A-weighted sound pressure level that is exceeded by the residual sound at the assessment location for 90 % of a given time interval, T, measured using time weighting F and quoted to the nearest whole number of decibels.

Rating level

Specific sound level plus any adjustment for the characteristic features of the sound.

Reference time interval

Specified interval over which the specific sound level is determined. This is 1 h during the day from 07:00 h to 23:00 h and a shorter period of 15 min at night from 23:00 h to 07:00 h.

Residual sound

Ambient sound remaining at the assessment location when the specific sound source is suppressed to such a degree that it does not contribute to the ambient sound.

Residual sound level ($L_{Aeq,T}$)

Equivalent continuous A-weighted sound pressure level of the residual sound at the assessment location over a given time interval, T.

Specific sound level

Equivalent continuous A-weighted sound pressure level produced by the specific sound source at the assessment location over a given reference time interval.

Specific sound source

Sound source being assessed.

Appendix B Layout of AR Tarmac and Freightliner sites relative to the Proposed Development

Figure B1 - Lease Demise (Blue line) for the Tarmac site with access rights over the road shaded brown

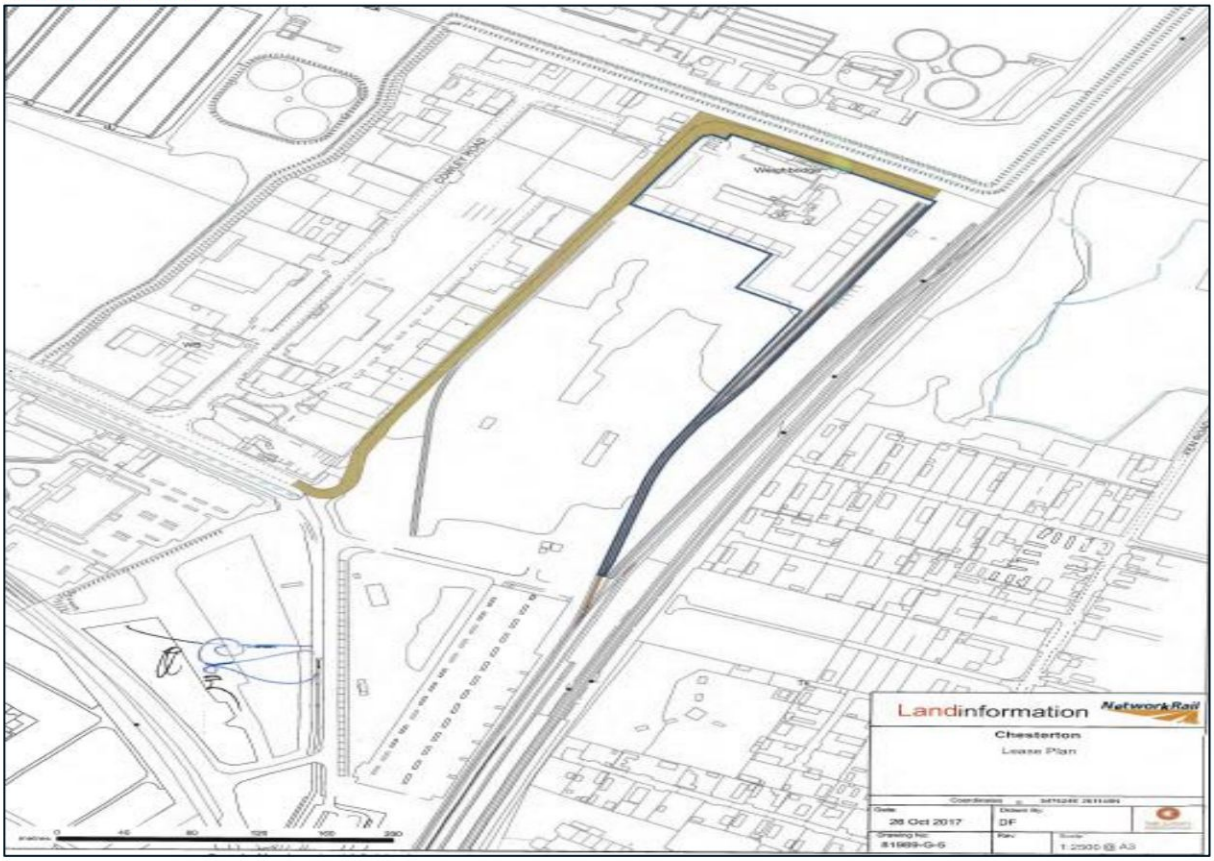
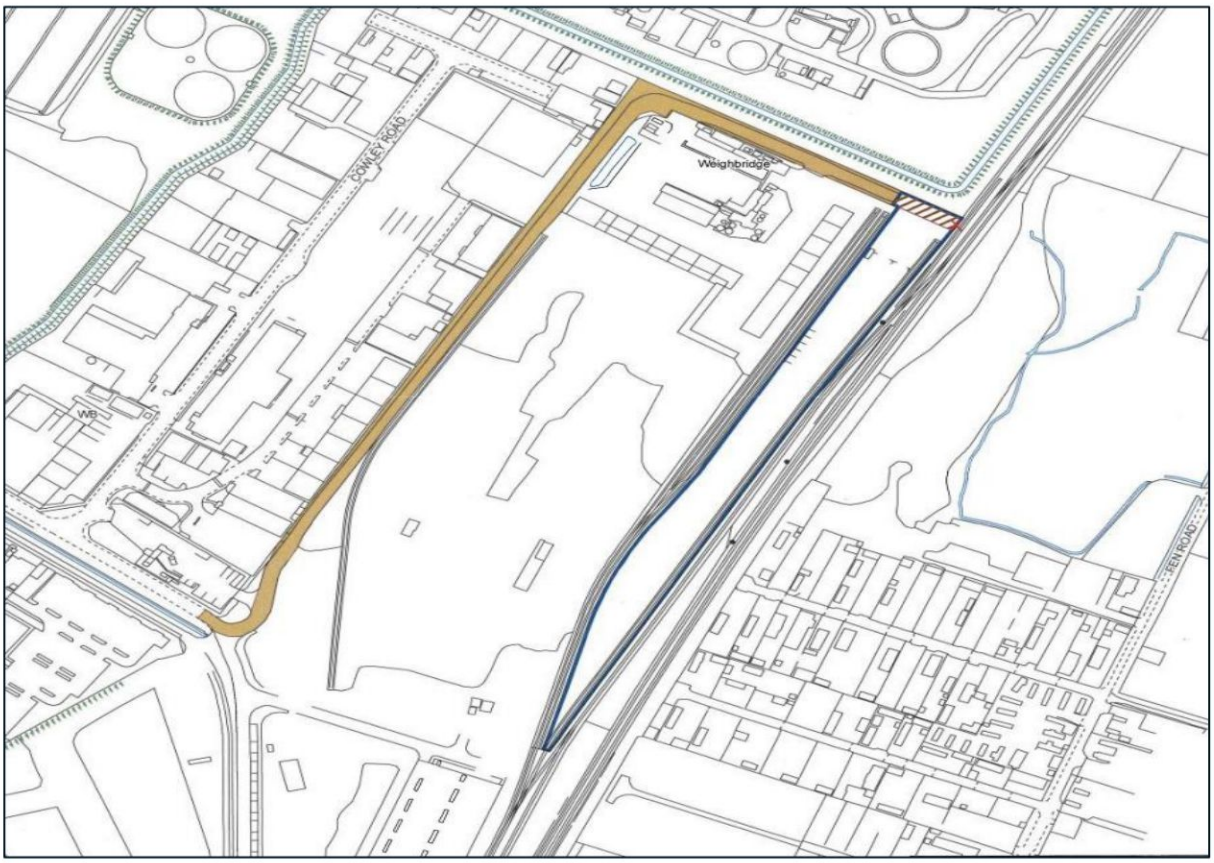


