Land North of Croesfoel Court, Rhostyllen

Arbtech

Air Quality Assessment

July 2026

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Executive Summary

Rappor Consultants Limited was instructed by Arbtech to undertake an air quality assessment for a Proposed Development for the change of use of land to a 4 pitch family gypsy traveller site (retrospective), on land to the North of Croesfoel Court, Rhostyllen, Wrexham, LL14 4DR (the Site).

A qualitative construction phase dust assessment was undertaken in accordance with Institute of Air Quality Management guidance and 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 does not trigger the need to proceed to Stage 2 of the IAQM operational phase screening process, as it will not provide more than 10 dwellings at the Site. As such, no further assessment has been undertaken as the impact associated with operational phase road traffic emissions can be deemed Negligible.

Consideration was given to the suitability of the Site for introduction of residential use through a review of local air quality monitoring data, management regimes, emission sources and imagery. The Site is not located in an air quality management area or other area of poor air quality, and local air quality monitoring data recorded concentrations below relevant air quality assessment levels. As such, the Site is considered suitable for the proposed residential end-use with regard to the current, relevant air quality assessment levels and mitigation measures are not required.

From the evidence presented, and by following the guidance provided in this report, the Proposed Development would be expected to comply with all relevant air quality policy. As such, air quality is not considered to be a constraint to planning approval.

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1 Introduction

General

1.1 Rappor Consultants Limited was instructed by Arbtech to undertake an air quality assessment for a Proposed Development for the change of use of land to a 4 pitch family gypsy traveller site (retrospective), on land to the North of Croesfoel Court, Rhostyllen, Wrexham, LL14 4DR (the Site).

1.2 The Site is located within the administrative area of Wrexham County Borough Council (WCBC) and is shown in **Figure 1.1**.

1.3 The Site is located between the B5098 Croesfoel Lane to the west, beyond which lies open fields, and the A483 dual carriageway to the east, beyond which lies Croesfoel Industrial Park and Rhostyllen services. The Site is approximately 40m north west of the Wrexham, Road roundabout.

1.4 The assessment considers the potential impacts of the Proposed Development during both the construction and operational phases and considers the suitability of the Site for the proposed use.

1.5 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**.

