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Lake 62, Cotswold Water Park

Quinque Stella Holdings Ltd

Air Quality and Dust Assessment

March 2026





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Executive Summary

Rappor Consultants Limited was appointed by Quinque Stella Holdings Ltd to undertake an air quality and dust assessment for the proposed development at Lake 62, Cotswold Water Park. The proposals include a leisure development for up to 38 holiday lodges and associated infrastructure. The Site is located within the administrative area of Wiltshire Council.

A qualitative construction phase dust assessment was undertaken in accordance with Institute of Air Quality Management guidance to consider the impact of construction phase activities on dust soiling, human health and ecological effects in the local area. Mitigation measures were recommended to minimise emissions during construction activities. With the implementation of these mitigation measures the impact of construction phase dust emissions was considered to be 'not significant' in accordance with Institute of Air Quality Management guidance.

The proposed development trip generation was screened using the Institute of Air Quality Management and Environmental Protection UK two stage screening process, to determine whether a detailed road traffic emissions impact assessment on human receptors was required. The proposed development trip generation did not exceed the relevant screening criteria and therefore the proposed development was concluded to have an insignificant impact on air quality at human receptors.

Consideration was also given to the impact of the proposed development on ecological designations in the vicinity of the Site. The proposed development trip generation was screened against the Natural England screening thresholds and confirmed to be below the threshold. Additionally, the in-combination trip generation of the proposed development and identified committed developments in the local area was also confirmed to fall below the screening thresholds. The proposed development was therefore identified to have an insignificant impact on ecological designations with regards to road traffic emissions both in isolation and in-combination.

A qualitative Site suitability assessment was undertaken to determine the suitability of the Site for the proposed uses with regard to the current, relevant air quality objectives. Local monitoring data undertaken by Wiltshire Council and Defra background concentrations identified that concentrations of nitrogen dioxide and particulate matter (PM₁₀ and PM_{2.5}) were well below the current relevant air quality objectives locally. Concentrations of pollutants from a proposed Anaerobic Digester facility were also considered in the assessment through a review of the Air Quality Assessment submitted with the application. The assessment identified a negligible level impact on local air quality at sensitive receptors in the local area, including the Site, as a result of the operation of the proposed facility.

Additionally, an operational phase dust risk assessment was undertaken to consider the potential for dust-generating activities at the neighbouring operations at North End Works to influence the Site with regard to dust soiling and human health effects. The Site was identified to have a low risk of dust impacts from the North End Works which is not significant. Therefore, the Site was considered suitable for the proposed uses, with regard to the current relevant air quality objectives.



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1 Introduction

General

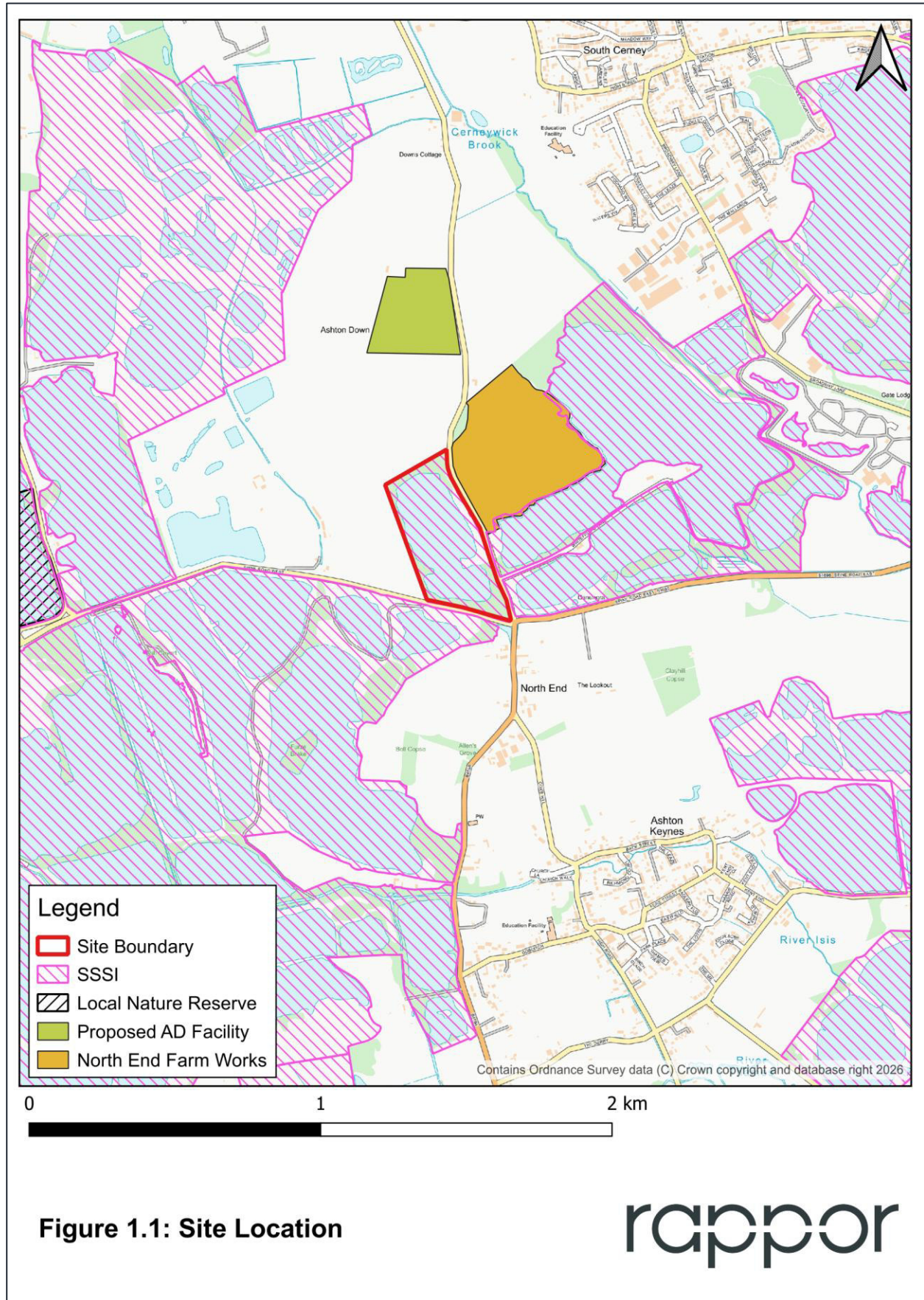
- 1.1 Rappor Consultants Limited was instructed by Quinque Stella Holdings Ltd to undertake an air quality assessment for a proposed leisure development at Lake 62 of Cotswold Water Park ('the Site'). The proposal is for up to 38 holiday lodges with associated infrastructure including parking, bike hire, gym and fitness studio.
- 1.2 The assessment considers the potential impacts of the proposed development during both the construction and operational phases. A qualitative construction phase assessment was undertaken, in accordance with relevant guidance. An operational phase road traffic emissions screening assessment was undertaken to consider the impact of development-generated road traffic on local air quality at both human and ecological receptors. A qualitative Site suitability assessment was also undertaken to consider the exposure of future residents to air pollutant sources, including road traffic emissions, and dust emissions associated with dust-generating activities at the neighbouring industrial premises.
- 1.3 The assessment takes account of relevant local and national policy and guidance. A glossary of terms utilised in this report is provided in **Appendix A**.

