of off-site roads to be used by construction plant accessing the Site during the construction phase.

Assessment of Significance / Significance Criteria

11.4.35 The resulting effects of aerial emissions are the consequences of the potential impacts, i.e. changes in pollutant concentrations and / or deposition, at receptors. IAQM guidelines do not provide a traditional matrix assessment of significant effects with regards to air quality. The frameworks outlined in the guidance above provide methodologies for describing air quality impacts at receptors for each aspect i.e. vehicle emissions and dust. These frameworks are therefore used as a starting point to assess the significance of predicted effects as set out in **ES Vol 2 Appendix 11-1: Air Quality Assessment Methodologies [EN010141/DR/6.2]**.

11.4.36 However, whilst the starting point of the assessment of the significance is the degree of impact it is only one of the factors for consideration. The judgement of whether an impact would have an effect that is significant or not significant in EIA terms takes into account multiple factors and the IAQM guidance avoids the use of prescriptive approaches. Where negligible impacts are predicted, the overall effects will be not significant. In general, where slight

impacts at receptors are predicted the resulting effects would be considered to be not significant. Moderate and substantial impacts could result in significant effects. However, the judgement of the overall significance of the air quality effects of the proposals is informed by the predicted impacts at individual receptors and takes into account a number of factors, such as, but not limited to:

- The existing and future air quality in the absence of the Scheme;
- The extent of current and future population exposure to the impacts and the severity of those impacts, whether in relation to ambient pollutant concentrations or dust soiling;
- Whether the predicted impacts potentially result in failure to achieve compliance, or enhance compliance, with relevant AQALs and national and / or local air quality action plans;
- Whether the predicted impacts potentially result in the need for declaration of a new or extended AQMA, or removal of an existing AQMA;
- Whether the predicted impacts potentially result in permanent or temporary damage or improvements to nature conservation sites of local, national or international importance and the geographical extent of those impacts; and
- The influence and validity of any assumptions adopted when undertaking the prediction of impacts.

11.5 Assumptions and Limitations

11.5.1 Baseline air quality data has been obtained through a review of existing information. Some recent HDC and BBC monitoring data is available for the immediate locality and which has been referred to. Further reference has been made to predicted background information provided by Defra. The Defra data was last updated in November 2024 and is based on 2021 monitoring and modelling and predicted UK fleet composition and vehicle exhaust emissions factors. It provides the most up to date available data and predictions of current and future background pollutant concentrations. This data does not however take into account the implications of the COVID-19 pandemic and possible long-term impacts on travel movements[1].

11.5.2 In the absence of any identified local air quality concerns and the site setting the Defra data is considered appropriate for this Site and assessment.

[1] *COVID-19: Following the outbreak of a global pandemic of the Coronavirus disease 2019 (COVID-19) due to the SAR-CoV-2 virus, the UK Government declared several restrictions on non-essential travel and movement from 23rd March 2020 onwards.*

11.6 Baseline Conditions

Site Context

11.6.1 The key aspects of the Site's context which are of relevance to this assessment are summarised as follows.

11.6.2 Settlement surrounding the Site comprises a number of villages, including Pertenhall and Great Staughton to the north, Little Staughton and Keysoe to the south, Swineshead to the west, and Hail Weston to the east.

11.6.3 The residential properties and other sensitive human receptors within these villages, along with other scattered properties, lie within the study areas, as illustrated on **ES Vol 3 Figures 11-1 and 11-2 [EN010141/DR/6.3]**. Residential development of the town of St Neots lies within 500m of the Eaton Socon substation and proposed grid connection, beyond the A1.

11.6.4 Two existing solar farms lie within the study areas; one is encircled by East Park Site A and one lies 100m to the south of Site D.

11.6.5 No high occupancy sensitive receptors have been identified within the study areas although the grounds of Great Staughton Primary School, Great Staughton, and Bushmead Primary School, St Neots, extend to 230m to the north and 275m to the east of the Order Limits respectively.

11.6.6 There are a number of Public Rights of Way (PRoW) which either cross the Site or pass close to the Order Limits.

11.6.7 Access is to be gained to the Site via the B645 from the A1 to the east. Residential properties and the Crosshall Schools, comprising a nursery school, an infant's school, and a junior school, lie within 500m of the A1 and associated slip roads at this junction.

11.6.8 The main site access is to be provided into East Park Site D off the B645. Settlement and scattered residential properties lie along this stretch of the B645 to the A1/B645 junction, including the village of Hail Weston to the north.

Further access points are to be provided to both the temporary internal access road and the wider network of tracks serving each part of the Site. Settlements and scattered residential properties lie off this network of public highway and tracks.

Nature Conservation Sites

11.6.9 No statutory designated nature conservation sites have been identified within the study areas.

11.6.10 Several non-statutory nature conservation sites have been identified within the study areas. These are listed in Table 11.9 below and shown in **ES Vol 3 Figures 11-1 and 11-2 [EN010141/DR/6.2]**.

Table 11.9: Nature Conservation Sites within air quality study areas

Name	Designation	Shortest distance and orientation from Order Limits
Statutory Sites		
none		
Non-Statutory Sites		
Kangaroo Meadow	County Wildlife Site	0m; shares boundary
Huntingdon Wood	Ancient Woodland, County Wildlife Site	30m south
High Wood	Ancient Woodland, County Wildlife Site	150m south

11.6.11 For full information on these sites reference should be made to **ES Vol 1 Chapter 7: Ecology and Nature Conservation [EN010141/DR/6.1]**.

Background Air Quality

11.6.12 Information on background air quality has been obtained through a review of Defra air quality data, and local authority annual air quality reports and monitoring data. Full details are provided in **ES Vol 2 Appendix 11-2: Baseline Air Quality Data [EN010141/DR/6.2]** and are summarised below.

Air Quality Management Areas (AQMAs)

11.6.13 There are no declared AQMAs within the study areas. Historically an AQMA had been declared by HDC, the St Neots AQMA (AQMA 2 St Neots), within St Neots town centre about 1.93km to the east of the Scheme. As access to the Site will be via the B645 off the A1 to the north-west of St Neots, this former AQMA is distant from the potentially impacted local highway. The location of the former AQMA in relation to the Scheme is shown in **ES Volume 3 Figure 11-2 [EN010141/DR/6.3]**. HDC revoked the St Neots AQMA in 2024 due to on-going compliance with the long-term NO_2 AQO as detailed in the 2025 Air Quality Annual Status Report (ASR)[26].