Figure 1.1: Site Location

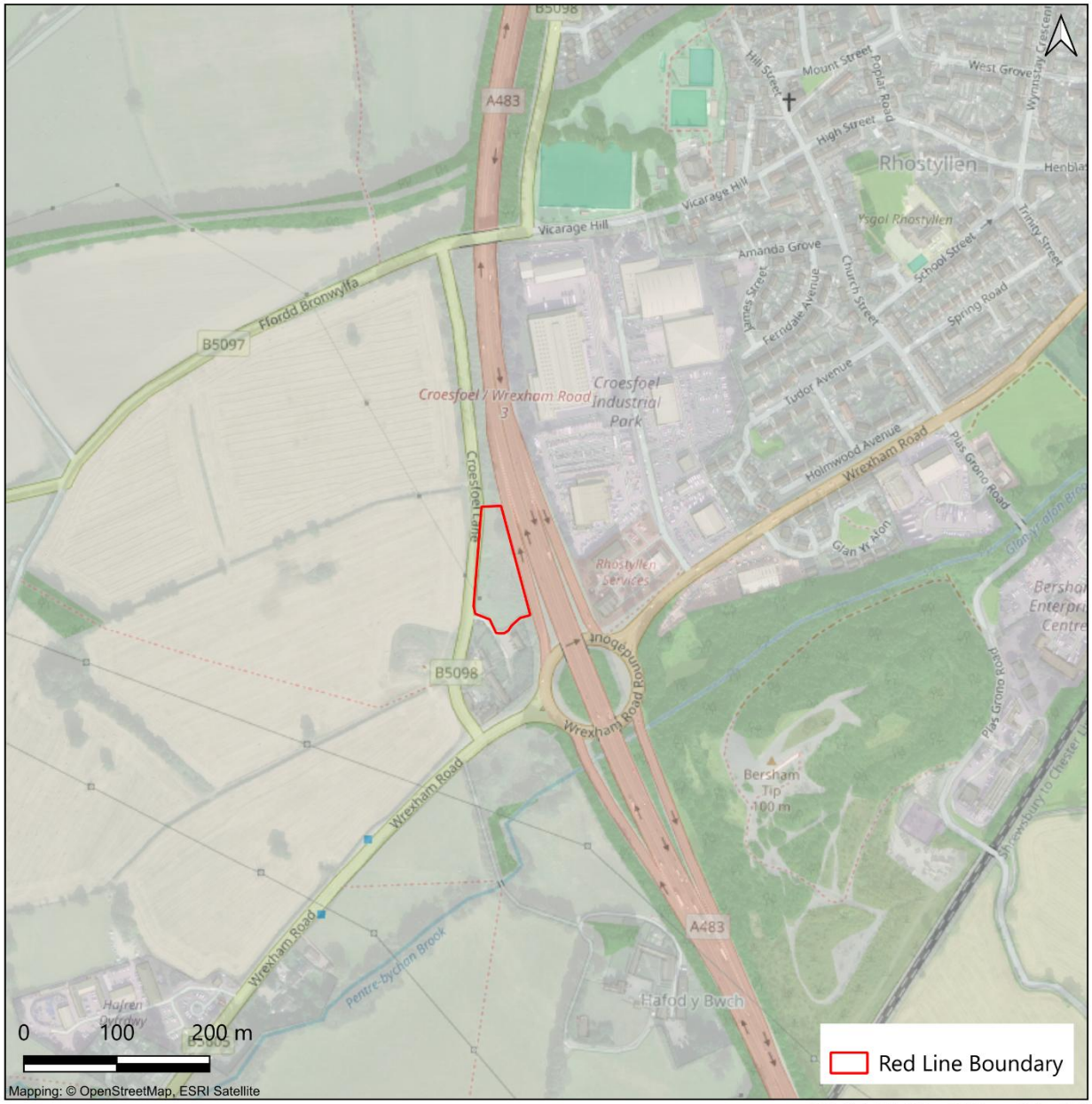


Figure 1.1: Site Location

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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, Directive 2008/50/EC on Ambient Air Quality and Cleaner Air for Europe[1];
- HMSO, Environment Act 1995[2];
- HMSO, Environment Act 2021[3];
- Welsh Government, Well-being of Future Generations (Wales) Act 2015[4];
- Welsh Government, The Air Quality Standards (Wales) Regulations 2010 (as amended)[5];
- Welsh Government, Clean Air Plan for Wales: Healthy Air, Healthy Wales (2020, updated 2024)[6];
- Welsh Government, Environment (Air Quality and Soundscapes) (Wales) Act 2024[7];
- Welsh Government, Planning Policy Wales (Edition 12)[8];
- Welsh Government, Future Wales: The National Plan 2040[9]; and
- Welsh Government, Development Management Manual[10].

Assessment Criteria

2.2 The assessment has been undertaken in the context of the current relevant air quality standards / objectives / limit values / concentration targets (hereby collectively termed Air Quality Assessment Levels (AQALs)) detailed in **Table 2.1,** which are derived from the legislation and policy outlined above:

Table 2.1: Relevant Air Quality Assessment Levels

Pollutant	Averaging Period	AQAL (v)	Date to Achieve by
NO_2	Annual Mean	40	31 December 2005

[1] European Parliament (2008) Directive 2008/50/EC on Ambient Air Quality and Cleaner Air for Europe.
[2] HMSO (1995) Environment Act 1995. London: TSO.
[3] HMSO (2021) Environment Act 2021. London: TSO.
[4] Welsh Government (2015) Well-being of Future Generations (Wales) Act 2015.
[5] Welsh Government (2010) The Air Quality Standards (Wales) Regulations 2010 (SI 2010 No. 1433 (W.126)), as amended.
[6] Welsh Government (2020) Clean Air Plan for Wales: Healthy Air, Healthy Wales. Updated September 2024.
[7] Welsh Government (2024) Environment (Air Quality and Soundscapes) (Wales) Act 2024
[8] Welsh Government (2024) Planning Policy Wales, Edition 12.
[9] Welsh Government (2021) Future Wales: The National Plan 2040.
[10] Welsh Government (2024) Development Management Manual.