Figure B2 - Lease Demise (Blue line) for the Freightliner site with access rights over the road shaded brown



Appendix C CadnaA Model

Figure C1 - AR Operations Predicted Noise levels, $L_{Aeq,T}$, dB

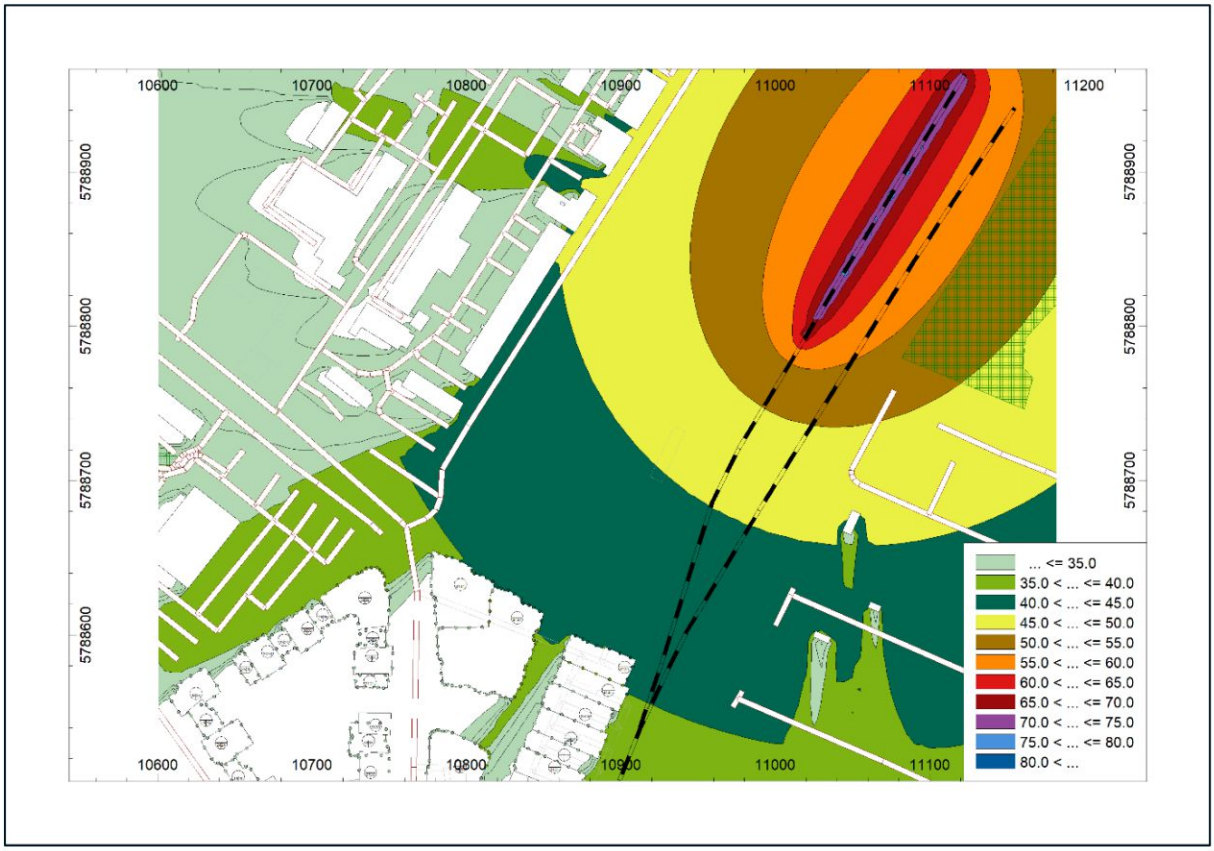
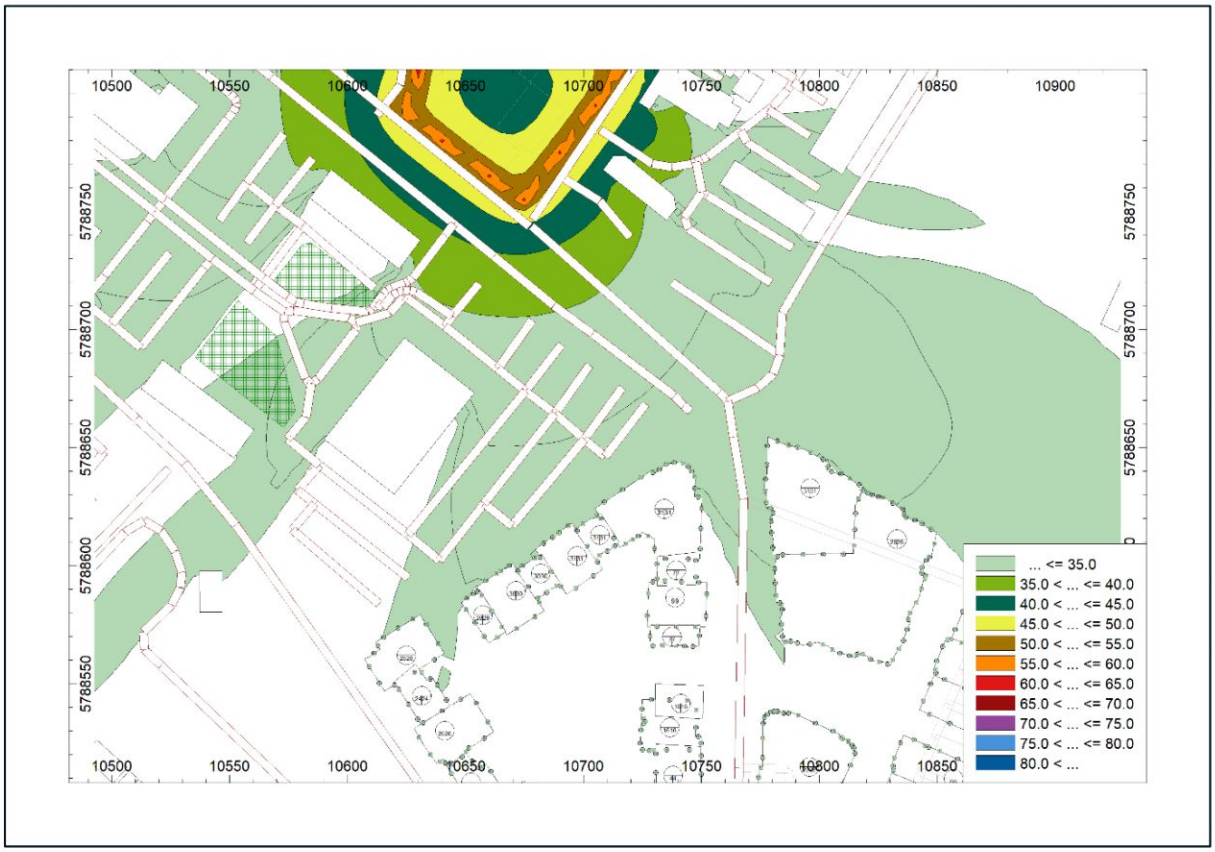