Site Location

- 1.4 The Site is located north of Spine Road West within the wider Cotswold Water Park and lies in the administrative area of Wiltshire Council. The Site currently comprises a lake and wooded areas with access from Ashton Road to the east of the Site. To the north of the Site lies agricultural land, with a proposed Anaerobic Digester (AD) plant situated approximately 320m north of the Site. This proposed plant has the potential to give rise to localised emissions to air as a result of back-up generators and an emergency flare, in addition to giving rise to odorous emissions associated with the feedstock and processing operations at the plant. A separate odour assessment has been prepared to consider the influence of this proposed AD plant on amenity within the Site for future users as a result of potential odorous emissions.
- 1.5 The Aggregate Industries North End Works is located approximately 20m east of the Site and includes operations such as aggregate delivery and transportation, bagging and on-site storage and processing which have the potential to give rise to dust emissions in the local area. Spine Road West forms the southern boundary of the Site with agricultural land, lakes and scattered residential properties beyond. To the west of the Site lies agricultural land and land associated with the Cotswold Community Estate which has planning consent for residential development and was under construction at the time of assessment.
- 1.6 The Site, and surrounding lakes within Cotswold Water Park are part of the Cotswold Water Park Site of Special Scientific Interest (SSSI) designation. Coke's Pit Lake Local Nature Reserve is also located approximately 1.2km west of the Site. The Site is not located within, or in the vicinity of, an Air Quality Management Area (AQMA).
- 1.7 The location of the Site, ecological designations and identified dust and odour-generating installations are illustrated in **Figure 1.1**.



Figure 1.1 Site Location



2 Relevant Policy and Guidance

National Legislation and Planning Policy

2.1 The following national legislation and planning policy is relevant to air quality and was considered throughout this air quality assessment:

- European Parliament, EU 2008 Ambient Air Quality Directive (2008)¹;
- HMSO, Air Quality (England) Regulations (2000)²;
- HMSO, Environment Act (1995)³;
- HMSO, Environment Act (2021)⁴;
- Department for Environment, Air Quality Strategy (1997)⁵;
- Department for the Environment, Food and Rural Affairs (DEFRA), Air Quality Strategy (2007)⁶;
- Department for the Environment, Food and Rural Affairs, The Environment (Miscellaneous Amendments) (EU Exit) Regulations (2020)⁷;
- HMSO, The Environmental Targets (Fine Particulate Matter) (England) Regulations (2023)⁸;
- Department for the Environment, Food and Rural Affairs, Air Quality Strategy: Framework for Local Authority Delivery (2023)⁹;
- Department for the Environment, Food and Rural Affairs, Environmental Improvement Plan 2023 (2023)¹⁰;
- Ministry of Housing, Communities and Local Government, National Planning Policy Framework (NPPF) (2024)¹¹;
- Ministry for Housing, Communities and Local Government, Planning Practice Guidance (PPG) for air quality (2019)¹²; and
- Department for the Environment, Food and Rural Affairs, Environmental Improvement Plan 2025 (2025)¹³.

¹ European Parliament (2008) Council Directive 2008/50/EC on Ambient Air Quality and Cleaner Air for Europe

² HMSO (2000) Statutory Instrument 2000 No. 928, The Air Quality (England) Regulations 2000 (as amended), London: HMSO

³ HMSO (1995) The Environment Act 1995, London: TSO

⁴ HMSO (2021) The Environment Act 2021, London: TSO

⁵ Department of the Environment (DoE) (1997) The UK National Air Quality Strategy, London: HMSO

⁶ Department of the Environment, Food and Rural Affairs (Defra) (2007) The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, London: HMSO

⁷ Department of the Environment, Food and Rural Affairs (Defra) (2020) The Environment (Miscellaneous Amendments) (EU Exit) Regulations, London: HMSO

⁸ HMSO (2023) The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023

⁹ Defra (2023) Air Quality Strategy: Framework for Local Authority Delivery

¹⁰ Defra (2023) Environmental Improvement Plan 2023, First revision of the 25 Year Environment Plan

¹¹ Ministry of Levelling Up, Communities and Local Government (2024) National Planning Policy Framework, HMSO London

¹² Ministry for Housing, Communities and Local Government (2019) Planning Practice Guidance Air Quality

¹³ Defra (2025) Environmental Improvement Plan 2025



Local Planning Policy

2.2 The following local planning policy was reviewed with regards to air quality and a summary of any relevant policies is provided in **Appendix B**:

- Wiltshire Council, Wiltshire Core Strategy, (2015)¹⁴.

Air Quality Guidance

2.3 The following air quality guidance was utilised in the air quality assessment:

- DEFRA, Local Air Quality Management Technical Guidance (LAQM.TG) 22) v2.1 (2025)¹⁵;
- Institute of Air Quality Management (IAQM), Guidance on the assessment of dust from demolition and construction (2024)¹⁶;
- Institute of Air Quality Management (IAQM), Guidance on the assessment of mineral dust (2016)¹⁷;
- IAQM and Environmental Protection UK (EPUK), Land-Use Planning and Development Control: Planning for Air Quality (2017)¹⁸;
- Natural England, Air pollution and development: advice for local authorities, 2025¹⁹;
- Institute of Air Quality Management, A guide to the assessment of air quality impacts at designated nature conservation sites, 2020²⁰;
- Natural England, Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations, 2018²¹;
- DEFRA, Habitats regulations assessments: protecting a European site, 2021²²; and,
- Joint Nature Conservation Committee, Guidance on Decision-making Thresholds for Air Pollution, 2021²³.

¹⁴ Wiltshire Council (2015) Wiltshire Core Strategy

¹⁵ Defra (2025) Local Air Quality Management Technical Guidance LAQM.TG(22) v2.1

¹⁶ Institute of Air Quality Management (2024) Guidance on the assessment of dust from demolition and construction, Institute of Air Quality Management, London

¹⁷ Institute of Air Quality Management (2016) Guidance on the assessment of mineral dust impacts for planning, Institute of Air Quality Management, London

¹⁸ Institute of Air Quality Management and Environmental Protection UK (2017) Land-Use Planning and Development Control: Planning for Air Quality

¹⁹ Air pollution and development: advice for local authorities, NE, 2025.

²⁰ A guide to the assessment of air quality impacts on designated nature conservation sites v1.1, IAQM, 2020.

²¹ Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations, NE, 2018.

²² Habitats regulations assessments: protecting a European site, DEFRA, NE, Welsh Government and Natural Resources Wales, 2021.

²³ Guidance on Decision-making Thresholds for Air Pollution, JNCC, 2021.

3 Assessment Methodology

Consultation

- 3.1 Consultation was undertaken with the Environment Health Officer at Wiltshire Council detailing the proposed scope of works and assessment methodology to be utilised within the air quality assessment. A response was received from Wiltshire Council in which the assessment methodology was agreed. Details of the consultation with Wiltshire Council is provided in **Appendix C**.
- 3.2 The assessment methodology is detailed below.