Pollutant	Averaging Period	AQAL (v)	Date to Achieve by
	1-hour mean not to be exceeded more than 18 times per year	200	31 December 2005
PM_{10}	Annual Mean	40	31 December 2004
	24-hour mean not to be exceeded more than 35 times per year	50	31 December 2004
$PM_{2.5}$	Annual Mean	20	1 January 2020

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2.3 At the time of writing, Welsh Government has not adopted $PM_{2.5}$ concentration targets equivalent to those established under the Environmental Targets (Fine Particulate Matter) (England) Regulations 2023. The applicable $PM_{2.5}$ AQAL for the purposes of this assessment is therefore the current annual mean objective of 20µg.m^{-3}.

2.4 In line with the Welsh Government's Clean Air Plan for Wales: Healthy Air, Healthy Wales, the baseline assessment detailed within this report identifies key sources of $PM_{2.5}$ air pollution within the Site locale.

Local Planning Policy

2.5 WCBC's Local Development Plan was adopted by the Council in 2023 and covered the period 2013 to 2028. However, this was un-adopted in 2025. The development plan for WCBC now comprises of Future Wales: The National Plan 2040 and Wrexham Unitary Development Plan 1996-2011 adopted in 2005. Further information is provided in **Appendix B.**

Air Quality Guidance

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

- Defra, Local Air Quality Management (LAQM) Technical Guidance (TG22) v2.1 (2025)[11];

  Institute of Air Quality Management (IAQM), Guidance on the assessment of dust from demolition and construction (2024)[12], and
- Environmental Protection UK (EPUK) and IAQM Land-Use Planning and Development Control: Planning for Air Quality (2017)[13].

[11] Defra (2025) Local Air Quality Management (LAQM) Technical Guidance (TG(22)) v2.1
[12] Institute of Air Quality Management (2024) Guidance on the assessment of dust from demolition and construction, Institute of Air Quality Management, London
[13] Institute of Air Quality Management and Environmental Protection UK (2017) Land-Use Planning and Development Control: Planning for Air Quality

3 Assessment Methodology

Consultation

3.1 The Local Authority Officer responsible for air quality at WCBC was contacted in July 2026 via email, where the methodology for assessment was outlined. A response was received confirming the assessment approach.

Construction Phase - Dust Assessment

3.2 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 the Institute of Air Quality Management (IAQM) guidance[12]. The 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 – Screening Assessment (Human Health)

3.3 The Environmental Protection UK (EPUK) and IAQM guidance[13] 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:

3.4 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 1,000m^2 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.

3.5 The Proposed Development does not trigger the need to proceed to Stage 2, as it will not provide more than 10 dwellings at the Site. As such, no further assessment has been undertaken as the impact can be deemed Negligible in accordance with guidance.

Operational Phase – Exposure Assessment

3.6 Consideration was also given to the suitability of the Site for the proposed residential use through a review of local air quality monitoring data, management regimes, emission sources and imagery. The exposure assessment is presented in **Section 6**.

4 Baseline Conditions

4.1 Baseline air quality conditions in the study area were defined based on a review of the following sources of data:

- Defra's Local Air Quality Management support pages, including UK-AIR;
- WCBC's Local Air Quality Management reports[14] and monitoring data; and
- Aerial imagery, maps and plans of the Site and study area.

Local Emissions Sources

4.2 Emissions from road vehicles, primarily those travelling on the A483, are considered to be the primary source of air pollution in the Site locale. DfT road traffic statistics[15] show that 24-hour Annual Average Daily Traffic flows in 2025 were estimated to be 54,333 vehicles.

4.3 No significant point sources have been identified within the Site locale following review of the National Atmospheric Emissions Inventory (NAEI)[16]. The closest is Pentrebychan Crematorium, c. 900m west of the Site. At this distance, any emissions would reasonably be expected to contribute to background ambient concentrations only.

Local Air Quality Management and Monitoring

Air Quality Management Areas

4.4 WCBC do not currently have any AQMAs declared in their jurisdiction.

Automatic Roadside Monitoring

4.5 There is an Automatic Urban and Rural Network (AURN) national roadside monitoring site located at Victoria Road, approximately 2km north east of the Site which monitors NO_2, PM_{10} and $PM_{2.5}$ which are the primary pollutants of concern for this assessment. The AURN roadside data are presented below:

Table 4.1: AURN Monitoring Data (µg.m^{-3})