Figure C2 - WTS Operations Predicted Noise levels, $L_{Aeq,T}$, dB



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APPENDIX E
T6118 DUST ASSESSMENT WASTE AND INDUSTRIAL SITES

Brookgate Plc

Qualitative Dust Risk Assessment
Cambridge North Development
21st September 2022

CAMBRIDGE NORTH
QUALITATIVE DUST RISK ASSESSMENT

temple

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Document Control

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1.0	22/09/2022	Paddy Nolan	Daniel Mullick	Dr Xiangyu Sheng	-
2.0	28/09/2022	Daniel Mullick	Dr Xiangyu Sheng	Dr Xiangyu Sheng	Changes to address client comments and update assessment of railhead

This report has been prepared by Temple Group Ltd with all reasonable care and diligence within the terms of the contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. We accept no responsibility to third parties to whom this report, or any part, thereof is made available. Any such party relies upon the report at their own risk.

Contents

List of Appendices

1 Introduction

Temple Group Limited (Temple) has undertaken a qualitative dust risk assessment for the Cambridge North development (22/02771/OUT) 'the Proposed Development'. The assessment has been prepared in response to comments made by Cambridgeshire County Council, acting in its role as Minerals and Waste Planning Authority (MWPA), regarding consideration of the potential for offsite dust generation from local 'Consultation Area' sites to affect future sensitive users of the Proposed Development. The Proposed Development comprises *"A hybrid planning application for:*

a) An outline application (all matters reserved apart from access and landscaping) for the construction of: three new residential blocks providing for up to 425 residential units and providing flexible Class E and Class F uses on the ground floor (excluding Class E (g) (iii)); and two commercial buildings for Use Classes E(g) i(offices), ii (research and development) providing flexible Class E and Class F uses on the ground floor (excluding Class E (g) (iii)),together with the construction of basements for parking and building services, car and cycle parking and infrastructure works; and,

b) A full application for the construction of three commercial buildings for Use Classes E(g) i (offices) ii (research and development), providing flexible Class E and Class F uses on the ground floor (excluding Class E (g) (iii)) with associated car and cycle parking, the construction of a multi storey car and cycle park building, together with the construction of basements for parking and building services, car and cycle parking and associated landscaping, infrastructure works and demolition of existing structures."

The Transport and Waste Sites considered within this assessment, those located within the Consultation Area, are:

- The Tarmac Roadstone Coatings Facility, the railhead supplying the Tarmac Facility and the Freightliner railhead (operated by DB Cargo), which form a Transport Infrastructure Area (TIA) under Policy 16 (Consultation Areas) of the Cambridgeshire and Peterborough Minerals and Waste Local Plan (2021); and,
- The Cowley Road Waste Transfer Station, which forms part of a Waste Management Area under Policy 16 (Consultation Areas) of the Cambridgeshire and Peterborough Minerals and Waste Local Plan (2021).

Policy 16 seeks to protect Transport Infrastructure Areas, and states that development within a consultation area:

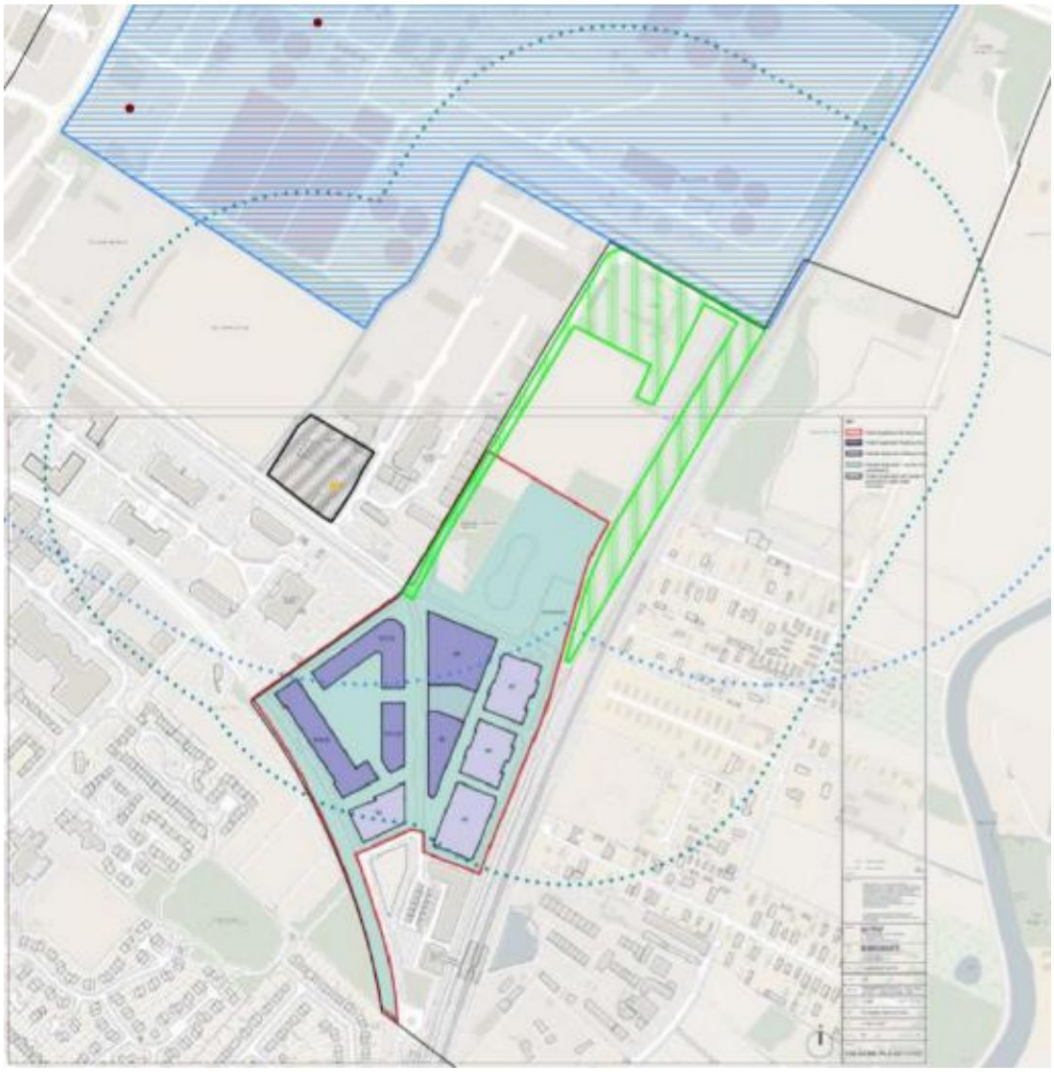
"will only be permitted where it is demonstrated that the development will: (C) not prejudice the existing or futures use of the area [...] for which the consultation area has been designated; and (d) not result in unacceptable amenity issues or adverse impacts to human health for the occupiers or users of such new development, due to the ongoing or future use of the area for which the consultation area has been designated."