11.6.14 All other AQMAs declared by HDC and BBC are distant from the Site and local road network.

Local Air Quality Monitoring Data

11.6.15 HDC and BBC each undertake a combination of automatic (real-time) and non-automatic (passive) ambient air quality monitoring across their areas.

Automatic (Real-Time) Monitoring

11.6.16 Neither council carries out any automatic monitoring within the study areas. Automatic monitoring is carried out within the towns of Bedford (by BBC) and Huntingdon (by HDC), both distant from the Scheme. These locations are all 'roadside' locations and are not considered to provide background information on the wider local ambient air quality of relevance to the Scheme.

Non-Automatic Monitoring

11.6.17 HDC undertakes non-automatic monitoring for NO_2 using passive diffusion tubes at two locations within (at St Neots 9) and close (at St Neots 10) to the Study Area. These are both located within Eaton Socon to the east of the A1 as shown in **ES Vol 3 Figure 11-2 [EN010141/DR/6.3]**. Annual mean NO_2 concentrations at these two locations have been in the range 13.5-24.7 µg/m^3 over the 2018-2024 period, remaining well below the relevant UK AQO of 40 µg/m^3. Full results over this period are presented in **ES Vol 2 Appendix 11-2: Baseline Air Quality Data [EN010141/DR/6.2]**.

11.6.18 Information is also provided for monitoring data at locations further afield within St Neots, including within the AQMA, in **ES Vol 2 Appendix 11-2: Baseline Air Quality Data [EN010141/DR/6.2]** to provide background information on local air quality. All annual mean NO_2 concentrations at these locations have remained well below the UK AQO in the range 9.9-28.8 µg/m^3 over the 2018-2024 period.

11.6.19 HDC and BBC also both undertake monitoring for NO_2 using diffusion tubes at several locations in the vicinity of the A1 to the north and south of the junction with the B645. Although outside the study areas these have been referred to in order to provide background information on local air quality. Full details and results are provided in **ES Volume 2 Appendix 11-2: Baseline Air Quality Data [EN010141/DR/6.2]**. Annual mean NO_2 concentrations at these locations have also remained well below the UK AQO over the 2018-2024 period, in the range 9.4-25.7 µg/m^3.

11.6.20 The monitored concentrations have generally been consistent with expectations and national trends. A predominantly year-on-year reduction in NO_2 was experienced up until 2019. A dip was then experienced in 2020 due to control measures associated with COVID-19, with overall concentrations then slightly increasing in 2021 and 2022 due to increasing traffic movements following the removal of COVID-19 travel restrictions. However,

concentrations remained lower than pre-Covid levels. Concentrations in 2023 were typically lower than 2022 levels.

11.6.21 The long-term implications of the pandemic on behavioural changes and resulting traffic movements are presently unknown. However, indications are that roadside NO_2 and NO_x concentrations will continue to decrease and it is considered unlikely that the majority of UK roadside locations are likely to experience concentrations above those experienced in 2019 at any point in the foreseeable future[21].

Predicted Background Air Quality

11.6.22 Defra publishes predicted background pollutant concentration maps for 1km-by-1km grid squares across the UK. Predicted pollutant concentrations for the study areas for the current year (2025) are summarised in Table 11.10 below. Full details are provided in **ES Volume 2 Appendix 11-2: Baseline Air Quality Data [EN010141/DR/6.2]**.

Table 11.10: DEFRA Predicted Background Air Quality Data - 2025

	Annual mean concentrations (µg/m^3)			
	NO_2	NO_x	PM_{10}	$PM_{2.5}$
Range within Study Areas	5.40 – 8.19	6.78 – 10.53	11.75 – 13.69	6.12 – 7.11
2025 AQAL	40	30(v)	40	20

11.6.23 It should be noted that the data is effectively an average concentration across each 1km square. The pollutant concentrations can therefore be expected to be higher close to any significant source, such as main roads, junctions, and concentrated habitation. Concentrations are therefore expected to be higher around St. Neots and the A1.

11.6.24 Average background pollutant concentrations across the study areas are well below their respective AQALs. Background NO_2 concentrations across the eastern part of the study areas, encompassing the Eaton Socon substation,

the internal road link to the substation, St. Neots, and the A1, are the highest, consistent with expectations of a built-up location. Background NO_2 concentrations are lower in the central and western parts of the study area, consistent with the rural setting. Background particulate matter (PM_{10} and $PM_{2.5}$) concentrations are broadly similar across the study area.

Industrial Emissions and Other Existing Emissions Sources

11.6.25 The Site is predominantly surrounded by open fields and small areas of habitation. Local agricultural and farming activities may give rise to seasonal dust emissions. Other sources of aerial emissions within the study areas include the poultry unit at Sunny Farm to the northwest of East Park Site A and the A1 to the east of the Eaton Socon substation and proposed grid connection. No other potential sources of aerial emissions of particular significance to the Scheme have been identified.

Wind Speed and Direction

11.6.26 The most important meteorological parameters governing the atmospheric dispersion of pollutants are:

i) **Wind direction:** determines the broad direction of the transport of the emission;
ii) **Wind speed:** affects the ground level emissions by determining the initial dilution of the pollutants emitted; and
iii) **Atmospheric stability:** a measure of the turbulence and hence affects the dispersion of pollutants.

11.6.27 The meteorological station at Bedford (NGR: 504912 259857; altitude 85m above ordnance datum) lies about 8km to the south-south-west of the Site. Wind speed and direction data has been provided by ADM Ltd, a recognised supplier of meteorological data, for the years 2013-2020. Given the nature of the location the meteorological conditions are expected to be broadly representative of those at the Site and appropriate for this assessment, although local variations will exist.

11.6.28 The wind rose derived from the data is provided in **ES Vol 2 Appendix 11-2: Baseline Air Quality Data [EN010141/DR/6.2]**. This depicts average wind speeds and directions over the 2013-2020 period.

11.6.29 The data shows that, as an annual average, winds blow from sectors 195° through to 285° about 46% of the time; i.e. predominantly south-westerly and consistent with typical UK conditions.

11.6.30 High wind speeds increase the likelihood of dust being raised and blown from a site. A speed of 5 m/s is typically referred to as a threshold for the initiation of windblown dust. Winds greater than 5 m/s blow from the south-west quarter for 18.5% of the time annually.