Site ID	X	Y	Site Type	Monitored Concentrations				
				2020	2021	2022	2023	2024
Victoria Road AURN	332865	349909	Roadside	**Annual mean NO_2**				
				13.0	14.7	14.2	134.	13.3
				Annual mean PM_{10}				
				11.0	11.3	11.7	10.4	10.2
				Annual mean $PM_{2.5}$				
				7.0	7.0	7.1	6.2	6.3

[14] https://www.wrexham.gov.uk/sites/default/files/2026-06/north-wales-annual-progress-report-2025.pdf
[15] https://roadtraffic.dft.gov.uk/count-points/30559
[16] https://naei.energysecurity.gov.uk/emissionsapp/

4.6 The data show that roadside concentrations of NO_2, PM_{10} and $PM_{2.5}$ have consistently been below their respective current AQALs in recent years, by 50% or more.

4.7 The Victoria Road AURN is located adjacent to Victoria Road, which carries lower AADT flows than the A483[17] and therefore, concentrations are likely to be higher at the Site. The Victoria Road AURN data are considered useful context of broader regional conditions.

Diffusion Tube Monitoring

4.8 WCBC undertook non-automatic (passive) monitoring of NO_2 at 33 sites during 2024. However, there are only three monitoring locations within c.2 km of the Site.

4.9 The relevant baseline data are detailed in **Table 4.2** below, and monitoring locations in relation to the Site are shown in **Figure 4.1**.

Table 4.2: Local Air Quality Monitoring Data (µg.m^{-3})

Site ID	X	Y	Site Type	Monitored Concentration				
				2020	2021	2022	2023	2024
30	330950	348170	Roadside	26.3	29.5	28.6	27.4	24.7
38	331765	350132	Roadside	12.5	14.8	13.8	13.2	12.5
51	330125	346099	Suburban	13.6	15.5	15.2	15.5	9.4

4.10 The data show that NO_2 concentrations in the Site locale have been consistently well below the annual mean AQAL year on year.

4.11 Monitoring location 30 is considered to be the most representative of baseline conditions at the Site as it is located <100m south of the Site and is situated at a similar distance from the A483 to the Site, and therefore captures the main emissions source in the locale. As shown in **Table 4.2,** concentrations have been consistently well below the AQAL in recent years.

4.12 During the consultation process, WCBC advised that an additional monitoring location (ID 67) was added to Wrexham Road in January 2025. However, the diffusion tube data was still being ratified and therefore are not reported.

Background Concentrations

4.13 There is an AURN national background monitoring site located in Wrexham Chirk Community Hospital, which is <10km from the Site. The AURN is considered to be representative of likely background conditions in the study area due to its location and proximity to similar emissions sources such as the A5 (note that traffic flows on the A5 are c. 50% below traffic flows on the A483[18]).

[17] https://roadtraffic.dft.gov.uk/count-points/10671
[18] https://roadtraffic.dft.gov.uk/count-points/30510

Table 4.3: AURN Monitoring Data (µg.m^{-3})

Site ID	X	Y	Site Type	Monitored Concentrations				
				2020	2021	2022	2023	2024
Wrexham Chirk Community Hospital AURN	329329	338992	Urban Background	**Annual mean NO_2**				
				-	-	13.3	20.3	11.5
				Annual mean PM_{10}				
				-	-	10.0	9.4	11.4
				Annual mean $PM_{2.5}$				
				-	-	5.0	4.7	5.0

PM_{10} and $PM_{2.5}$ data from Wrexham Chrik Community Hospital remains provisional and subject to ratification

4.14 The data show that background concentrations of NO_2, PM_{10} and $PM_{2.5}$ have consistently been below their respective AQALs in recent years, by 50% or more.

General Trends

4.15 According to WCBC, overall air quality in North Wales is good. Every air quality monitoring location recorded pollutant concentrations well below the respective AQALs and there were no observed annual mean concentrations within 10% of the annual mean NO_2 AQAL.