Figure 1.1, below, shows the Proposed Development location plan. The Roadstone Coatings site (hatched light green) is located (aside from a strip located within the western boundary of the Proposed Development Site, forming an access road) directly to the north and northeast of the Proposed Development, denoted by the redline Site boundary. The railway siding (also hatched green), which is used to temporarily store aggregates before being taken to the main Railhead site, abuts the north-eastern boundary of the North Cambridge Development Area. The Cowley Road Waste Management Area is hatched grey. The hatched blue area represents a sewage treatment works, which is not expected to result in effects on the Site.

This assessment evaluates the potential for the safeguarded aggregates, waste and transport sites to cause dust impacts on the Proposed Development and includes a review of current air quality baseline levels at the Site and in the surrounding areas.

This report includes a baseline assessment of local air quality, a qualitative dust risk assessment of the waste sites and reaches a conclusion as to the potential risk to amenity for future users of the Proposed Development.

Figure 1.1: Site location plan



2 Air Quality Assessment Method

2.1 Overall Assessment Approach

The approach taken for assessing the potential dust impacts on the Proposed Development is as follows:

- baseline characterisation of local air quality;
- qualitative impact assessment of dust and emissions generated by activities related to the Transport Infrastructure and Waste Management areas;
- review of existing mitigation measures used by the Transport Infrastructure and Waste Management areas to minimise offsite dust generation; and,
- recommendation of mitigation measures, where appropriate, to ensure residual impacts on air quality are minimised.

2.2 Baseline and Site Suitability Assessment

Existing or baseline air quality refers to the concentrations of relevant substances that are already present in ambient air, including from road traffic and industrial sources.

A study has been undertaken using data obtained from continuous monitoring stations maintained by Cambridge City Council (CCC) and South Cambridgeshire District Council (SCDC) and estimated background from the United Kingdom Air Information Resource (UK-AIR) website maintained by the Department for Environment, Food and Rural Affairs (Defra); the aim being to ascertain ambient PM_{10} and $PM_{2.5}$ concentrations to enable adequate consideration within the Dust Risk Assessment.

The baseline assessment has considered air quality against the Air Quality Objectives (AQOs), as explained in **Appendix B**.

2.3 Qualitative Dust Risk Assessment

Potential air emissions from industrial activities, particularly in the form of dust, have the potential to cause a loss of amenity (due to dust soiling). The finer fraction of dust, in the form of PM_{10} and particulates of finer fractions, have the potential to affect human health.

A dust risk assessment has therefore been prepared, with reference to the principles identified in the 'Guidance on the assessment of dust from demolition and construction' (Institute of Air Quality Management, 2014), replicated in **Appendix A**. This has incorporated consideration of the dust emissions magnitude from the waste sites; an assessment of receptor sensitivity; and a review of the overall likelihood of risk from each waste Site.

As this assessment focuses on the implications of dust from the existing waste and transport sites on the Proposed Development, it is considered appropriate to consider

embedded mitigation measures adopted by existing waste and transport site operators in the assessment of dust emissions magnitude.

Emissions from trackout, which occurs when vehicles move to and from a Site, has not been assessed. Correspondence from the client has indicated that wheel washing facilities have been used at the Roadstone Coatings d site, which should prevent emissions affecting land at the Proposed Development site. Trackout from the Waste Transfer Station would affect existing receptors equally to proposed receptors, meaning that these emissions should be controlled from the Waste Facility. Many vehicles using the Waste Transfer Station can also be reasonably assumed to be enclosed as to prevent fallout on route.

3 Baseline Conditions and Air Quality Assessment

3.1 Local Authority review and assessment information

Each year and is iterated in the main ES Chapter, Cambridge City Council (CCC) and South Cambridgeshire District Council (SCDC) produce an Air Quality Annual Status Report (ASR)[12] summarising the results of monitoring undertaken in their area, progress made on improving air quality, and consequently on whether AQMAs should be maintained.

The most recent ASRs available at the time of this assessment (the 2022 report, reviewing 2021 for CCC, and the 2021 report reviewing 2020 for SCDC) have been reviewed and the results presented below.

3.2 Particulate Matter (PM) monitoring

Particulate Matter (PM) is an airborne pollutant measured by Local Authorities that can be made up of all airborne particles, including dust. As such, baseline PM levels in an area can be used to determine how likely the area is to be affected by dust impacts. If an area has high baseline PM levels, it is more at risk of being impacted by dust episodes.

CCC and SCDC undertake continuous monitoring of PM_{10} at 6 locations within 5km of the Proposed Development site, and of $PM_{2.5}$ at 2 locations. **Table 3.1** and **Table 3.2**, below, outline the annual mean PM_{10} and $PM_{2.5}$ concentrations monitored at these sites over the last five years.

The ASRs indicate that the annual mean PM_{10} AQO has been met at both busy roadside and urban background locations. At each of the monitoring sites presented, annual mean PM_{10} concentrations have remained very low over the last 5 years, with marked reductions in the last 2 years, which could be due to the impact of the Pandemic on travel behaviours.

[1] Cambridge City Council Air Quality Annual Status Report 2022 (2022). Cambridge City Council. https://www.cambridge.gov.uk/media/11277/air-quality-annual-status-report-2022.pdf

[2] South Cambridge District Council Air Quality Annual Status Report 2021 (2021). South Cambridge District Council. https://www.scambs.gov.uk/media/18620/2021-air-quality-annual-status-report.pdf

Table 3.1 Annual mean PM_{10} concentrations monitored by CCC and SCDC automatic monitors

Site ID	Site Name	Site Type	Distance from Proposed Devt. site (km)	Annual mean NO_2 concentration (µg/m³)				
				2017	2018	2019	2020	2021
CM2	Montague Road	Roadside	1.8	20	21	22	19	15
ORCH	Orchard Park Primary School (A14)	Urban Background	3.0	14	14	14	12	-
CM4	Parker Street	Roadside	3.1	21	23	21	17	18
CM1	Gonville Place	Roadside	3.5	18	19	19	15	14
IMP	Impington (A14)	Roadside	3.8	16	17	16	15	-
GIRT	Girton	Roadside	4.7	17	17	17	14	-
Objective				**40**				

Note: Site IDs starting with CM are locations in CCC. Site IDs without CM at the beginning are in SCDC, as labelled in their respective ASRs. At the time of writing 2021 data for sites in SCDC are not yet available.