11.6.31 The atmospheric stability is the state of the atmosphere with respect to the reaction of a volume or 'parcel' of air to a vertical displacement. The stability at any one time will be affected by several factors including atmospheric pressure, humidity, cloudiness, sunshine, temperature and wind velocity.

Future Baseline

11.6.32 The Site and immediate surroundings are predominantly dominated by agricultural fields, a network of minor tracks and roads, and isolated properties and settlements with the A1 and development of St Neots lying to the east.

11.6.33 Pollutant concentrations are generally expected to decrease in the future, most noticeably at roadside locations associated with falling NO_x / NO_2 emissions from vehicles. This is evidenced by the recent revocation by HDC of the St Neots AQMA due to on-going compliance with the long-term NO_2 AQO as detailed in sub-section 11.6.12 above.

11.6.34 The current Defra predicted background concentrations for a future year (2030) for the Site are as follows.

Table 11.11: DEFRA Predicted Background Air Quality Data - 2030

	Annual mean concentrations (µg/m^3) in 2030			
	NO_2	**NO_x**	**PM_{10}**	**$PM_{2.5}$**
Range at Site	4.64 - 6.70	5.79 - 8.51	11.32 - 13.26	5.76 - 6.72
2030 AQAL	40	30(v)	40	12

11.6.35 Background concentrations of NO_2 are predicted to fall across the study area from a maximum of 8.19 µg/m^3 in 2025 to a maximum of 6.70 µg/m^3 in 2030. Background concentrations of PM_{10} and $PM_{2.5}$ are also predicted to fall although to a lesser extent.

11.6.36 The maximum average background NO_2 and PM_{10} concentrations for the grid squares in which the Site is located are predicted to fall to 17% and 33% of the objectives respectively by 2030. Further reductions would be expected in later years.

11.7 Embedded Mitigation and Enhancement Measures

Embedded Mitigation

Construction Phase

Construction Dust

11.7.1 As described above the construction dust assessment is used to inform the required site-specific dust mitigation measures. The assessment has therefore been used to inform the **outline Construction Environmental Management Plan (oCEMP) [EN010141/DR/7.3]** which has been prepared as part of the application for development consent. If the DCO is granted, this oCEMP will be developed into a final Construction Environmental Management Plan (CEMP) once a contractor is appointed. The final CEMP(s) produced for any phase of the Scheme will be in substantial accordance with this oCEMP, as set by a Requirement of the **draft DCO [EN010141/APP/3.1]**, and approved by the relevant local planning authorities prior to construction.

11.7.2 The oCEMP includes the following embedded mitigation measures:

- Construction and decommissioning compounds to be formed of heavy-duty construction matting;
- Temporary internal access roads to be formed of heavy-duty construction matting and / or compacted stone;
- Other internal access tracks to be used for construction traffic to be formed of heavy-duty construction matting and / or compacted stone or to be upgraded / restored if existing tracks;
- Provision of satellite construction compounds in addition to main construction compound to minimise internal haulage;
- Storage of excavated soils from the grid connection trenching to be adjacent to the trench in preparation for backfilling;
- Where required in Areas of Archaeological Constraint, concrete supports for solar arrays are to be pre-fabricated off-site;

- Majority of above ground structures to be of modular, prefabricated or containerised design, including the BESS Control Building and Battery Transformer Containers.

11.7.3 In addition, a final Construction Dust Management Plan (CDMP) will be prepared as part of, or to accompany, the final CEMP, in line with guidance on dust mitigation. The CDMP will be in substantial accordance with the outline CDMP (oCDMP) provided as Appendix A of the **oCEMP [EN010141/DR/7.3]**. It will include for the implementation of Best Practice Measures to control and manage dust emissions as recommended in the IAQM guidance on dust from construction[19]. Hierarchy for mitigation to be prevention, suppression then containment.

11.7.4 These site-specific measures will be based on the findings of the construction dust assessment and will include for the following measures with respect to haulage:

- Regular compaction, grading and maintenance of on-site non-metalled internal haulage routes;
- Regular inspections of the main site access, other access points, crossing points and local road network;
- Restriction of site traffic to designated haul routes;
- Fitting of on-site vehicles with upswept exhausts and radiator fan shields;
- Use of water bowsers with suitable spray bars (or similar) on site to dampen down internal haul routes and exposed areas, particularly during prolonged dry weather;
- Provision and enforcement of an internal speed limit;
- Provision of wheel wash or other wheel cleaning facilities at appropriate locations before exit from the internal access roads to the public highway; and
- Sheeting of all incoming / outgoing vehicles carrying loose loads.

11.7.5 Other general matters that would be employed include:

- Minimisation of drop heights at material unloading points;
- Avoidance of soil reinstatement operations during dry and windy conditions; and
- Stockpiles of loose materials to be retained for the shortest time possible and to be clearly delineated.

11.7.6 An additional requirement would be that further measures are implemented immediately in the event of adverse conditions developing which cause, or risk causing, visible dust escaping the site. These could include the modification, reduction or suspension of any activities causing the dust until such time as the situation has been resolved. This may require for example moving site activities to a suitable location until suitable weather conditions return or additional use of water suppression.

11.7.7 The oCDMP further includes for both visual and quantitative dust monitoring, details of which would be developed and agreed with appropriate stakeholders.

Construction Phase Traffic

11.7.8 The application for development consent is supported by an **outline Construction Traffic Management Plan (oCTMP) [EN010141/DR/7.4]**. This sets out the proposed access strategy and site management plan and would be developed into a final CTMP if the DCO is granted.

11.7.9 In order to reduce the impact of construction staff vehicle movements on the local highway network, construction staff would be encouraged to consider ways of travelling to the Site by means other than individual private car.

11.7.10 The exact nature of the measures that would be employed to encourage sustainable travel would be dependent on the composition of construction staff and the locations from which they would be travelling to the Site. Full details of the measures to encourage sustainable travel would be prepared by the main construction contractor. Measures may include encouraging local

staff to walk or cycle to site and use of a minibus if a large number of staff travel to site from the same area.

NRMM

11.7.11 The oCEMP includes the provision that where possible only equipment compliant with at least Stage IIIB of the NRMM (Type-Approval and Emission of Gaseous and Particulate Pollutants) Regulations 2018 would be used. In addition, any diesel generators to be used for the duration of the construction phase would conform with Stage IV requirements to meet Best Practice and offer a substantial reduction in pollutant emissions.