Figure 4.1: Monitoring Locations

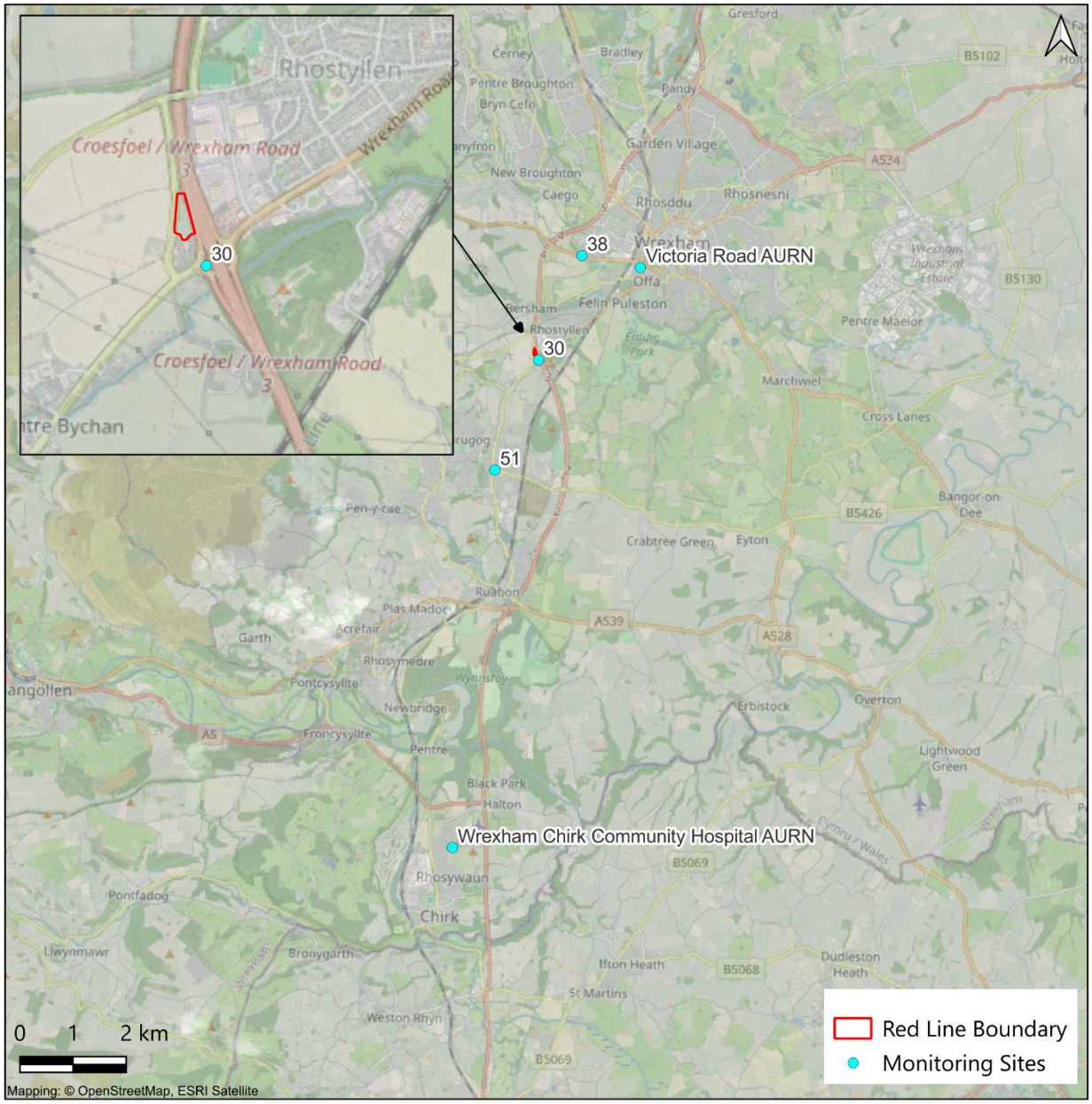


Figure 4.1: Monitoring Locations

5 Construction Phase Dust Assessment

5.1 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.

5.2 As there are existing sensitive receptors within the distances set out in IAQM guidance[12], 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

5.3 The scale and nature of construction phase activities were compared to the criteria set out in IAQM guidance[12] to define the initial dust emission magnitude for each activity. **Table 5.1** summarises the dust emission magnitude for each activity and provides the justification for each assigned magnitude.