Construction Phase Dust Assessment

- 3.3 A qualitative assessment of the potential for construction phase activities to influence local air quality through dust soiling, human health and ecological effects was undertaken utilising the methodology set out in IAQM guidance¹⁶. The IAQM guidance provides a four-step approach, summarised below:
- Step 1: Screen the need for a detailed assessment. Where relevant sensitive receptors are located within 250m of the Site boundary, or within 50m of roads used by construction vehicles up to 250m from the Site, the assessment should progress to Step 2. No further assessment is required if there are no receptors within the specified distances of the works.
 - Step 2: Assess the risk of dust impacts using the following steps:
 - a) Define the potential dust emission magnitude for demolition, earthworks, construction and trackout, as appropriate;
 - b) Define the sensitivity of the area to dust; and
 - c) Define the risk of impacts.
 - Step 3: Identify appropriate site-specific mitigation based on the identified dust risk;
 - Step 4: Determine the significance of residual effects.

Operational Phase Road Traffic Emissions Screening Assessment

Consideration of Human Receptors

- 3.4 IAQM and EPUK guidance¹⁸ provides screening criteria to determine whether a detailed assessment of development-generated road traffic emissions is potentially required. The screening criteria are split into two stages:

Stage One:

- 3.5 The Stage One criteria detailed below are utilised to determine whether there is the need to proceed to Stage Two of the screening assessment:
- If any of the following apply:
 - a) 10 or more residential units or a Site area greater than 0.5ha; or
 - b) More than 1,000m² of floorspace for all other use classes or a Site area of greater than 1ha;



- Coupled with any of the following:
 - a) The development has more than 10 parking spaces; or
 - b) The development will have a centralised energy facility or other centralised combustion process.

Stage Two:

3.6 Where the proposed development exceeds the criteria set out in Stage One, the following indicative criteria are used to determine whether a detailed assessment of development-generated road traffic emissions is required.

3.7 The Stage Two screening criteria are:

- A change in Light Duty Vehicles (LDVs) flows of:
 - a) More than 100 Annual Average Daily Traffic (AADT) flow within or adjacent to an Air Quality Management Area (AQMA); or
 - b) More than 500 LDVs as an AADT elsewhere.
- A change in Heavy Duty Vehicles (HDVs) of:
 - a) More than 25 AADT flow within or adjacent to an AQMA; or
 - b) More than 100 AADT flow elsewhere.

3.8 Where none of the Stage Two criteria are exceeded, IAQM and EPUK guidance¹⁸ states:

“there should be no requirement to carry out an air quality assessment of the impact of the proposed development on the local area, and the impacts can be considered to have insignificant effects”.

Consideration of Ecological Receptors

3.9 Natural England guidance 'Air pollution and development: advice for local authorities'²⁴ and 'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations'²⁵ provide screening criteria to consider the potential for significant impacts to occur as a result of development-generated road traffic emissions on ecological designations. The following steps are set out in the guidance:

- Step 1: Identification of sensitive ecological designations and existing air quality conditions. If there are no designations within 200m of an affected road, then a screening conclusion of no likely adverse effect can be reached with regard to air quality;
- Step 2: Review of site critical loads and critical levels and assessment of impacts associated with road vehicle exhaust emissions from the development alone. A risk of adverse effect can be screened out for the proposal in isolation if the change in AADT flow as a result of the development is less than 1,000, or less than 200 for HDV flows, or if the modelled Process Contribution (PC) is less than 1% of the relevant critical load or level;
- Step 3: Consideration of emission reductions approach. It should be noted that this is only applicable to agricultural developments and is included in this list for completeness only; and,

²⁴ Air pollution and development: advice for local authorities, NE, 2025.

²⁵ Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations, NE, 2018.



- Step 4: Identification of plans and projects within the vicinity of the site and assessment of impacts associated with road vehicle exhaust emissions from the development in-combination. A risk of adverse effect can be screened out for the proposal in-combination with other relevant plans or projects if the change in AADT flow is less than 1,000, or less than 200 for HDV flows, or if the modelled PC is less than 1% of the relevant critical load or level.
- If Steps 1 to 4 indicate a screening conclusion of no likely adverse effects on the relevant designations can be reached with regard to air quality, then the assessment can be concluded. If potential effects cannot be screened out, then the assessment should proceed to Step 5 - Detailed Air Quality Assessment.

Operational Phase Site Suitability Assessment

- 3.10 A review of local air quality monitoring data, management regimes, emission sources and planning applications was undertaken to determine the suitability of the Site for the proposed use. The planning application details for the proposed AD Plant located approximately 320m north of the Site were reviewed which included an air quality assessment²⁶ which included consideration of emissions to air associated with the proposed emergency flare and back-up generator. The findings of the air quality assessment were utilised within this air quality assessment to consider the future air quality at the Site with the AD Plant in operation. **Table 3.1** details the air quality objectives considered in the assessment when considering Site suitability.

Table 3.1: Relevant Air Quality Standards and Objectives utilised in the Assessment

Pollutant	Averaging Period	Air Quality Objective ($\mu\text{g.m}^{-3}$)	Date to Achieve by
NO ₂	Annual Mean	40	31 st December 2005
	1-hour mean not to be exceeded more than 18 times per year	200	31 st December 2005
PM ₁₀	Annual Mean	40	31 st December 2004
	24-hour mean not to be exceeded more than 35 times per year	50	31 st December 2004
PM _{2.5}	Annual Mean	20	1 st January 2020
	<i>Annual Mean</i>	<i>10</i>	<i>31st December 2030</i>
	<i>Annual Mean Interim Target*</i>	<i>12</i>	<i>31st January 2028</i>

*Detailed within the Environmental Improvement Plan 2023.

Italics denotes future air quality objectives that will come into force in the future.

- 3.11 Additionally, due the proximity of the North End Works to the Site, dust-generating activities as part of operations at North End Works have the potential to influence amenity and human health at the Site through dust soiling and elevated particulate matter (PM₁₀ and PM_{2.5}) concentrations. Operations at these premises were reviewed to consider their dust emission magnitude, in addition to reviewing the effectiveness of the pathway between the sources and the Site, to determine the influence these operations may have on future users of the Site.

²⁶ Earthcare Technical (2025) Air Quality Impact Assessment Addendum for Proposed Anaerobic Digestion Plant



4 Construction Phase Dust Assessment

- 4.1 Construction phase activities associated with demolition, earthworks, construction and trackout have the potential to generate dust and particulate matter which may influence local air quality at sensitive receptor locations.
- 4.2 As there are existing sensitive receptors within the distances set out in IAQM guidance¹⁶, a construction phase dust assessment was undertaken. The assessment includes determining the dust emission magnitude for construction phase activities and identifying the sensitivity of the area to determine the overall risk of construction phase dust impacts. Mitigation measures proportionate to the level of dust impacts identified are then recommended to minimise the impact of construction phase activities on local air quality.

Assessing Risk of Dust Impacts

Defining the Dust Emission Magnitude

- 4.3 The scale and nature of construction phase activities were compared to the criteria set out in IAQM guidance¹⁶ to define the initial dust emission magnitude for each activity. **Table 4.1** summarises the dust emission magnitude for each activity and provides the justification for each assigned magnitude.

Table 4.1: Dust Emission Magnitude

Activity	Dust Emission Magnitude	Justification
Demolition	Small	There are a small number of outbuildings to be demolished that are associated with the water sports business previously operating at the Site. The total volume of structures is less than 12,000m ³ .
Earthworks	Medium	Total area of the Site where earthworks will take place is less than 18,000m ² .
Construction	Medium	The total volume of buildings to be constructed is more than 12,000m ³ but less than 75,000m ³ .
Trackout	Low	There are estimated to be less than 20 HDV (>3.5t) outward movements in any one day at the height of construction phase activity.