Operational Phase

11.7.12 An **outline Operational Environmental Management Plan (oOEMP) [EN010141/DR/7.5]** has been prepared as part of the application for development consent. If the DCO is granted, this oOEMP will be developed into a final Operational Environmental Management Plan (OEMP) once a contractor is appointed. The final OEMP(s) produced for any phase of the Scheme will be in substantial accordance with this oOEMP, as set by a Requirement of the **draft DCO [EN010141/APP/3.1]**, and approved by the relevant local planning authorities.

11.7.13 The following embedded mitigation measures are assumed for the operational phase:

- Best Practice Measures will be set out in the final OEMP to control and manage dust emissions during maintenance activities. Measures to be derived from Institute of Air Quality Management (IAQM) guidance.
- Suppression of dust/particulate matter where appropriate, using clean water supply.
- Provision and enforcement of internal site speed limit of 20mph along internal access tracks.
- Ensure the proper maintenance of access roads, clean the highway or access roads where material is tracked onto them.

- Inspection of vehicles before using public highway and removal of dust/soil where required.

Decommissioning Phase

11.7.14 An **outline Decommissioning Environmental Management Plan (oDEMP) [EN010141/DR/7.6]** has been prepared as part of the application for development consent. If the DCO is granted, this oDEMP will be developed into a final Decommissioning Environmental Management Plan (DEMP) once a contractor is appointed. The final DEMP(s) produced for any phase of the Scheme will be in substantial accordance with this oDEMP, as set by a Requirement of the **draft DCO [EN010141/APP/3.1]**, and approved by the relevant local planning authorities prior to decommissioning.

11.7.15 A Decommissioning Dust Management Plan (DDMP) will be prepared as part of, or to accompany, the final DEMP, in line with prevailing guidance on dust mitigation.

11.7.16 Best Practice Measures will be set out in the final DEMP to control and manage dust emissions during maintenance activities. Measures to be derived from Institute of Air Quality Management (IAQM) guidance.

11.8 Assessment of Likely Impacts and Effects

Construction Phase

Construction Dust Assessment

11.8.1 The following summarises the assessment of construction dust impacts and effects. The methodology is detailed in **ES Vol 2 Appendix 11-1: Air Quality Assessment Methodologies [EN010141/DR/6.2]** and the full assessment is presented in **ES Volume 2 Appendix 11-3: Construction Dust Assessment [EN010141/DR/6.2]**.

11.8.2 As noted above the IAQM methodology is to assess the potential risk of impacts due to construction dust in the absence of mitigation, to then inform the required site-specific mitigation measures. This approach has therefore been followed and summarised below, although the findings of the assessment are used to inform the oCEMP which forms embedded mitigation.

11.8.3 Airborne dust occurs when fine particles are disturbed and loosened by physical activity such as breaking, excavating, loading, tipping and transport. Additionally airborne dust can be generated by an airstream passing over such materials and it is generally accepted that wind speeds greater than about 5 m/s across loose fine materials can cause windblown dust emissions[22].

11.8.4 Light winds will transport fine particles already suspended in the atmosphere due to disturbance. In calm conditions, any raised dust tends to settle out in the vicinity of the source. In windier conditions the dust may be carried for a greater distance before settling out. The distance the dust will be carried depends on the wind speed, the particle size of the dust, the topography of the site and its surroundings.

11.8.5 Large dust particles, greater than 30 µm, which constitute the greatest proportion of dust emitted from earthworks and construction activities, will largely deposit within 100 m of the source[6]. Finer particles, which constitute a

small proportion of the dust emitted from most operations, are only deposited slowly, although their concentrations decrease rapidly from the source due to dispersion and dilution.

11.8.6 The principal sources of airborne dust associated with the earthworks and construction across the Site include:

- Site clearance and preparation, including soil stripping;
- Preparation and construction of temporary and permanent access / egress to the Scheme, access tracks and temporary construction compounds;
- Earthworks to include foundation and trench excavation works and subsequent backfilling;
- Materials handling, storage and stockpiling;
- Internal traffic movements and haulage:
    a. On-road vehicle movements between the main site access and construction compounds and car parking areas;
    b. Off-road vehicle movements (NRMM) between construction compounds and wider construction areas across the Site;
- Construction of solar arrays, buildings and areas of hardstanding;
- Wind-blow across bare surfaces and stockpiles;
- Site landscaping and provision of green infrastructure, to include soil placement.

11.8.7 The IAQM assessment methodology has been used to determine the potential dust emission magnitude for each aspect of the construction works ('source'). This has considered demolition, earthworks, construction and trackout for each Works Package and individual construction phase. As the various construction phases would often happen in tandem across the overall construction period (of 30 months) the overall dust emission magnitude for the Scheme has been determined as a whole from the individual works assessments.

11.8.8 The resulting overall dust emission magnitude for the Scheme is presented in Table 11.12.

Table 11.12: Overall Scheme - Dust Emission Magnitude[1] *(in the absence of mitigation)*

Activity	Class	Comments
Demolition	*n/a*	*No buildings present on Site and no demolition works required*
Earthworks	Large	Large Scheme area; earthworks to include some soil stripping, foundation and trench excavation across the Scheme
Construction	Medium	Large Scheme area, but construction works mostly at surface level using pre-fabricated structures; above ground on-site concrete construction limited to the East Park BESS, East Park Substation, and the Operational and Maintenance Building.
Trackout	Medium	Peak of 30 outward HGV movements per day from main site access onto B645; temporary internal access road from main site access to wider Site to be provided with heavy duty construction matting and / or compacted stone; HGV movements on other stretches of public highway to be crossed or used as part of the main internal access road peak at 34 2-way movements per day (crossing of Moor Road between Site D and C).

1: Magnitude classification as per IAQM Guidance as detailed in ***ES Vol 2 Appendix 11-1***.

11.8.9 The sensitivity of each area of the Site to dust soiling, human health (PM_{10} exposure) and ecological impacts has been assessed taking into the presence of sensitive receptors within the Study Area, the sensitivity of those receptors and background air quality (with respect to PM_{10}). The Order Limits has been used to measure the distances between receptors and potential sources of dust emissions to provide a conservative assessment, even though sources of dust may be located well within the Site itself during much of the construction phase.

11.8.10 As the various Works and construction phases would occur across the Site the overall sensitivity for the area surrounding the Site as a whole has been determined from the individual area assessments.