Table 5.1: Dust Emission Magnitude

Activity	Dust Emission Magnitude	Justification
Demolition	n/a	There are no existing buildings or structures on the Site requiring demolition.
Earthworks	Small	Earthworks will primarily involve excavating material, haulage, tipping and stockpiling. This may also involve levelling the site and landscaping. Total site area is in the IAQM's 'Small' range of <18,000m^2. The number of heavy earth moving vehicles active at any one time is considered unlikely to exceed 5 during the peak of the works and this would be temporary. According to Soilscapes,[19] the underlying soil texture is *'Freely draining slightly acid loamy soils'*, which has a moderate potential for dust emissions and is unlikely to provide an element of natural mitigation.
Construction	Small	The key issues when determining the potential dust emission magnitude during the construction phase include the size of the building(s)/infrastructure, method of construction, construction materials, and duration of build. It is estimated that the volume of any new buildings or structures would be within the IAQM's Small range of <12,000m^3 and the nature of the Proposed Development is such that structures may only be semi-permanent.
Trackout	Small	Factors which determine the dust emission magnitude are vehicle size, vehicle speed, vehicle numbers, geology and duration HDV (>3.5t) outward movements in any one day would be expected to be well below 20 for a scheme of this size and unpaved road lengths within the Site during construction works are unlikely to exceed 50m due to the size of the Site.

[19] http://www.landis.org.uk/soilscapes/

Defining the Sensitivity of the Area

5.4 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 guidance[12], 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.

5.5 **Table 5.2** details the sensitivity of the area to dust soiling, human health and ecological effects for the different phases of construction activities. **Figure 5.1** was utilised to identify the number of sensitive receptors within the distances set out in IAQM guidance[12].

Table 5.2: Sensitivity of Study Area

Activity	Sensitivity to Dust Soiling	Sensitivity to Human Health	Sensitivity to Ecological Effects
Earthworks	**Medium** 1 residential receptor has been identified within 20m of the Site boundary and trackout routes up to 250m from the Site, which is associated with Croesfoelm Farm to the south. Medium sensitivity receptors are located at Croesfoel Industrial Park and Rhostyllen services.	**Low** 1 residential receptor has been identified within 20m of the Site boundary and trackout routes up to 250m from the Site, which is associated with Croesfoelm Farm to the south. Medium sensitivity receptors are located at Croesfoel Industrial Park and Rhostyllen services. However, background PM_{10} concentrations at the Site are well below 24 $\mu g.m^{-3.}$	n/a – no relevant receptors within screening distances
Construction			
Trackout			

Defining the Risk of Impacts

5.6 The dust emission magnitude and sensitivity of the area for demolition, earthworks, construction and trackout are then combined to determine the overall risk of impacts associated with each activity. **Table 5.3** below summarises the risk of dust impacts for each activity.

Table 5.3: Summary of Risk of Dust Impacts

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

Mitigation

5.7 IAQM guidance[12] 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 5.3** are detailed in **Appendix C**. With the implementation of these measures, the residual impacts associated with construction phase activities are considered to be 'not significant'.