Defining the Sensitivity of the Area

- 4.4 The proximity of receptors to construction phase activities was reviewed alongside meteorological conditions and receptor use classes to define the sensitivity of the area. In accordance with IAQM guidance¹⁶, different use classes can be more or less sensitive to dust and particulate matter emissions during the construction phase based on parameters such as the level of amenity typically expected and the duration of time spent at the location. **Table 4.2** details the sensitivity of the area to dust soiling, human health effects and ecological effects for the different phases of construction activities. **Figure 4.1** was utilised to identify the number of sensitive receptors within the distances set out in IAQM guidance¹⁶.



Table 4.2: Sensitivity of Study Area

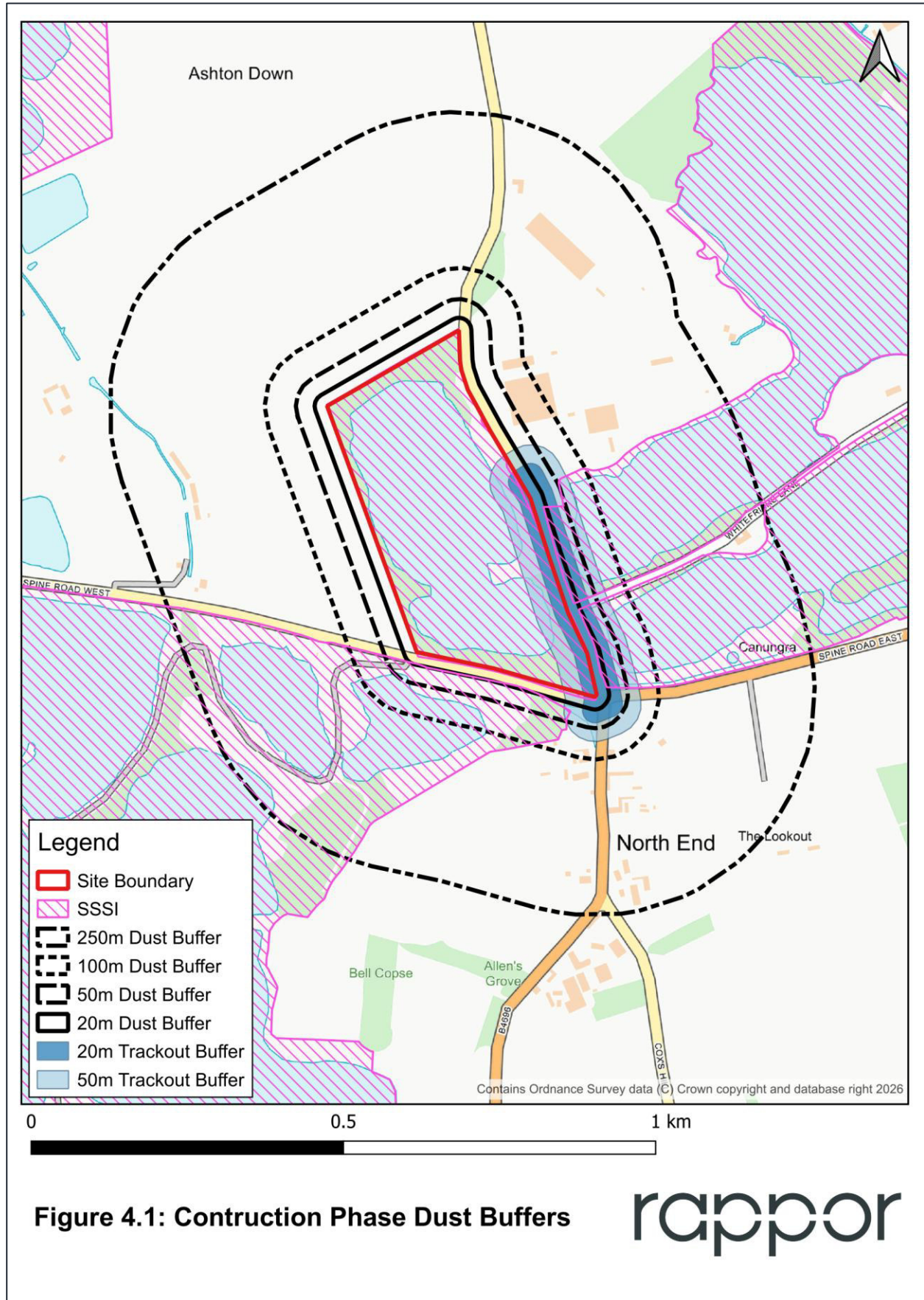
Activity	Sensitivity to Dust Soiling	Sensitivity to Human Health	Sensitivity to Ecological Effects
Demolition	Low – there are between 10 and 100 car parking spaces associated with North End Works within 50m of areas where demolition activities will take place. Due to the car parking being associated with North End Works which is a dust-generating premises itself, it is considered that sensitivity to dust soiling is less than that associated with car parking at premises not linked to dust-generating activities. Car parking within North End Works was therefore considered to be a medium sensitivity receptor to dust soiling.	Low – North End Works is located within 50m of areas where demolition activities will take place. Places of work are medium sensitivity receptors for human health. Background PM ₁₀ concentrations in the vicinity of the Site are below the screening threshold of 24µg.m ⁻³ set out in IAQM guidance and therefore the overall sensitivity of the area to human health effects associated with demolition activities is Low.	Medium – Lake 62 and the wider Site is part of the Cotswold Water Park SSSI designation. It is not known whether species sensitive to dust soiling are present however, for the purpose of a conservative and robust assessment, it has been assumed that dust-sensitive species may be present. Where a medium sensitivity receptor, such as a SSSI, is located within 20m of demolition activities, the sensitive is identified to be Medium.
Earthworks and Construction	Low – there are between 10 and 100 car parking spaces associated with North End Works within 50m of areas where earthworks and construction activities will take place. Additionally, less than 10 residential properties are located between 50 and 100m of areas where earthworks and construction activities will take place. Residential properties are highly sensitive to dust soiling whilst parking associated with dust-generating activities are considered to be medium sensitivity receptors. Taking into consideration the distance and sensitivity of the nearest receptors, the overall sensitivity of the area to dust soiling is Low.	Low – North End Works is located within 50m of areas where earthworks and construction activities will take place. Additionally, less than 10 residential properties are located between 50 and 100m of areas where earthworks and construction activities will take place. Residential properties are highly sensitive to human health effects whilst places of work are medium sensitivity receptors. Background PM ₁₀ concentrations in the vicinity of the Site are below the screening threshold of 24µg.m ⁻³ set out in IAQM guidance and therefore the overall sensitivity of the area to human health effects associated with earthworks and construction activities is Low.	Medium – Lake 62 and the wider Site is part of the Cotswold Water Park SSSI designation. It is not known whether species sensitive to dust soiling are present however, for the purpose of a conservative and robust assessment, it has been assumed that dust-sensitive species may be present. Where a medium sensitivity receptor is located within 20m of earthworks and construction activities, the sensitive is identified to be Medium.