Table 3.2 below outlines the annual mean $PM_{2.5}$ monitoring locations monitored at these sites from 2017 - 2021.

Table 3.2 Annual mean $PM_{2.5}$ concentrations monitored by CCC automatic monitors

Site ID	Site Name	Site Type	Distance from Proposed Devt. site (km)	Annual mean NO_2 concentration (µg/m³)				
				2017	2018	2019	2020	2021
CM3	Newmarket Road	Roadside	2.1	11	10	10	8	8
CM1	Gonville Road	Roadside	3.5	15	15	14	11	12
Objective				**25**				

The results show that in the five years from 2015 to 2019, there have been no exceedances of the annual mean $PM_{2.5}$ objective, even at these busy roadside monitoring locations within Cambridge city centre.

3.3 Pollutant Background Concentrations

Background concentrations of PM_{10} and $PM_{2.5}$ were obtained from maps downloaded in 2022 from the UK-AIR website[3] maintained by Defra. The maps present annual mean pollutant concentrations on a 1km^2 basis for the years 2018 (the base mapping year) to 2030. The concentrations for the 1km x 1km grid square centred on OS coordinates 547500, 260500, corresponding to the location of the Proposed Development, for 2019, 2022 (the current year), 2023 and 2027 (the year the Proposed Development is expected to become operational) are shown in **Table 3.3**. The data show that annual mean pollutant concentrations are expected to be a long way below the annual mean PM_{10} or $PM_{2.5}$ AQOs in any of the presented years.

Table 3.3: Background pollutant concentrations at the Proposed Development from the UK-AIR website

Pollutant	2019 (µg/m^3)	2022 (µg/m^3)	2023 (µg/m^3)	2027 (µg/m^3)	Objective
PM_{10}	14.88	14.21	14.03	13.67	40.0
$PM_{2.5}$	9.88	9.36	9.22	8.93	25.0

3.4 Current Baseline

Data collected by CCC and SCDC, and predictions from UK-AIR, indicate that annual mean PM_{10} and $PM_{2.5}$ concentrations area unlikely to exceed the respective objective levels even at busy roadside locations. As concentrations reduce with distance from sources, this is considered an indication that baseline PM levels across the site will be well below the AQOs.

Thus, based on the monitored and estimated background data presented above, it is considered that the Proposed Development site is located in an area where the PM_{10} and $PM_{2.5}$ AQOs are likely to be very low. Consequently, PM_{10} and $PM_{2.5}$ can be considered as <24µg/m^3 for the purposes of the dust risk assessment without the need to undertake site-specific monitoring for ground truthing.

[3] Department for Environment, Food and Rural Affairs, 2020. UK Air Information Resource. [online] Available at: http://uk-air.defra.gov.uk

4 Qualitative Dust Risk Assessment

4.1 Dust Emissions Magnitude

Dust Emissions Magnitude attributable to the Roadstone Coatings Facility

In 2013, an Air Quality Assessment was carried out by Mott MacDonald[4] in relation to the Air Quality Assessment for a planning application at and around the roadstone coatings and Railheads Site (planning reference: S/0467/13/CM) which is now predominantly operated by Tarmac. The assessment identified the activities summarised in Table 4.1, below have the potential to generate dust.

Table 4.1: Potential for dust emissions and parameters affecting dust risk associated with the Roadstone Coatings Plant

Activity	Duration of Activity	Potential Dust Emission	Parameters which may affect Dust Risk
Handling activities	Varies but generally ongoing	Can be significant but varies depending on nature of material, whether wet or dry, volumes handled and equipment used.	Frequency of unloading operations and corresponding meteorological conditions. Primarily by conveyor/ front-end loading shovel and HGV.
Loading and unloading activities	Ongoing during deliveries (3-5 times per week for 5 hours per day)	Can be significant but varies depending on nature of material, whether wet or dry, volumes handled and equipment used.	Frequency of unloading operations and corresponding meteorological conditions. Primarily by open conveyor.
Storage of materials within the site	Ongoing	Varies depending on volume of stored material, whether wet or dry and exposure to wind.	Some existing storage bays are roofed. All new storage bays to be enclosed on three sides and have roofs to prevent wind blowing. Dust suppression water sprays already operational all around the site.

[4] Lafarge Site, Chesterton Sidings. Mott Macdonald (2013). Microsoft Word - Air Quality Report - Final (cambridgeshire.gov.uk)

Activity	Duration of Activity	Potential Dust Emission	Parameters which may affect Dust Risk
Transport of materials within the site	Varies but generally ongoing	Varies depending on the type of transport. If road transported, then the type of vehicle and nature of roads (surfaced or unmade) are important factors.	Transport is usually by front-end loading shovel. Re-suspension of dust by vehicles on site minimised by surfaced (asphalt) roads and concreted areas around the asphalt plant. Areas around the storage bays are hard standing. Wheel wash facility available. Dust suppression water sprays already operational around the site.
Loading of hoppers	Varies but generally ongoing	Varies depending on the volume of material, frequency or operations, whether wet or dry and exposure to wind.	
Transport offsite	Ongoing	Mainly by road. Not generally significant (except near site exits).	Wheel-wash is already in place for all HGVs leaving the site.

The above table shows that the Roadstone Coatings plant regularly carries out potentially significantly dusty activities that are ongoing. These are day to day activities and highlight that, in the absence of mitigation, this site could pose a potential dust risk to the surrounding area.

The Mott MacDonald assessment considered mitigation measures to be implemented during the operation of the Aggregates site to ensure that offsite dust risk is reduced to a minimum. These are summarised in **Appendix C**.

The Application for this Site was consented, subject to conditions.

In 2015, Mott MacDonald produced a Dust Suppression and Monitoring report to discharge Condition 18[5]. This report also outlines existing Dust Suppression Infrastructure used at the site that dampens dusty areas. This is explained further below:

- **Borehole** – The site contains a borehole from which water is drawn to supply the dust suppression system. Water is stored in the adjacent storage tank.
- **Storage Tank** – A storage tank, of approximately 22.5 cubic meters in volume, is used to store water pumped from the borehole to be used in the dust suppression system. When water from the tank is used by the system, is it automatically topped up with water from the borehole.

[5] Planning Condition 18 – Dust Suppression and Monitoring. (2015). Mott MacDonald. S_0467_13_CM_C2-Dust_Suppression_Monitoring-18158.pdf (cambridgeshire.gov.uk)

- **Sprinklers** – A number of M10 360° rotary sprinklers are located throughout the site to disperse water in order to dampen areas with the objective of keeping dust levels as low as reasonably possible. The degree of rotation of the sprinklers located on site has been limited in order to only dampen certain areas.