Table 11.13 Overall Site - Sensitivity of Area[1,2]

Activity	Sensitivity	Comment
Dust Soiling Impacts on People & Property		
Earthworks	Medium	1-10 high sensitive receptors within 20m of the Order Limits; 10-100 high sensitive receptors within 50m of the Order Limits; 10-100 high sensitive receptors within 100m of the Order Limits; >100 within 250m of Order Limits.
Construction		
Trackout	Medium	1 high sensitive receptor within 20m of side of roads to be used by construction HGV traffic on the main internal access route (up to 250m of an egress point).
Human Health Impacts		
Earthworks	Low	Predicted background PM_{10} <24 µg/m^3; 1-10 high sensitive receptors within 20m of the Order Limits; 10-100 high sensitive receptors within 50m of the Order Limits; 10-100 high sensitive receptors within 100m of the Order Limits; >100 within 250m of Order Limits.
Construction		
Trackout	Low	Predicted background PM_{10} <24 µg/m^3; 1 high sensitive receptor within 20m of the roads used by construction HGV traffic on the main internal haul route (up to 250m of an egress point).
Ecological Impacts		
Earthworks	Low	2 local non-statutory designated nature conservation sites within 50m of Order Limits
Construction		
Trackout	*n/a*	*0 nature conservation sites within 50m the roads used by construction HGV traffic on the main internal access road (up to 250m of an egress point).*

1: Area sensitivity classification as per IAQM Guidance as detailed in **ES Volume 2 Appendix 11-1: Air Quality Assessment Methodologies [EN010141/DR/6.2]**.

2: Only the highest level of area sensitivity is considered above as per IAQM guidance as detailed in **ES Volume 2 Appendix 11-1: Air Quality Assessment Methodologies [EN010141/DR/6.2]**.

11.8.11 The overall sensitivity is summarised in Table 11.14:

Table 11.14: Overall Site - Outcome of Defining the Sensitivity of the Area

Potential Impact	Sensitivity of the Surrounding Area		
	Earthworks	Construction	Trackout
Dust Soiling	Medium	Medium	Medium
Human Health	Low	Low	Low
Ecological	Low	Low	*n/a*

11.8.12 Taking into account the dust emission magnitude and the sensitivity of the area, the risk of dust impacts, in the absence of mitigation, are as follows:

Table 11.15: Overall Scheme - Summary of Risk of Dust Impacts[1] *(in the absence of mitigation)*

Potential Impact	Risk of Dust Impacts			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	n/a	Medium Risk	Medium Risk	Medium Risk
Human Health	n/a	Low Risk	Low Risk	Low Risk
Ecological	n/a	Low Risk	Low Risk	n/a

1: Based on dust emission magnitude and area sensitivity as set out above in Tables 11.11 and 11.12

11.8.13 In summary, the assessment indicates that there is a *medium* risk of dust soiling impacts arising from fugitive dust associated with earthworks, construction works and trackout. There is a *low* risk of PM_{10} human health impacts or ecological impacts arising from fugitive dust associated with earthworks, construction, and trackout.

11.8.14 This however is a worse-case scenario on the basis of activities occurring simultaneously across all areas of the Site close to boundaries near receptors. The proposed phasing of the works would however serve to reduce the risk of adverse impacts during the works. For example, with reference to the programme in **ES Volume 2 Appendix 2-1: Indicative Construction Phasing and Resource Schedule [EN010141/DR/6.2]**, there is no period

when site preparation and trench excavation works are proposed to overlap across East Park Sites A, B, C and D simultaneously. Furthermore, site preparation and trench excavation would occur in a phased manner across each individual site.

11.8.15 In addition, set-back distances are provided from the Order Limits and the main works areas (the solar arrays) in some areas. This is of particular note with regards the eastern and southern parts of Site A, southeastern part of Site B, and northern part of Site C, which are to be set aside for landscaping and habitat creation. These landscaping areas provide set-back distances from the main works area to the main habitation areas of Pertenhall, Little Staughton and Great Staughton, reducing the number of receptors that would fall within the 250m of the main works areas. Landscaping works would have a reduced potential for the generation of dust and would be of a shorter duration than the main earthworks and construction works.

11.8.16 The greatest risk of potential adverse impacts from dust soiling would occur during soil stripping, foundation and trench excavation works in areas close to the Site boundaries. As works move away from the Site boundaries the risk would reduce. Taking into account the phased nature of the works there is a resulting *medium* risk of dust soiling impacts arising from fugitive dust associated with earthworks and *low* risk during construction as summarised below.

Table 11.16: Overall Scheme – Revised Summary of Risk of Dust Impacts – taking into account phasing *(in the absence of mitigation)*

Potential Impact	Risk of Dust Impacts			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	n/a	Medium Risk	Low Risk	Medium Risk
Human Health	n/a	Low Risk	Low Risk	Low Risk
Ecological	n/a	Low Risk	Low Risk	n/a

11.8.17 As discussed above the assessment process is to determine the risk of dust impacts in the absence of mitigation to identify the required site-specific mitigation measures. The findings of the assessment have therefore been used to inform the oCDMP that is included within the oCEMP and which would be developed into a final CDMP and final CEMP. The final step is to determine whether there are residual significant effects arising from construction dust after considering the construction activity with mitigation.

11.8.18 IAQM advice is that for almost all construction activity it should normally be possible to prevent significant effects on receptors through the use of effective mitigation. A final CDMP and CEMP would be secured by the DCO. Following the implementation of the appropriate site-specific mitigation measures included within the oCDMP and oCEMP the significance of effects with regards to dust soiling, human health (PM_{10}) and ecological receptors due to earthworks, construction and trackout are not significant in EIA terms.

11.8.19 The presence of an extensive PRoW network both across and in proximity to the Site is also noted. However, these form *low* sensitivity receptors and any exposure at the footpaths would be transient and of short-duration with a resulting *low* risk of adverse impacts. Resulting effects would be not significant in EIA terms.

11.8.20 Several stretches of the public highway are also to be used as part of the wider minor internal access roads along with several crossing points. There is a potential for track-out to occur onto these roads which could result in dust soiling, PM_{10} or ecological impacts on any nearby receptors. However, given the provision of temporary heavy-duty matting / compacted stone and the low number of movements along these stetches of roads there is a *low* risk of these impacts occurring. Resulting effects would be not significant in EIA terms.