Activity	Sensitivity to Dust Soiling	Sensitivity to Human Health	Sensitivity to Ecological Effects
Trackout	Low – there are between 10 and 100 car parking spaces associated with North End Works within 50m of roads to be used by construction traffic up to 250m from the Site entrance. Due to the car parking being associated with North End Works which is a dust-generating premises itself, it is considered that sensitivity to dust soiling is less than that associated with car parking at premises not linked to dust-generating activities. Car parking within North End Works was therefore considered to be a medium sensitivity receptor to dust soiling.	Low – North End Works is located within 50m of roads to be used by construction traffic up to 250m from the Site entrance. Places of work are medium sensitivity receptors for human health. Background PM ₁₀ concentrations in the vicinity of the Site are below the screening threshold of 24µg.m ⁻³ set out in IAQM guidance and therefore the overall sensitivity of the area to human health effects associated with trackout is Low.	Medium – Lake 62 and the wider Site is part of the Cotswold Water Park SSSI designation. It is not known whether species sensitive to dust soiling are present however, for the purpose of a conservative and robust assessment, it has been assumed that dust-sensitive species may be present. Where a medium sensitivity receptor is located within 20m of roads to be used by construction vehicles up to 250m from the Site entrance, the sensitive is identified to be Medium.



Figure 4.1: Construction Phase Dust Buffers





Defining the Risk of Impacts

- 4.5 The dust emission magnitude and sensitivity of the area for earthworks, construction and trackout are then combined to determine the overall risk of impacts associated with each activity. **Table 4.3** below summarises the risk of dust impacts for each activity.

Table 4.3: Summary of Risk of Dust Impacts

Activity	Dust Emission Magnitude	Highest Sensitivity of Area	Risk of Dust Impact
Demolition	Small	Medium	Low Risk
Earthworks	Medium	Medium	Medium Risk
Construction	Medium	Medium	Medium Risk
Trackout	Small	Medium	Low Risk

Mitigation

- 4.6 IAQM guidance¹⁶ provides a list of dust mitigation measures that should be implemented on site during the construction phase, where practicable. Mitigation measures proportionate to the level of dust risk identified in **Table 4.3** are detailed in **Appendix D**. With the implementation of these measures, the residual impacts associated with construction phase activities are considered to be 'not significant'.



5 Operational Phase Road Traffic Emissions Screening Assessment

Consideration of Human Receptors

- 5.1 The trip generation associated with the proposed development was reviewed and compared to the two stage screening criteria set out in IAQM and EPUK guidance¹⁸ for the consideration of human receptor impacts.

Stage One

- 5.2 The development proposals include more than 10 residential dwellings and more than 10 car parking spaces and therefore exceeds the Stage One criteria set out in IAQM and EPUK guidance¹⁸.

Stage Two

- 5.3 The proposed development is estimated generate an additional 294 trips as a 24-hour AADT. The trip generation falls below the relevant Stage Two screening criteria of 500 LDVs and 100 HDVs outside an AQMA.
- 5.4 In accordance with IAQM and EPUK guidance¹⁸, where the Stage Two criteria are not exceeded, a detailed assessment of the impact of the proposed development on local air quality at human receptors is not required, and the proposed development is considered to have an insignificant effect.

Consideration of Ecological Receptors

- 5.5 A Screening Assessment was undertaken in accordance with the steps outlined in Section 3, which are based on the Natural England guidance. The findings are summarised in the following Sections.

Step 1

- 5.6 Step 1 required identification of any sensitive designations that may be affected by emissions from the development. The following sites were identified within 200m of roads potentially affected by changes in traffic flow as a result of the proposals:
- Cotswold Water Park SSSI and,
 - Coke's Pit Lake LNR.
- 5.7 As shown above, two designations were identified that may be affected by emissions associated the development. As such, the assessment proceeded to Step 2.

Step 2

Identification of Relevant Critical Levels and Loads

- 5.8 In order to identify whether the identified designations are sensitive to air pollution, a review of the Air Pollution Information System (APIS) website²⁷ was undertaken. This indicated

²⁷ UK Air Pollution Information System, www.apis.ac.uk.



critical levels and loads have been defined for qualifying features in the LNR and as such, they are considered sensitive to air pollution and a screening conclusion of no adverse effect on the designations could not be reached with regard to air quality for the LNR. No critical levels or loads were identified for the Cotswold Water Park SSSI and therefore a conclusion of no adverse effect of this designation could be reached.

Calculation of Process Contribution

- 5.9 A review of the screening thresholds outlined in the Natural England guidance was undertaken for the LNR. As outlined in Section 3, if the predicted change in AADT as a result of the development is less than 1,000 or less than 200 HDVs, a screening conclusion of no adverse effects on the designation can be reached.
- 5.10 Predicted vehicle trip generation for the proposed development was provided by Rappor, the Transport Consultants for the Project. The proposed development will generate 294 vehicles as a 24-hour AADT, with no HDV movements. The proposed development alone is therefore not predicted to increase AADT flows on roads within 200m of the identified ecological designations by more than 1,000. As such, a screening conclusion of no adverse effect on ecological designations as a result of the proposed development alone can be reached.

Step 3

- 5.11 The proposed development is not an agricultural development. As such, the assessment progressed to Step 4.

Step 4

- 5.12 An assessment of potential impacts of the proposed development in-combination with other developments in the local area was undertaken for the identified ecological designations. As in Step 2, a review of the Natural England screening thresholds was undertaken in order to determine the risk of adverse effects associated with the development in-combination.
- 5.13 **Table 5.1** details the trip generation associated with the proposed development in addition to the trip generation associated with the identified committed developments: the consented development at Cotswold Community Estate and the AD Plant.

Table 5.1: Trip Generation associated with Proposed Development and Identified Committed Developments

Site	Predicted Change in AADT Flow	Predicted Change in HDV Flow
Proposed Development	294	0
AD Plant	58	34
Cotswold Community Estate	353	0
Total	705	34

- 5.14 As detailed in **Table 5.1**, the total in-combination increase in vehicles as a result of the proposed development and identified committed developments was 705 vehicles as a 24-hour AADT, of which 34 will be HDVs. These are below both the AADT and HDV screening



thresholds set out in Natural England guidance, and it can therefore be concluded that the proposed development in-combination will have an insignificant impact on ecological receptors. No further assessment of ecological effects was therefore required.

Development Measures

5.15 Whilst the proposed development is not predicted to give rise to any significant air quality impacts as a result of development-generated traffic, measures are incorporated into the proposals to further minimise emissions associated with the operation of the proposed development.

5.16 Measures include:

- Provision of information for guests identifying public and active travel availability in the local area to minimise vehicle use by guests and staff;
- Provision of Electric Vehicle charging infrastructure to promote low emission vehicle update; and
- Provision of cycle hire facilities to encourage active travel for guests during their stay.



6 Operational Phase Exposure Assessment

- 6.1 As the proposed development will introduce new sensitive uses to the Site, consideration was given to the suitability of the Site for the proposals with regard to air quality.
- 6.2 A review of the following sources was undertaken to consider Site suitability:
- Defra's Local Air Quality Management support pages;
 - Local Air Quality Management reports and monitoring data;
 - Aerial imagery, maps and plans of the Site and study area; and
 - The Wiltshire Council planning portal.