The use of dust suppression would effectively contain emissions where applied. The dust emissions magnitude, considering mitigation measures already then proposed at this Site, would not be expected to exceed a 'not significant' (generally negligible or low) dust emissions magnitude.

It is assumed that a similar dust suppression system will have remained in-situ or reconfigured similarly in further, subsequent non-material amendment applications; and/or in the Environmental Permit for the Site.

Dust Emissions Magnitude attributable to the Veolia Waste Transfer Station

Emissions from the waste transfer station are considered likely to be 'not significant' (assumed to be generally negligible or low). This is because:

- Following consultation with Veolia, it is understood that no waste *"which could generate dust or dirt is handled externally each day;"*
- All bulking, transfer or treatment facilities are required to take place inside the on-site buildings, according to the Standard Rules Environmental Permit which it is understood apply to the Waste Transfer Station in question.
- The Standard Rules Environmental Permit requires that: *"Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this rule if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions. The operator shall: (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan; (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency."* Considering there are commercial buildings closer to the Waste Transfer Station than the Proposed Development, the Environment Agency are already obliged to regulate pollution from the Waste Transfer Station appropriately regardless of whether the Proposed Development is consented. It is however acknowledged that the Proposed Development would increase the number of receptors around the facility.

Dust Emissions Magnitude attributable to the Aggregates Railheads

The planning consent for the aggregates railhead (planning reference S/0245/17/CM) indicates that it will principally accept deliveries of hard stone/ rock (presumably sized as gravel or cobbles) and occasionally sand. However, smaller aggregates are understood be stored in bays towards the north of the railhead, further from sensitive receptors.

It is understood that Freightliner are no longer moving any traffic to Site. The new operator is expected to accept circa one train delivery per week.

Moreover, Tarmac have moved their roadstone coating operations to another Site, due to restrictions on the operating regime posed by planning conditions. As of mid-September 2022, this meant that there would be no more trains for a two-month period. It is assumed that the frequency of trains would not increase for as long as restrictions on activities at the Roadstone Coating Facility remain in place.

It is anticipated that materials unloaded from either rail operation would be stored at the Roadstone Coatings Facility, for which dust suppression and mitigation is in place; or in the area between both sidings.

It is anticipated that the dust emissions magnitude associated with any storage between the railheads may have a 'medium' dust emissions magnitude; considering the extent to which dust suppression measures are used is unknown, but also acknowledging the limited frequency and size of aggregates imported would limit their dust generating potential. This is considered conservative as it has not considered the use of dust suppression which the Planning Statement for the railheads has stated is in place.

4.2 Receptor Sensitivity

Using the IAQM 2014 guidance process outlined in Appendix A, the area sensitivity was defined (insofar as it applies to the Proposed Development site). The findings of this assessment are shown in **Table 4.2**, below.

The sensitivity of receptors at the Proposed Development to activities occurring at the Waste Management Facility, Roadstone Coating Plant and Railhead are assessed as low.

Table 4.2: Sensitivity of receptors at Site to dust and emissions associated with each of the Proposed types of activity

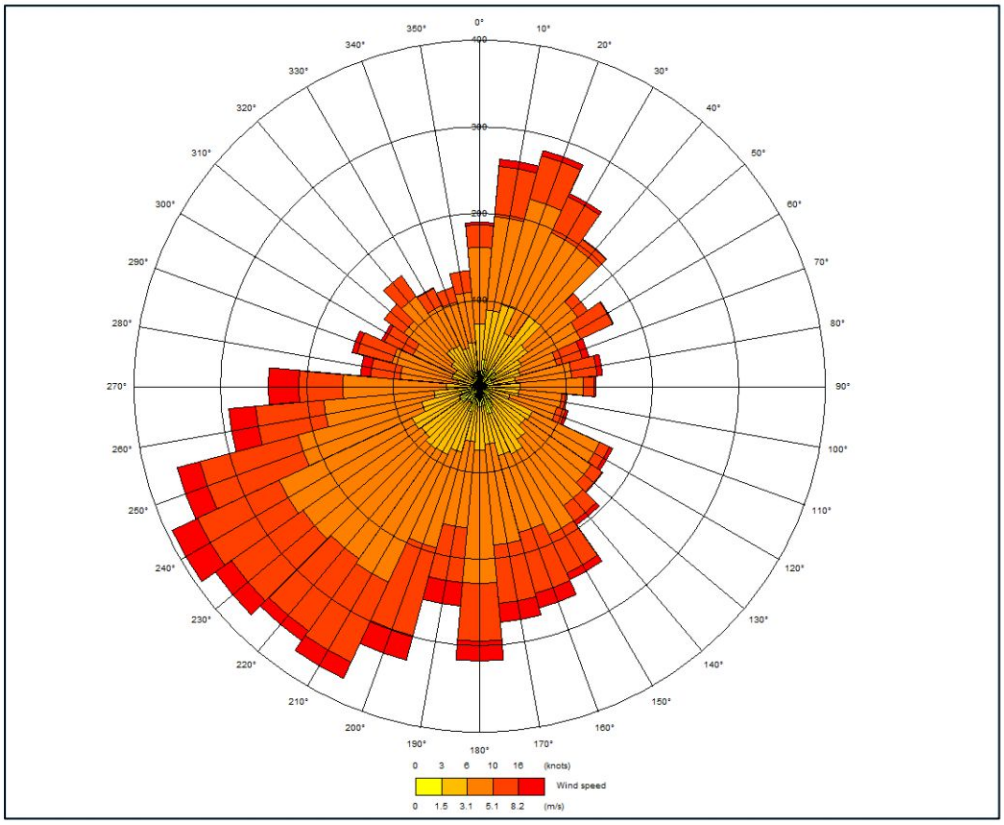
Type of work	Waste Management Facility	Roadstone Coating Plant	Railheads
Dust soiling	**Low:** No proposed buildings (containing all high and most low/ medium sensitivity receptors) within 100m of the facility boundary. The closest space within the Site is located 120 metres southeast of the facility. The closest building facades are located circa 135 metres southeast of the facility – with residential (high sensitivity) facades a greater distance.	**Low:** No proposed buildings (containing all high and most low/ medium sensitivity receptors) within 100m of the Site boundary. The closest space within the site boundary is located 140 metres southwest of the facility. The closest building facades (assumed to be residential) are located circa 318 metres southwest of the facility.	**Low:** There is >1 medium sensitivity receptor within the Proposed Development site within 20-50m (24m) of the closest part of the Railhead. The nearest residential façade is located 175m southwest of the boundary of the railhead.