Figure 5.1: Construction Phase Dust Buffers

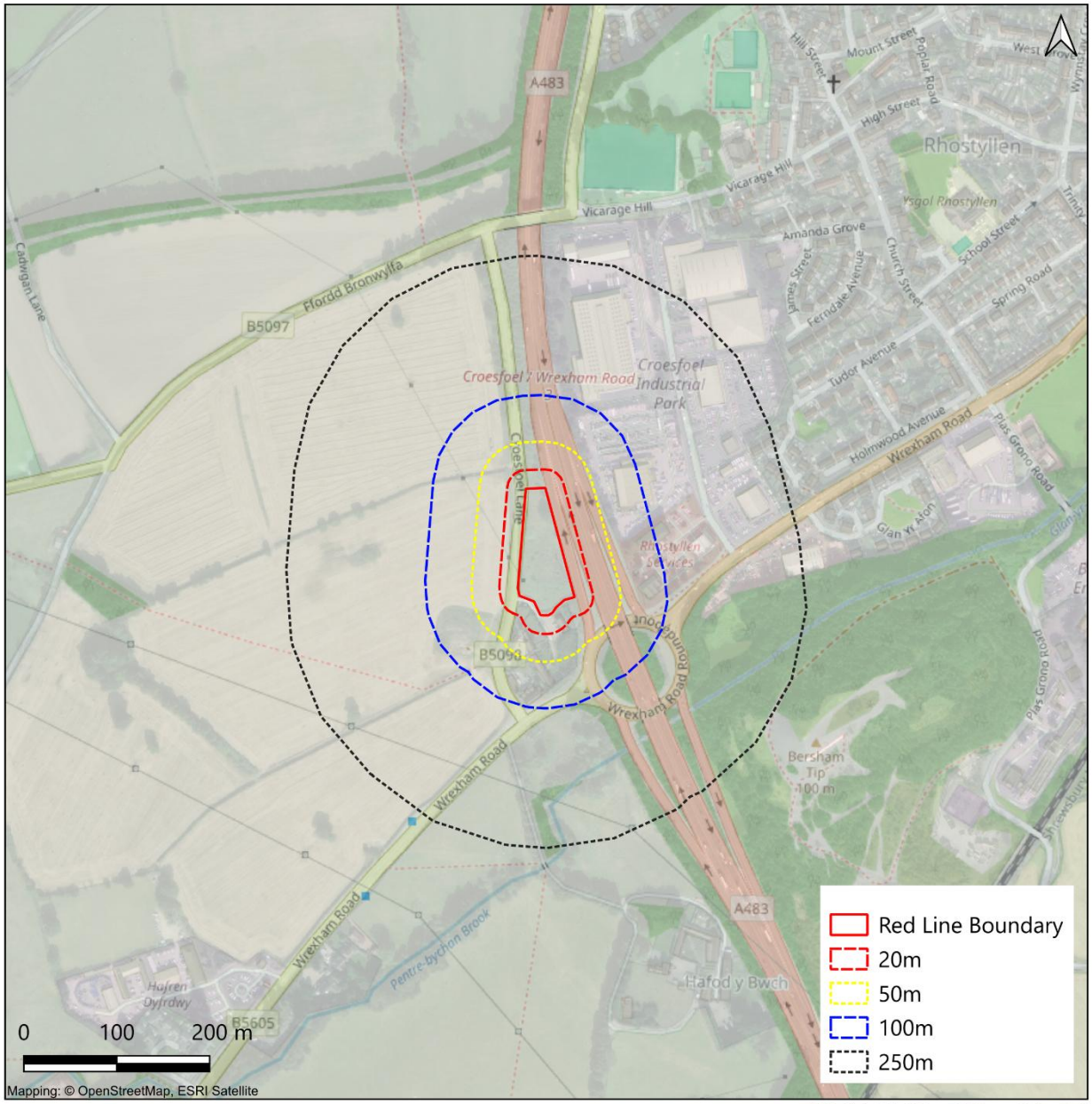


Figure 5.1: Construction Phase Dust Buffers

6 Operational Phase Exposure Assessment

6.1 Emissions from road vehicles, primarily those travelling on the A483, are considered to be the primary source of air pollution in the Site locale. **Section 4** shows that 24-hour AADT flows in 2025, the most recent year in which publicly available traffic data were available, were estimated to be 54,333 vehicles. WCBC monitoring location 30 is considered to be highly representative of baseline conditions at the Site. It is located <100m south of the Site and is situated at a similar distance from the A483 to the Site, and therefore captures the main emissions source in the locale.

6.2 Taking Wrexham Chirk Community Hospital AURN background concentrations as representative, the road-contribution of emissions from the A483 to annual mean NO_2 is 13.2 $\mu g.m^{-3}$ based on 2024 monitoring data for tube 30, and concentrations remain 38.3% below the AQAL with this road contribution in 2024.

6.3 While no similar baseline roadside data for PM_{10} or $PM_{2.5}$ are available, again taking Wrexham Chirk Community Hospital AURN background concentrations as representative, for each pollutant, a road contribution of 24.6 $\mu g.m^{-3}$ and 13 $\mu g.m^{-3}$ respectively would be required for there to be a risk of exceedance of the relevant AQALs at the Site, which is not considered likely based on the conclusions evidenced for NO_2.

6.4 Based on the above, no significant air quality constraints have been identified and the Site is considered suitable for the proposed residential end-use with regard to the current relevant AQALs and no mitigation measures are required.

7 Summary and Conclusions

7.1 Rappor Consultants Limited was instructed by Arbtech to undertake an air quality assessment for a Proposed Development for the change of use of land to a 4 pitch family gypsy traveller site (retrospective), on land to the North of Croesfoel Court, Rhostyllen, Wrexham, LL14 4DR (the Site).