Local Air Quality Management and Monitoring

- 6.3 The proposed development is not located within or adjacent to an Air Quality Management Area (AQMA). Wiltshire Council undertakes monitoring of NO₂ within its administrative area however, the closest Wiltshire Council-operated monitoring locations to the Site are situated over 24km southwest of the Site in Chippenham. A review of neighbouring local authorities was undertaken to identify whether any air quality monitoring was undertaken closer to the Site. The neighbouring authority of Cotswold District Council (CDC) was identified to operate a series of diffusion tube monitors in Cirencester, approximately 4.2km north of the Site
- 6.4 The closest monitoring locations to the Site are detailed in **Table 6.1** below. Due to the influence of the COVID-19 pandemic and subsequent lockdowns, monitoring data up to 2019 are considered the 'pre-pandemic baseline' whilst monitoring data for 2022 onwards represent the 'post-pandemic baseline'. Monitoring data recorded in 2020 and 2021 are considered atypical due to the influence of lockdown restrictions on road traffic levels and emissions, in accordance with the IAQM position statement²⁸.

Table 6.1: Local Air Quality Monitoring Data (µg.m⁻³)

Site ID	X	Y	Site Type	Monitored Concentration				
				2020	2021	2022	2023	2024
NAS34	402394	199581	Rural	7.4	7.0	7.1	6.4	5.6
NAS35	402439	200297	Kerbside	7.0	7.9	8.0	7.3	7.2
NAS36	402241	201102	Roadside	11.2	10.8	10.7	10.5	9.6

- 6.5 As detailed in **Table 6.1**, the monitored NO₂ concentrations at the closest monitoring locations to the Site recorded concentrations well below the annual mean NO₂ objective of 40µg.m⁻³. The data also demonstrates that a downtrend is evident, indicating that air quality is improving in the area. Monitoring locations NAS35 and NAS36 are located within the more built-up area of Cirencester however monitoring location NAS34 is a rural monitoring

²⁸ Institute of Air Quality Management (2023) Position Statement: The Use of 2020 and 2021 Monitoring Datasets Version 2.1



location and set in a similar setting to that of the Site and surrounding area. It is therefore considered that concentrations at the Site will be most similar to those recorded at NAS34.

- 6.6 A review of Defra background maps²⁹ for the 1km by 1km grid square that the Site is located within was undertaken and pollutant concentrations compared to the current relevant air quality objectives. Background concentrations of NO₂, PM₁₀ and PM_{2.5} were all well below the relevant air quality objectives.

Local Emission Sources

Road Traffic Emissions

- 6.7 Consideration was given to the potential influence of existing road traffic emissions on the surrounding road network on air quality within the Site.
- 6.8 **Table 6.2** details the road traffic levels for Spine Road for the most recent years of data freely available for review. A review of local road traffic levels was undertaken in addition to a review of road traffic levels on the local network was undertaken to consider the potential influence of vehicle emissions on the suitability of the Site for the proposed uses. The Department for Transport traffic count website³⁰ was reviewed to identify the traffic levels of the nearest road links for which data is freely available. Traffic data for roads near the Site are detailed in **Table 6.2**.

Table 6.2: DfT Traffic Count Data near the Site

Road	Traffic Flow (AADT)				
	2020	2021	2022	2023	2024
B4696 Spine Road (count point 8119930)	9,045	9,946	10,261	10,488	11,257

- 6.9 The data presented in **Table 6.2** illustrates that the road network in the vicinity of the Site does not carry significant traffic levels that may give rise to elevated pollutant concentrations. Currently, there are existing residential dwellings situated in the local area which are closer to the closest road source than the proposed development, whereby the closest lodges are set back within the Site by approximately 20m. This is considered to reduce the influence of road traffic emissions associated with the local road network on the Site.
- 6.10 Taking into consideration that the road network in the vicinity of the Site does not carry significant traffic levels, it is considered that road traffic emissions will not significantly influence air quality within the Site.

Dust Emission Sources

- 6.11 The Site is located to the west of the Aggregate Industries North End Works which undertakes dust-generating activities. Consideration was given to the potential influence of these operations on the Site with regard to dust emissions.
- 6.12 A dust risk assessment was undertaken in accordance with IAQM guidance¹⁷ to determine the dust source potential of the works. Consideration was then given to the effectiveness of

²⁹ Defra (2024) background pollutant concentration maps [<https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2021>]

³⁰ Department for Transport (2026) <https://roadtraffic.dft.gov.uk/count-points#13/51.714982/-1.966307>



the pathway from these operations to the Site to identify the overall dust risk impact on the Site.

Dust Source Potential

- 6.13 The operations at Soils HS Ltd were reviewed and compared to the dust source potential criteria set out within IAQM guidance¹⁷. The works do not include quarrying or extraction of minerals, with operations being focussed on processing, storing and distributing mineral products. The works are based largely on hardstanding with paved haul roads to minimise dust. The works also operate a 10mph speed limit on site.
- 6.14 Limited amounts of potentially dusty material is stored in stockpiles at the works, with stockpile retention limited as products are bagged and distributed. Stockpiles are located at the easternmost end of the works, furthest from the Site. Imagery of the works identified minimal dust soiling within the works, and no trackout from the works onto the main road network, even during dry months.
- 6.15 On the basis of this information, the Dust Source Potential for the North End Works was considered to be **small to medium** in accordance with IAQM guidance¹⁷.

Pathway Effectiveness

- 6.16 The effectiveness of the pathway between the identified dust-generating activities and the Site was reviewed. Meteorological data from Lyneham was reviewed to identify the frequency with which winds blow from the North End Works towards the Site on dry days.
- 6.17 The prevailing wind direction in the area is from the southwest with significant contributions from the northeast (typically during winter months). The Site is located approximately 20m southwest of the North End Works at its closest point. Therefore, north-easterly winds are considered the most likely to transport dust from North End Works towards the Site.
- 6.18 The frequency with which north-easterly winds of speeds in excess of 5 m/s on dry days are experienced is between 5% and 12% of the year. This is considered to be **moderately frequent** in accordance with IAQM guidance¹⁷.
- 6.19 The Site is located within 100m of the North End Works at their closest point, which falls into the **close receptor distance** criteria set out in IAQM guidance¹⁷.
- 6.20 The overall pathway effectiveness between the North End Works and the Site is therefore defined as **moderately effective**.

Dust Risk Impact

- 6.21 The criteria set out in **Table 6.3**, as detailed in IAQM guidance¹⁷, were utilised to determine the overall potential dust risk impact associated with the Site as a result of nearby dust-generating activities.

Table 6.4: Dust Risk Impact Criteria

Pathway Effectiveness	Source Emission Potential		
	Small	Medium	Large
Highly effective	Low Risk	Medium Risk	High Risk
Moderately effective	Negligible Risk	Low Risk	Medium Risk



Pathway Effectiveness	Source Emission Potential		
	Small	Medium	Large
Ineffective	Negligible Risk	Negligible Risk	Low Risk

- 6.22 With a medium Dust Source Emission Potential and a moderately effective pathway, the dust risk impact at the Site as a result of operations at North End Works is low risk. Wiltshire Council confirmed that they had not received any complaints regarding emissions associated with the operations at the North End Works, which supports the findings of the assessment. It is therefore considered that the North End Works will not significantly influence the Site within regards to amenity from dust soiling or emissions to air from particulate matter.