On-Road Vehicle Exhaust Emissions

11.8.21 As described in **ES Volume 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1]** it is proposed that construction traffic will approach the

Site via the B645 from the Strategic Road Network (SRN) at the A1 at St Neots. All HGV movements to / from the Site would utilise this route and the main site access into Site D and the wider Site. Staff would also be encouraged to access the Site from the east and for the purposes of the assessment it has been assumed all Light Duty Vehicles (LDV) movements would also utilise this route to / from the A1. The majority of the staff movements would also utilise the main site access, although a small number would utilise separate access points directly into Areas A and B and not pass through Areas C or D.

11.8.22 The greatest vehicle movements would therefore be experienced along the B654 to / from the A1, at the main site access and to / from Site D Compound. Traffic movements would be reduced on the wider local road network including at the A1 / B645 junctions, the Crosshall roundabout and on the A1 north / south of the B645.

11.8.23 Movements would similarly be dispersed within the wider Site between the main construction compound in Site D and the satellite compounds in Sites A, B and C. This includes along those short stretches of public highway (Great Staughton Road, Staughton Road, Green End and the B660) to be used as part of the temporary main internal access road and minor access routes to parts of East Park Site B.

11.8.24 The construction phase is predicted to result in an average of 14 two-way HGV movements and 498 two-way LDV movements to / from the Site per *working day* across the 30-month construction phase. The resulting annual average daily traffic (AADT) would be reduced to these figures when movements across working days are averaged out across the year and allowing for no working on bank holidays). On the basis of 6 working days a week and no working on bank holidays the resulting AADT would be 12 HGVs and 392 LDVs.

11.8.25 These movements between the main site access and A1, and resulting distribution within the Site, are summarised below in Table 11.17 and shown on **ES Vol 3 Figure 11-3 [EN010141/DR/6.3]**.

Table 11.17: Forecast Working Day Construction Phase Vehicle Trip Generation – Average[1]

Area	2-Way Working Day Trip Generation[2]		Comment
	HGVs	LDVs	
A1 (North Bound)	10	250	Movements would be experienced on A1 northbound carriageway and distributed across northbound slip roads to / from B645
A1 (South Bound)	10	250	Movements would be experienced on A1 southbound carriageway and distributed across southbound slip roads to / from B645
Great North Road	10	250	Movements would be experienced on stretch of Great North Road between A1 southbound slip roads and Crosshall Roundabout
B645	10	250	Movements would be experienced on stretch of B645 Crosshall Roundabout and A1 northbound slip roads
B645	20	500	Movements would be experienced on stretch of B645 between A1 northbound slip roads and main site access
Main Site Access / Site D	20	500	Movements would be experienced between main site access and main construction compound in Site D
Site C	12	404	Movements would be experienced between the main construction compound in Site D and satellite compound in Site C
Great Staughton Road (between Site C and Site B)	10	330	Movements would be experienced along stretch of Great Staughton Road that forms internal access road between Sites C and B
Site B	10	330	Movements would be within Site B between satellite compounds

Area	2-Way Working Day Trip Generation[2]		Comment
	HGVs	LDVs	
Little Staughton Road (within Site B)	0	30	Movements would be experienced along stretch of Little Staughton Road that forms internal access road within Site B
B660 (between Site B and Site A)	2	100	Movements would be experienced along short stretch of B660 that forms internal access road between Sites B and A
Site A	2	100	Movements would be experienced within Site A between satellite compounds

1: Based on information provided in Table 9.13 and 9.14 of **ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1]**

2: Average Working Day 2-way movements

Screening Assessment – Human Health

11.8.26 As detailed above in Section 11.6 no AQMAs or areas of potential air quality concern have been identified in the vicinity of the local road network. On this basis reference to the IAQM screening criterion[14] of changes of vehicle movements of +100 AADT HGVs and +500 LDVs (where distant from an AQMA, as outlined in **ES Vol 2 Appendix 11-1: Air Quality Assessment Methodologies [EN010141/DR/6.2]**), are deemed appropriate to determine the need for assessment.

11.8.27 The predicted HGV movements for the construction phase are well below the indicative threshold. Furthermore, these HGV movements are below the more stringent criterion of +25 AADT provided for locations within or adjacent an AQMA.

11.8.28 The resulting predicted LDV movements as AADT for the construction phase are also below the indicative threshold.

11.8.29 It is further noted that property facades are typically set-back from the roadside of the most affected stretch of the B645 between the A1 junction and

main site access. No particular sources of queuing or idling traffic that may result in additional contributions to local air pollution have been noted along this stretch. The main site access itself is at least 350m from the nearest human receptor (Wood View) and will be specifically constructed for the Scheme.

11.8.30 Properties within Crosshall along the stretches of B645 and Great North Road between the A1 northbound slip roads and A1 southbound slip roads extend to within 6m of the roadside (closest property to the affected roadside is 403 Great North Road). Predicted average construction phase working day vehicle movements along these stretches of road are 10 HGVs and 250 LDVs, each well below the relevant screening thresholds.

11.8.31 As predicted construction phase traffic movements on the local road network are below their respective IAQM indicative thresholds and there are no known concerns regarding air quality in the local area, no further assessment is therefore deemed necessary. The additional traffic that would be generated by the Scheme for a temporary period is not predicted to result in significant adverse impacts on local air quality.

11.8.32 Potential effects with regards to human health receptors due to construction phase vehicle emissions are not significant.

Screening Assessment – Ecology

11.8.33 The predicted HGV and LDV construction phase movements are well below the relevant screening thresholds. In addition, all the identified nature conservation sites within the study area lie over 200m from the main internal access road to be used by the on-road vehicles, including the short stretches of public highway (Great Staughton Road and B660). Movements on the wider minor internal access tracks would be substantially below the screening thresholds, including close to Kangaroo Meadow located alongside the northern area of Site B and near a temporary satellite compound, and near Huntingdon Wood to the south of Site D and near the grid connection.

11.8.34 The additional temporary traffic that would be generated by the Scheme is not predicted to result in significant adverse impacts on ecological receptors. Further detailed assessment is not considered necessary.

11.8.35 Potential effects with regards to ecological receptors due to construction phase vehicle movements are not significant.

NRMM

11.8.36 A range of equipment would be used during the different Works across the Site as detailed in **ES Vol 1 Chapter 2: The Scheme [EN010141/DR/6.1]** and includes low loaders, tipper trucks, excavators, telehandlers, push-press piling rigs, cable pullers, vibrating rollers, mobile cranes and Horizontal Directional Drill (HDD) rigs. Other on-site power plant would include generators and compressors. The use of NRMM will give rise to combustion emissions, primarily CO, NO_x and PM_{10}, with potential resulting impacts on local air quality.