Type of work	Waste Management Facility	Roadstone Coating Plant	Railheads
Human health impacts	**Low:** There are not >100 high sensitivity Proposed Development receptors within 50 metres of the facility. Baseline annual mean PM_{10} concentrations are likely to be below 24µg/m^3 the vicinity of the Application Site (see Section 3).	**Low:** There are not >100 high sensitivity Proposed Development receptors within 50 metres of the facility. Baseline annual mean PM_{10} concentrations are likely to be below 24µg/m^3 the vicinity of the Application Site (see Section 3).	**Low:** There are not >100 high sensitivity Proposed Development receptors within 50 metres of the facility. Baseline annual mean PM_{10} concentrations are likely to be below 24µg/m^3 the vicinity of the Application Site (see Section 3).
Ecological	**Negligible:** According to the MAGIC Maps website, there are no SACs, SPAs, Ramsar sites, SSSIs, National Nature Reserves or Ancient Woodlands at Site.		

Local Meteorological Impacts

The Aggregates site is located on the north-eastern boundary of the Proposed Development site and the prevailing wind direction in the area is predominantly south-westerly. This is outlined in **Figure 4.1**, below, which shows the predominant south-westerly wind direction and occasionally north-easterly winds. Based on a review of wind directions, the Site is expected to be downwind of the railheads and Roadstone Coatings facility c20% of the year.

Figure 4.1 Windrose from Cambridge Airport meteorological station during 2019



4.3 Risk of Dust Effects

Using the IAQM 2014 guidance process outlined in Appendix A (using categories for 'earthworks'), the risk of dust impacts derived from the different on-site activities is shown in Table 4.3. A negligible risk has been assessed (in relation to the waste management facility and roadstone coating plant). A low risk has been assessed in connection with the railheads.

Considering that dust suppression measures are understood to be used at the Railheads, it is considered likely in practice that the dust risk attributable to the railheads may be lower than has been assessed.

Considering each facility has been assessed as having a negligible to low risk on future site users, it is anticipated that the overall dust risk would be 'not significant'.

Table 4.3: Summary of the dust risk from site activities

Potential Impact	Dust Risk Summary		
	Waste Management Facility	Roadstone Coating Plant	Railheads
Dust Soiling	Negligible risk	Negligible risk	Low risk
Health Effects	Negligible risk	Negligible risk	Low risk
Ecological	Negligible Risk – none expected		

5 Conclusions

This qualitative dust risk assessment looking at the potential for Roadstone Coatings, Railhead and Waste sites to cause dust impacts on the proposed Cambridge North residential Proposed Development has determined:

- The dust risk assessment has identified that the Facilities would have a small or medium dust emissions magnitude of impacting on-site receptors, after accounting for embedded mitigation.
- The sensitivity of receptors at site to dust from all three activities is low.
- The overall dust risk on future site users is considered to be negligible (not significant).

Appendix A Construction Phase Assessment

Construction Phase Dust Assessment Methodology

The qualitative construction dust and PM_{10} risk assessment method outlined in the IAQM 2014 guidance is summarised below.

Step 1: Identify the need for a detailed assessment

An assessment would normally be required where there is:

- A human receptor within 350 metres of the proposed scheme; and/or within 50 metres of the access route(s) used by the construction vehicles on the public highway up to 500 metres from the study area site entrance(s); and/or
- An ecological receptor within 50 metres of the proposed scheme and/or within 50 metres of the access route(s) used by construction vehicles on the public highway up to 500 metres from the entrance(s).

A human receptor refers to any location where a person or property may experience the adverse effects of airborne dust or dust-soiling, or exposure to PM_{10} over a period relevant to the ambient AQOs.

An ecological receptor refers to any sensitive habitat affected by dust soiling. For habitats with a statutory designation, such as a National Nature Reserve, Ramsar site, Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC) or Special Protection Areas (SPA), consideration should be given as to whether the particular site is sensitive to dust. Some non-statutory sites may also be considered if appropriate, such as a Site of Importance for Nature Conservation.

Where the need for a more detailed assessment is screened out, it can be concluded the level of risk is 'negligible' and any effects would be 'not significant'.

Step 2: Assess the risk of dust impacts

A site is allocated a risk category on the basis of the scale and nature of the works (Step 2A) and the sensitivity of the area to dust impacts (Step 2B). These two factors are combined in Step 2C to determine the risk of dust impacts before the allocation of mitigation measures. Risks are described as low, medium or high for each of the four17itigatee activities (demolition, construction, earthworks and trackout). Site-specific mitigation is required, proportionate to the level of risk.

Step 2A: Define the potential dust emission magnitude

The potential dust emission magnitude is based on the scale of the anticipated works and should be classified as small, medium or large. Table A-1 presents the dust emission criteria outlined for each construction activity.

Table A.1: Potential dust emission magnitude criteria

Construction activity	Large	Medium	Small
Demolition	Total building volume >50,000 m^3, potentially dusty construction material (e.g. concrete), on-site crushing and screening, demolition activities >20 m above ground level.	Total building volume 20,000 m^3 – 50,000 m^3, potentially dusty construction material, demolition activities 10-20 m above ground level.	Total building volume <20,000 m^3, construction material with low potential for dust release (e.g. metal cladding or timber), demolition activities <10 m above ground, demolition during wetter months.
Earthworks	Total site area >10,000 m^2, potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size), >10 heavy earth moving vehicles active at any one time, formation of bunds >8 m in height, total material moved >100,000 tonnes.	Total site area 2,500 m^2 – 10,000 m^2, moderately dusty soil type (e.g. silt), 5-10 heavy earth moving vehicles active at any one time, formation of bunds 4 m – 8 m in height, total material moved 20,000 tonnes – 100,000 tonnes.	Total site area <2,500 m^2, soil type with large grain size (e.g. sand), <5 heavy earth moving vehicles active at any one time, formation of bunds <4 m in height, total material moved <20,000 tonnes, earthworks during wetter months.
Construction	Total building volume >100,000 m^3, on site concrete batching, sandblasting.	Total building volume 25,000 m^3 – 100,000 m^3, potentially dusty construction material (e.g. concrete), on site concrete batching.	Total building volume <25,000 m^3, construction material with low potential for dust release (e.g. metal cladding or timber).
Trackout	>50 HDV (>3.5 t) outward movements[a] in any one day[b], potentially dusty surface material (e.g. high clay content), unpaved road length >100 m.	10-50 HDV (>3.5 t) outward movements[a] in any one day[b], moderately dusty surface material (e.g. high clay content), unpaved road length 50 m – 100 m.	<10 HDV (>3.5 t) outward movements[a] in any one day[b], surface material with low potential for dust release, unpaved road length <50 m.

a. A vehicle movement is an one way journey. i.e. from A to B and excludes the return journey.
b. HDV movements during a construction project vary over its lifetime, and the number of movements is the maximum not the average.

Step 2B Define the sensitivity of the area

The sensitivity of the area is described as low, medium or high. It takes into account a number of factors:

- The specific sensitivities of receptors in the area;
- The proximity and number of those receptors;
- The local background PM_{10} concentrations; and
- Site-specific factors, such as whether there are natural shelters, such as trees, to reduce the risk of wind-blown dust.