Other Emission Sources

- 6.23 A review of aerial imagery did not identify any existing railway lines or other industrial emission sources in the vicinity of the Site that may influence air quality within the Site.
- 6.24 A review of the Wiltshire Council planning portal identified an application for a proposed AD plant 320m north of the Site. This facility will produce biogas which will be transported off site to other facilities where it will be fed into the national grid. A flare will be present at the facility which will only be operated in emergency conditions when gas is required to be vented for safety purposes e.g. during malfunction of the AD facility. A back-up generator will also be installed with expected use limited to approximately 15% of the year according to the application.
- 6.25 The AD plant application included an assessment of the impact of the flare and back-up generator on local air quality, including the Site. The assessment concluded that the impact of emission sources at the proposed AD plant would have a negligible impact on all nearby receptors, including the Site. It is therefore considered that the AD plant would not significantly influence air quality within the Site for future users.

Summary of Site Suitability

- 6.26 Local representative monitoring data and background mapped concentrations were well below current relevant objectives and the Site is not located within or near an existing AQMA. The closest road sources to the Site do not carry significant levels of road traffic and there are existing residential properties located closer to these roads than the sensitive uses proposed within the Site.
- 6.27 The neighbouring industrial premises were identified to have a negligible impact on amenity and human health within the Site as a result of dust-generating activities and emissions to air in accordance with relevant guidance and associated air quality assessments. Therefore, it is considered that the Site is suitable for the proposed use with regards to air quality and the current relevant air quality objectives without the requirement for mitigation.



7 Summary and Conclusions

- 7.1 Rappor was instructed by Quinque Stella Holdings Ltd to undertake an air quality assessment for submission with a planning application for a proposed leisure development at Lake 62 in Cotswold Water Park. The development proposals include the construction of up to 38 holiday lodges and associated infrastructure.
- 7.2 A qualitative construction phase dust assessment was undertaken and mitigation measures proportionate to the level of dust risk identified are recommended. With the implementation of these measures, the impact of construction phase dust is negligible which is not significant.
- 7.3 A qualitative operational phase road traffic emissions screening assessment was undertaken to consider the impact of the proposed development on local air quality. The two stage screening criteria set out in IAQM and EPUK guidance were not exceeded and there was no need to undertake any further detailed assessment of the impact of development-generated road traffic on human receptors. Additionally, the screening process set out in Natural England guidance confirmed that the proposed development did not meet the screening thresholds for potentially significant ecological impacts in isolation or in-combination with local committed developments. Where the screening criteria are not exceeded, the proposed development can be considered as having a not significant impact on local air quality at ecological and human receptors as a result of development-generated traffic.
- 7.4 An operational phase exposure assessment, which considered local sources of pollution, was undertaken to consider the suitability of the Site for the proposed sensitive end use. As the road network in the vicinity of the Site does not carry significant traffic levels and as background and monitored concentrations were below the relevant objectives, road traffic is not considered to have a significant impact on future users of the Site. Consideration was also given to the influence of activities at the neighbouring North End Works on amenity and health of future residents of the Site. A review of potential dust-generating activities was undertaken in accordance with guidance, and the Site was identified to be at low risk of dust impacts.
- 7.5 Consideration was also given to the potential influence of a proposed AD plant on air quality within the Site due to the proposed emergency flare and back-up generator. The AD plant application air quality assessment considered the impact of the installation on air quality with the Site and identified a negligible impact. The Site was therefore considered suitable for the proposed sensitive use with regard to dust and particulate matter emissions associated with existing and proposed industrial operations in the vicinity of the Site.



Appendix A – Glossary



Term	Definition
AADT	Annual Average Daily Traffic flow.
Air quality objective	Policy target generally expressed as a maximum ambient concentration to be achieved, either without exception or with a permitted number of exceedances within a specific timescale (see also air quality standard).
Air quality standard	The concentrations of pollutants in the atmosphere which can broadly be taken to achieve a certain level of environmental quality. The standards are based on the assessment of the effects of each pollutant on human health including the effects on sensitive sub groups (see also air quality objective).
Annual mean	The average (mean) of the concentrations measured for each pollutant for one year. Usually this is for a calendar year, but some species are reported for the period April to March, known as a pollution year. This period avoids splitting winter season between two years, which is useful for pollutants that have higher concentrations during the winter months.
AQAP	Air Quality Action Plan.
AQMA	Air Quality Management Area.
AQS	Air Quality Strategy.
Defra	Department for Environment, Food and Rural Affairs.
EPUK	Environmental Protection UK.
Exceedance	A period of time where the concentrations of a pollutant is greater than, or equal to, the appropriate air quality standard.
HDV	Heavy Duty Vehicles (HGVs + buses and coaches)
HGV	Heavy Goods Vehicles.
IAQM	Institute of Air Quality Management.
LAQM	Local Air Quality Management.
LDV	Light Duty Vehicles (motorbikes, cars, vans and small trucks)
NO	Nitrogen monoxide, a.k.a. nitric oxide.
NO ₂	Nitrogen dioxide.
NO _x	Nitrogen oxides.
Percentile	The percentage of results below a given value.
PM ₁₀	Particulate matter with an aerodynamic diameter of less than 10 micrometres.
PM _{2.5}	Particulate matter with an aerodynamic diameter of less than 2.5 micrometres.
SDC	Stroud District Council
micrograms per cubic metre (µg.m ⁻³)	A measure of concentration in terms of mass per unit volume. A concentration of 1µg.m ⁻³ means that one cubic metre of air contains one microgram (millionth of a gram) of pollutant.



Appendix B – Local Planning Policy



Wiltshire Core Strategy

Core Policy 55 Air Quality states:

“Development proposals which by virtue of their scale, nature or location are likely to exacerbate existing areas of poor air quality, will need to demonstrate that measures can be taken to effectively mitigate emission levels in order to protect public health and wellbeing, environmental quality and amenity. Mitigation measures should demonstrate how they will make a positive contribution to the aims of any Air Quality Strategy for Wiltshire and where relevant, the Wiltshire Air Quality Action Plan. Mitigation may include:

- 1. landscaping, bunding or separation to increase distance from highways and junctions*
- 2. possible traffic management or highway improvements to be agreed with the local authority*
- 3. abatement technology and incorporating site layout / separation and other conditions in site planning*
- 4. traffic routing, site management, site layout and phasing*
- 5. where appropriate, contributions will be sought toward the mitigation of the impact a development may have on levels of air pollutants.”*



Appendix C – Consultation

Freya Hoyle

From: Broad, Damaris <Damaris.Broad@wiltshire.gov.uk>
Sent: 03 March 2026 14:06
To: Freya Hoyle
Subject: RE: Lake 62 - Cotswold Water Park - Air Quality, Dust and Odour Assessment

Good afternoon Freya,

I would agree with your proposals with regard to air quality assessment for the construction phase site and impact on end users of the site from nearby aggregate uses, considering short term AQ objectives.

The odour assessment should be undertaken with current Institute of Air Quality Management (IAQM) guidance "Guidance on the assessment of odour for planning" 2018 and we would support visits to the site to establish baseline odour conditions.

I can confirm that we have not received any dust or dust complaints concerning activities at North End Farm works.