11.8.37 Under the Non-Road Mobile Machinery (Type-Approval and Emission of Gaseous and Particulate Pollutants) Regulations 2018 (which implemented EU regulations 2016/1628) increasingly stringent emission limits, have been, and are being, applied to the engines of NRMM and power plant with the aim of progressively reducing the emissions and phasing out polluting equipment. The regulations set limits for CO, hydrocarbons, NO_x and for diesel engines, PM_{10}. Emissions from these engines are regulated before they are placed on the market with the maximum permitted exhaust emissions being stipulated as a function of power of the relevant engine. The regulations include several stages for the progressive reduction of emissions from Stage 1 which came in for new engines being placed on the market from 1996-1999 through to Stage V for new engines from 2019. As the equipment is replaced with new equipment a progressive reduction in emissions is achieved.

11.8.38 The emissions of SO_2 from NRMM is controlled through restrictions of sulphur content in fuel with regulations now requiring all diesel used in NRMM to be virtually sulphur free.

11.8.39 All NRMM would be mobile within the relevant working areas within the Site and their associated activities would vary from day to day, may be in use at different stages of the construction period, and for relatively short durations. The use of the NRMM would not result in continuous emissions for any substantial period of time at any location, including close to a Site boundary and potential receptors. The resulting concentrations at any receptor would be dependent on a number of factors including the quantity and type of NRMM in use, distance and orientation of the NRMM from a receptor, the topography and the weather conditions at the time.

11.8.40 The NRMM would be sited overnight at the main construction compound and satellite compounds as required during the works to minimise potential daily travel distances on the internal main access road and minor access roads.

11.8.41 Other combustion plant would include compressors and generators. These would be primarily sited at the construction compounds.

Screening Assessment – Human Health

11.8.42 Movements of NRMM would be dispersed to / from the main construction compound and satellite compounds and across the working areas of the Site and there would not be any continuous NRMM emissions at any location. Furthermore, as noted above set-back distances are provided from the Order Limits and the main works areas. This is of particular note with regards the eastern and southern parts of Site A, southeastern part of Site B, and northern part of Site C, which provide set-back distances from the main works areas to the main habitation areas of Pertenhall, Little Staughton and Great Staughton. This therefore provides set-back from any receptors close to the Order Limits and NRMM operating within these Sites.

11.8.43 With reference to **ES Vol 2 Appendix 2-1: Indicative Construction Phasing and Resource Schedule [EN010141/DR/6.2]** the maximum duration of works in any one of the Sites is 21 months in Site B, with 17 months in Site A and 11 months in Sites C and D. Overall emissions associated with NRMM

within any one part of the Scheme would therefore be for a relatively short duration.

11.8.44 Hence, where there are any human receptors within 200m of the working areas and potential NRMM emissions, the exposure would be of limited duration due to the intermittent nature of those emissions and movements of NRMM within the wider area.

11.8.45 The main construction compound and satellite compounds are all over 200m from any human receptors. Hence, plant sited at these compounds would be over 200m of any human receptors.

11.8.46 The use of NRMM and on-site plant would not result in significant adverse impacts on pollutant concentrations at any human receptor. Resulting effects would therefore be not significant.

Screening Assessment –Ecological Receptors

11.8.47 Kangaroo Meadow county wildlife site (CWS), Huntingdon Wood CWS and High Wood CWS all lie within 200m of the Order Limits. However, as for above there would not be any continuous sources of NRMM emissions close to the Order Limits and hence any of these ecological receptors.

11.8.48 Power plant sited at the main construction and satellite compounds would all be over 200m from these ecological receptors.

11.8.49 The use of NRMM and on-site plant would not result in significant adverse impacts at any ecological receptor. Resulting effects would be not significant.

Decommissioning Phase

11.8.50 The decommissioning phase would include removal of all solar modules, mounting poles, cabling, inverters, transformers, BESS equipment, the East Park substation, and fencing from the Site. Temporary compound area(s) will be constructed within the Site to service the decommissioning phase. As for the construction phase, the compound area would house modular office and

welfare facilities on concrete slabs / compacted aggregate. This will be removed upon completion of the decommissioning works.

11.8.51 Decommissioning is expected to be of a shorter duration than the construction phase, taking between 12 and 24 months, and again would be undertaken in phases.

11.8.52 Potential impacts and effects that may arise during the decommissioning phase would be less than during the construction phase. There can be a high degree of uncertainty regarding decommissioning as engineering approaches and technologies evolve over the operational life of the Scheme. However, key points in relation to dust and air quality are summarised below.

Dust

11.8.53 The potential for dust generation during the decommissioning phase would be expected to be reduced to that during the construction phase. There would be reduced requirements for earthworks for ground re-instatement following the removal of below ground structures and much of the structures would be removed whole with reduced potential dust source magnitudes. It is expected there would be reduced on-site vehicle movements with corresponding lower magnitude of track-out.

11.8.54 As for the construction phase the decommissioning activities would not occur simultaneously across all areas of the Site close to boundaries near receptors. Again, as noted above the main works are to be set back from the Order Limits in some areas, further reducing the potential for adverse impacts and resulting effects. The resulting risk of dust impacts due to dust soiling, human health and ecological are likely to be low as summarised below and detailed in **ES Vol 2 Appendix 11-3: Construction Dust Assessment [EN010141/DR/6.2]**.

Table 11.18: Overall Scheme: Decommissioning Phase – Summary of Risk of Dust Impacts

Potential Impact	Risk of Dust Impacts			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	n/a	Low Risk	Low Risk	Low Risk
Human Health	n/a	Low Risk	Low Risk	Low Risk
Ecological	n/a	Low Risk	Low Risk	n/a

11.8.55 Resulting effects with regards to dust soiling, PM_{10} and ecological impacts due to earthworks, construction and trackout during the decommissioning phase, through implementation of appropriate mitigation measures, would be not significant.

On-Road Vehicle Emissions

11.8.56 Vehicle movements to / from the Site during the decommissioning phase are expected to be less than during the construction phase. The additional temporary traffic and associated emissions that would be generated by the proposed Scheme during the decommissioning phase is not therefore predicted to result in significant adverse impacts on human or ecological receptors.

11.8.57 Resulting effects with regards to human and ecological impacts due to on-road vehicle emissions during the decommissioning phase would be not significant.