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 The Proposed Development does not trigger the need to proceed to Stage 2 of the IAQM operational phase screening process, as it will not provide more than 10 dwellings at the Site. As such, no further assessment has been undertaken as the impact of the Proposed Development during the operational phase on local air quality can be deemed Negligible.

7.4 Consideration was given to the suitability of the Site for introduction of residential use through a review of local air quality monitoring data, management regimes, emission sources and imagery. Based on the available monitoring data and background concentration estimates, the Site is not considered to be subject to significant existing air quality constraints and the Site is considered suitable for the proposed residential end-use with regard to the current relevant AQALs. As such, no on-site mitigation is required to protect future users from poor air quality,

7.5 From the evidence presented, and by following the guidance provided in this report, the Proposed Development would be expected to comply with all relevant air quality policy. As such, air quality is not considered a constraint to planning approval.

Appendix A – Glossary

Term	Definition
AADT	Annual Average Daily Traffic flow.
AQAL	Air Quality assessment Level – catch-all term to refer to objectives, standards and limit values. See below for individual definitions.
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 / Limit Value	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.
NOx	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.
micrograms per cubic metre ($\mu g.m^{-3}$)	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

Wrexham County Borough Council Local Development Plan 2013-2028

The Welsh Ministers, in exercise of powers conferred by section 66(1) of the Planning and Compulsory Purchase Act 2004 Direct the local planning authority, Wrexham County Borough Council to withdraw the emerging Wrexham Local Development Plan ("the LDP").

The development plan for Wrexham now comprises Future Wales: the national plan 2040 and the Wrexham Unitary Development Plan 1996-2011, adopted 2005 – in order of legal hierarchy.

Future Wales does not contain a specific standalone air quality policy.

Wrexham Unitary Development Plan (UDP) 1996-2011

The Wrexham UDP was adopted in February 2005 and remains part of the statutory development plan for the County Borough alongside Future Wales: The National Plan 2040. The UDP does not contain specific policies relating to air quality; however, its general development and environmental protection policies seek to ensure that development does not give rise to unacceptable impacts on the environment, public amenity or the health and wellbeing of existing communities.

Appendix C – Construction Phase Dust Mitigation

Process	Mitigation Measure	H = Highly Recommended D = Desirable N = Not Required
Communication	Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.	N
	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.	H
	Display the head or regional office contact information.	H
	Develop and implement a Dust Management Plan which may include measures to control other emissions, approved by the Local Authority.	D
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.	H
	Make the complaints log available to the local authority when asked.	H
	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 logbook.	H
Monitoring	Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and windowsills within 100 m of site boundary, with cleaning to be provided if necessary.	D
	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.	H
	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.	H
	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.	H
Preparing and maintain the Site	Plan site layout so that machinery and dust causing activities are located away from receptors, as far as possible.	H
	Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as stockpiles on site.	H
	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.	D
	Avoid site runoff of water or mud.	H
	Keep site fencing, barriers and scaffolding clean with wet methods.	D

Process	Mitigation Measure	H = Highly Recommended D = Desirable N = Not Required
	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.	D
	Cover, seed or fence stockpiles to prevent wind whipping.	D
Operating vehicle / machinery and sustainable travel	Ensure all vehicles switch off engines when stationary – no idling.	H
	Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where practicable.	H
	Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate).	D
	Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).	N
Operations	Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction.	H
	Ensure an adequate water supply to the site for effective dust suppression using non-potable water where possible and appropriate.	H
	Use enclosed chutes and conveyors and covered skips.	H
	Minimise drop heights from conveyors, loading shovels, hoppers and other loading and handling equipment and use fine water sprays on such equipment wherever appropriate.	H
	Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable.	D
Waste management	Avoid bonfires and burning of waste materials.	H
Earthworks	Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.	N
	Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable.	N
	Only remove the cover in small areas during work and not all at once	N
Construction	Avoid scabbling (roughening of concrete surfaces) if possible.	D
	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.	D

Process	Mitigation Measure	H = Highly Recommended D = Desirable N = Not Required
	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.	N
	For smaller supplies of fine power materials ensure bags are sealed after use and stored appropriately to prevent dust	N
Trackout	Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use.	D
	Avoid dry sweeping of large areas.	D
	Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport	D
	Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable	N
	Record all inspections of haul routes and any subsequent action in a site log book.	D
	Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned	N
	Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).	D
	Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits	N
	Access gates to be located at least 10 m from receptors where possible.	N

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