Regards

Ms Damaris Broad
Environmental Health Officer
Environmental Control & Protection
County Hall
Bythesea Road
Trowbridge
Wiltshire
BA14 8JN

01225 716686

Sent: 03 March 2026 10:49
To: Public Protection West <publicprotectionwest@wiltshire.gov.uk>
Subject: Lake 62 - Cotswold Water Park - Air Quality, Dust and Odour Assessment

You don't often get email from freya.hoyle@rappor.co.uk. [Learn why this is important](#)

Good morning,

Rappor has been appointed to provide air quality, odour and dust services in support of the application for up to 39 holiday lodges and associated infrastructure at Lake 62, Cotswold Water Park. A pre-app has been held (reference: PL/2025/08620) in which details of the required supporting documents were provided.

We understand from the pre-app that the following require consideration:

- Consideration of construction phase dust emissions associated with the proposals on local air quality including ecological receptors;
- Consideration of operational phase dust from nearby dust-generating premises on amenity within the site for future users;
- Consideration of operational phase road traffic emissions associated with the development on local air quality including ecological receptors; and

- Consideration of the suitability of the site for the proposed sensitive use with regards to air quality and odour.

The proposed assessment methodology is provided below and we would be grateful if you could advise if this is accepted.

Air Quality and Dust

A qualitative construction phase dust assessment will be undertaken in accordance with IAQM guidance to consider the potential for dust impacts to occur during the construction phase as a result of dust soiling, human health effects and ecological effects. Mitigation measures proportionate to the level of dust risk identified will be provided for inclusion in a CEMP which can be secured by condition.

The trip generation provided by the transport consultants has confirmed that the development will generate 232 trips as a 24-hour AADT which is well below the 500 LDV trips screening threshold set out in IAQM and EPUK guidance for when a detailed assessment of road traffic impacts on human receptors is required. Additionally, this level of trips falls below the 1000 AADT threshold set out in Natural England guidance for when a detailed assessment of ecological impacts is required. It is therefore proposed to undertake a simple qualitative road traffic emissions impact screening assessment in accordance with IAQM and EPUK guidance and Natural England guidance to demonstrate that the proposals will have an insignificant impact on local air quality.

As the proposals will introduce new sensitive users to the site, the assessment will also consider the suitability of the site for the proposed uses. A review of local air quality monitoring data and management regimes will be undertaken in addition to findings of air quality assessments for nearby developments to identify baseline air quality conditions at the site and consider whether pollutant concentrations will be below the relevant air quality objectives for the proposed uses. As the development proposes holiday lodges, people are not expected to be present for periods of time relevant to the annual mean air quality objectives, and therefore the short term objectives are considered applicable for this application.

The assessment of site suitability will also include consideration of dust from nearby dust-generating activities to consider the potential influence on the site. This will include a site walkover to consider existing dust baseline conditions within the site and surrounding area, and a review of environmental permits and dust management measures in place at identified dust-generating installations in the area. A qualitative dust risk assessment will be undertaken in accordance with IAQM guidance on mineral dust to identify the risk of significant dust impacts within the site as a result of nearby uses. Based on the level of dust management required for the nearby installations, and the prevailing wind direction, it is considered that the site will not be significantly impacted by dust associated with nearby installations.

Odour:

The site is located near a proposed Anaerobic Digester plant which has not yet been built. Consideration will be given to the potential for odours associated with operations at the AD plant to impact amenity for future users. A site walkover will be undertaken within the site and in the vicinity of the proposed AD plant to identify existing baseline odour conditions. A review of odour assessment work prepared for the AD plant application will be undertaken to determine the Odour Source Potential and Effectiveness of the Pathway to the site. An odour dust risk assessment will then be undertaken to determine the risk of odour impacts within the site, and identify any relevant mitigation measures to minimise odour risk if required.

I would be grateful if you could provide us with a copy of any dust and odour complaints that you may hold for the local area for our consideration.

If you have any queries, please don't hesitate to get in touch.

Best regards,

Freya

Freya Hoyle MSc BSc MIAQM MIEEnvSc

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Appendix D – Construction Phase Dust Mitigation



Mitigation Measure	Highly Recommended	Desirable
Communication	Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.	None
	Display the name and contact details of person(s) responsible for air quality and dust issues on the site boundary. This may be the environment manager / engineer or the site manager.	
	Display the head or regional office contact information.	
	Develop and implement a Dust Management Plan which may include measures to control other emissions, approved by the Local Authority.	
Site Management	Record all dust and air quality complaints, identify causes and take appropriate action to reduce emissions in a timely manner and record any measures taken.	None
	Make the complaints log available to the local authority when asked.	
	Record any exceptional incidents that cause dust or air emissions, either on or off site and the action taken to resolve the situation in the log book.	
Monitoring	Carry out regular inspections to monitor compliance with the Dust Management Plan, record inspection results and make an inspection log available to the local authority when asked.	Undertake daily on site and off site inspections where receptors including roads are nearby, to monitor dust. Record inspection results and make the log available to the local authority when asked.
	Increase the frequency of site inspections when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.	
	Agree dust deposition, dust-flux or real-time dust monitoring locations with the local authority, where monitoring is required. Baseline monitoring should commence at least three months prior to works on site, where possible.	
Preparing and maintain the Site	Plan site layout so that machinery and dust causing activities are located away from receptors, as far as possible.	None
	Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as stockpiles on site.	
	Fully enclose the site or specific operations where there is a high potential for dust production and the site is active for an extensive period.	
	Avoid site runoff of water or mud.	
	Keep site fencing, barriers and scaffolding clean with wet methods.	
	Remove materials that have potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on site, cover as described below.	
	Cover, seed or fence stockpiles to prevent wind whipping.	
Operating vehicle / machinery and sustainable travel	Ensure all vehicles switch off engines when stationary – no idling.	Impost and signpost a maximum 15 mph speed limit on surfaced and 10mph speed limited on unsurfaced haul roads and work areas.



Mitigation Measure	Highly Recommended	Desirable
	Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable.	Implement a Travel Plan that supports and encourages sustainable travel.
Operations	Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction.	None
	Ensure an adequate water supply to the site for effective dust suppression using non-potable water where possible and appropriate.	
	Use enclosed chutes and conveyors and covered skips.	
	Minimise drop heights from conveyors, loading shovels, hoppers and other loading and handling equipment and use fine water sprays on such equipment wherever appropriate.	
	Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable.	
Waste management	Avoid bonfires and burning of waste materials.	None
Demolition	Ensure effective water suppression is used during demolition operations.	Soft strip inside buildings before demolition.
	Avoid explosive blasting.	
	Bag and remove any biological debris before demolition, or damp down such material before demolition.	
Earthworks	None	Re-vegetate earthworks and exposed areas / soil stockpiles to stabilise surfaces as soon as practicable.
		Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable.
		Only remove the cover in small areas during work and not all at once.
Construction	Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.	Avoid scabbling (roughening of concrete surfaces) if possible.
		Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.
		For smaller supplies of fine powder materials, ensure bags are sealed after use and stored appropriately to prevent dust.
Trackout	None	Use water-assisted dust sweepers on the access and local roads to remove, as necessary, any material tracked out of the site.
		Avoid dry sweeping of large areas.
		Ensure vehicles entering and leaving the site are covered to prevent any escape of materials during transportation.
		Record all inspections of haul routes and any subsequent action taking in site log book.



Mitigation Measure	Highly Recommended	Desirable
		Implement a wheel-washing system with rumble grids to dislodge mud prior to leaving the site, where practicable.

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