NRMM

11.8.58 Potential impacts and effects that may arise during the decommissioning phase would be less than during the construction phase. Resulting effects with regards to human and ecological impacts due to NRMM and on-site plant emissions during the decommissioning phase would be not significant.

11.9 Additional Mitigation, Enhancement and Monitoring

Construction Phase

Construction Dust

11.9.1 The assessment concludes there is up to a *medium* risk of adverse impacts, at most, at nearby sensitive receptors due to dust soiling in the absence of mitigation.. This is only predicted for when soil stripping, foundation and trench excavation works are occurring near to any sensitive receptors. At other times, whilst activities are away from sensitive receptors risks are predicted as *low* at most.

11.9.2 The potential for fugitive dust generation during construction activities can however be readily controlled through the implementation of best practice in respect of dust control and site management. As detailed in the IAQM Guidance, for almost all construction activities the application of effective mitigation should prevent any significant effects occurring to sensitive receptors and therefore the residual effect would normally be negligible.

11.9.3 Given the scale of the Scheme enhanced mitigation measures would be employed to minimise the risk of adverse impacts. The measures to be employed are detailed in the oCEMP and are based on standard industry guidance as provided in the IAQM guidance on construction dust[19]. Based on the findings of the risk assessment discussed above in Section 11.8 the measures are derived from those recommended for medium risk sites. As discussed the oCEMP will be developed into a final CEMP which will be secured by the DCO.

11.9.4 These measures would also serve to minimise any potential PM_{10} and $PM_{2.5}$ emissions.

Monitoring

11.9.5 Monitoring during the construction phase would include visual inspections and monitoring for dust as detailed in the oCEMP. No additional monitoring would be required.

On-Road Vehicle Emissions

11.9.6 As set out above the application for development consent is supported by an **oCTMP [EN010141/DR/7.4]**. No additional specific measures are deemed necessary with respect to vehicle exhaust emissions.

NRMM

11.9.7 No additional specific measures are deemed necessary in the oCEMP in relation to NRMM emissions.

Decommissioning Phase

11.9.8 As noted above in Section 11.7 a DDMP would be prepared as part of, or to accompany, the final DEMP. It is assumed that similar techniques and / or approaches would be used as for the construction phase and no additional measures would be required.

11.10 Residual Effects

Construction Phase

11.10.1 The air quality assessment has considered the potential impacts at representative receptors associated with fugitive dust and on-road vehicle exhaust emissions from the Scheme during the construction phase.

11.10.2 An assessment has been undertaken of the potential for fugitive dust that may arise during the various elements of the construction phase across the Site. The assessment takes into account the nature and extent of the Scheme, local wind data and the sensitivity of the surrounding area.

11.10.3 The essence of guidance is that best practice working practices and mitigation measures are generally accepted as providing effective control against the impact of airborne dust and suspended particulate matter. The construction dust assessment has been used to determine the required site-specific mitigation measures and these have been included within the **oCEMP [EN010141/DR/7.3]** and would be further provided in a final CEMP as a Requirement of the DCO.

11.10.4 Through the incorporation of these standard dust mitigation measures no unacceptable impacts or resulting effects on human health, amenity or ecological receptors have been identified. No additional mitigation, other than the proposed embedded mitigation measures, is proposed. The resulting significance of dis-amenity, health (PM_{10}) and ecological effects resulting from fugitive dust emissions is not significant in EIA terms.

11.10.5 The Scheme would result in the generation of additional HGV and LDV movements on the local road network. However, based on the available local air quality information and review of the expected numbers and routing, the significance of residual effects associated with vehicle exhaust emissions would be not significant in EIA terms.

11.10.6 The overall significance of the Scheme in relation to air quality effects is not significant in EIA terms.

Decommissioning Phase

11.10.7 The air quality assessment has considered the likely potential impacts at representative receptors associated with fugitive dust and on-road vehicle exhaust emissions from the Scheme during the decommissioning phase. This is based on current available information although there is a high degree of uncertainty.

11.10.8 Through the incorporation of standard dust mitigation measures no unacceptable impacts or resulting effects on human health, amenity or ecological receptors have been identified. The resulting significance of dis-amenity, health (PM_{10}) and ecological effects resulting from fugitive dust emissions is not significant in EIA terms.

11.10.9 The decommissioning phase would result in the generation of additional HGV and LDV movements on the local road network for a period of about 12 to 24 months. However, these movements would be expected to be reduced to those that would occur during the construction phase and for a reduced period of time based on the available local air quality information. The significance of residual effects associated with vehicle exhaust emissions would be not significant in EIA terms.

11.11 Cumulative Effects

11.11.1 The cumulative assessment has considered the potential for cumulative environmental effects as a result of the Scheme in combination with the cumulative schemes set out in **ES Vol 2 Appendix 4-5: Short List of Other Development [EN010141/DR/6.2]**.

11.11.2 The cumulative assessment has considered the potential for cumulative effects to arise due to dust, on-road vehicle emissions and Non-Road Mobile Machinery (NRMM) emissions on human and ecological receptors.

11.11.3 An initial screening exercise was undertaken to identify any relevant receptors within the following distances:

- **Dust**:
  - Human receptors – within 250m of the Order Limits and a cumulative scheme
  - Ecological receptors – within 50m of the Order Limits and a cumulative scheme
- **On-road vehicle emissions**: human and ecological receptors - within 200m of roads potentially affects by both the Scheme and cumulative schemes;
- **NRMM emissions**: human and ecological receptors - within 200m of the Order Limits and a cumulative scheme.

11.11.4 For dust and NRMM further assessment has then been undertaken considering the scale of the operations and the locations and orientation to receptors. For vehicle emissions further assessment has then been undertaken considering the future background local air quality near receptors and the combined predicted movements on the affected road network.

11.11.5 The assessment is reported in **ES Vol 1 Chapter 17: Cumulative and In-Combination Effects [EN010141/DR/6.1]** and concludes that there would be no significant cumulative air quality effects as a result of the Scheme in

combination with any cumulative scheme. The residual effects of the Scheme would not be changed as a result of any of the cumulative schemes.

11.11.6 An assessment of the in-combination effects arising from the interaction and combination of different residual environmental effects of the Scheme affecting a single receptor is reported in Section 17.5 of **ES Vol 1 Chapter 17: Cumulative and In-Combination Effects [EN010141/DR/6.1]**.

11.12 Conclusions

11.12.1 The residual effects of the Scheme in relation to air quality are not significant. The overall significance of the Scheme in relation to air quality effects is therefore not significant.

11.13 References

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