Table A-2 presents indicative examples of classification groups for the varying sensitivities of people to dust soiling effects and to the health effects of PM_{10}; and the sensitivities of receptors to ecological effects. A judgement is made at the site-specific level where sensitivities may be higher or lower, for example a soft fruit business may be more sensitive to soiling than an alternative industry in the same location. Box 6, Box 7 and Box 8 within the IAQM 2014 guidance outlines more detailed information on defining sensitivity.

Table A.2: Indicative examples of the sensitivity of different types of receptors

Sensitivity of receptor	Sensitivities of people and ecological receptors		
	Dust soiling effects [a]	Health effects of PM_{10} [b]	Ecological effects [c]
High	Dwellings, museums and other culturally important collections, medium and long-term car parks and car showrooms.	Residential properties, hospitals, schools and residential care homes.	Locations with an international or national designation and the designated features may be affected by dust soiling (e.g. SAC/SPA/Ramsar). Locations where there is a community of a species particularly sensitive to dust such as vascular species included in the Red Data list for Great Britain.
Medium	Parks, places of work.	Office and shop workers not occupationally exposed to PM_{10}.	Locations where there is a particularly important plant species, where dust sensitivity is uncertain or unknown. Locations with a national designation where the features may be affected by dust deposition (e.g. SSSIs).
Low	Playing fields, farmland, footpaths, short-term car parks and roads.	Public footpaths, playing fields, parks and shopping streets.	Locations with a local designation where the features may be affected by dust deposition (e.g. Local Nature Reserves).

a. People's expectations would vary depending on the existing dust deposition in the area.
b. This follows the Department for Environment, Food and Rural Affairs (Defra, 2016) guidance as set out in Local Air Quality Management Technical Guidance (LAQM.TG (16)). Notwithstanding the fact that the ambient AQOs and limit values do not apply to people in the workplace, such people can be affected to exposure of PM_{10}. However, they are considered to be less sensitive than the general public as a whole

because those most sensitive to the effects of air pollution, such as young children are not normally workers. For this reason workers have been included in the medium sensitivity category.

c. Only if there are habitats that might be sensitive to dust. A Habitat Regulation Assessment of the site may be required as part of the planning process if the site lies close to an internationally designated site i.e. SACs, SPAs and Ramsar sites.

The IAQM 2014 guidance and MOL SPG advise consideration of the risk associated with the nearest receptors to construction activities.

The sensitivity and distance of receptors from the source of dust (i.e. demolition activities, earthworks, etc.) are then used to determine the potential dust risk for each dust effect for each construction activity as shown in Table A-3, Table A-4 and Table A-5. It is noted that distances are to the dust source and so a different area may be affected by trackout than by on-site works.

For trackout, the distances should be measured from the side of the roads used by construction HDVs. Without site specific mitigation, trackout may occur from roads up to 500 metres from large sites, 200 metres from medium sites and 50 metres from small sites, as measured from the site exit. The impact declines with distance from the site. It is only necessary to consider trackout impacts up to 50 metres from the edge of the road.

Table A.3: Sensitivity of the area to dust soiling effects on people and property [a]

Receptor area sensitivity	Number of Receptors [b]	Distance from the Source (m)			
		<20	<50	<100	<350
High	>100	High	High	Medium	Low
	10-100	High	Medium	Low	Low
	1-10	Medium	Low	Low	Low
Medium	>1	Medium	Low	Low	Low
Low	>1	Low	Low	Low	Low

a. Estimate the total number of receptors within the stated distance. Only the highest level of area sensitivity from the table needs to be considered. For example, if there are 7 high sensitivity receptors <20 metres of the source and 95 high sensitivity receptors between 20 and 50 m, then the total of number of receptors <50 metres is 102. The sensitivity of the area in this case would be high.

b. Exact counting of number of human receptors not required. It is instead recommended that judgement is used to determine the approximate number of receptors within each distance band. For example, a residential unit is one receptor. For receptors which are not dwellings, professional judgement should be used to determine the number of human receptors. For example a school or hospital is likely to be within the >100 receptor category.

Table A. 4: Sensitivity of the area to human health impacts [a b c]

Receptor sensitivity	Annual Mean PM_{10} Concentrations	Number of Receptors	Distance from the Source (m)				
			<20	<50	<100	<200	<350

High	>32 µg/m^3	>100	High	High	High	Medium	Low
		10-100	High	High	Medium	Low	Low
		1-10	High	Medium	Low	Low	Low
	28-32 µg/m^3	>100	High	High	Medium	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	High	Medium	Low	Low	Low
	24-28 µg/m^3	>100	High	Medium	Low	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	<24 µg/m^3	>100	Medium	Low	Low	Low	Low
		10-100	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Medium	>32 µg/m^3	>10	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	28-32 µg/m^3	>10	Medium	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	24-28 µg/m^3	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	<24 µg/m^3	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Low	-	≥1	Low	Low	Low	Low	Low

a. Estimate the total within the stated distance (e.g. the total within 350 metres and not the number between 200 and 350 m), noting that only the highest level of area sensitivity from the table needs to be considered. For example, if there are 7 high sensitivity receptors <20 metres of the source and 95 high sensitivity receptors between 20 and 50 m, then the total of number of receptors <50 metres is 102. If the annual mean PM_{10} concentration is 29 µg/m^3, the sensitivity of the area would be high.

b. Annual mean PM_{10} concentrations are most straightforwardly taken from the national background maps but should also take account of local sources. The values are based on 32 µg/m^3 being the annual mean concentration at which an exceedance of the 24-hour objective is likely in England, Wales and Northern Ireland.

c. In the case of high sensitivity receptors with high occupancy (such as schools or hospitals) approximate the number of people likely to be present. In the case of residential dwellings, simply include the number of properties.

Table A. 5: Sensitivity of the area to ecological impacts

Receptor Sensitivity	Distance from the Source (m)[a]	
	<20	<50
High	High	Medium
Medium	Medium	Low

Low	Low	Low

a. Only the highest level of area sensitivity from the table needs to be considered.

Step 2C Define the risk of impacts

The dust emission magnitude is then combined with the sensitivity of the area to determine the overall risk of impacts with no mitigation measures applied. The matrices in Table A-6 provide a method of assigning the level of risk for each activity. These can then be used to determine the level of mitigation that is required.

Table A.6: Risks of dust impacts

Receptor Sensitivity	Dust Emission Magnitude		
	Large	Medium	Small
Demolition			
High	High Risk	Medium Risk	Medium Risk
Medium	High Risk	Medium Risk	Low Risk
Low	Medium Risk	Low Risk	Negligible
Earthworks			
High	High risk	Medium risk	Low risk
Medium	Medium risk	Medium risk	Low risk
Low	Low risk	Low risk	Negligible
Construction			
High	High risk	Medium risk	Low risk
Medium	Medium risk	Medium risk	Low risk
Low	Low risk	Low risk	Negligible
Trackout			
High	High risk	Medium risk	Low risk
Medium	Medium risk	Low risk	Negligible
Low	Low risk	Low risk	Negligible

Step 3 Site-specific mitigation

Step three of the IAQM guidance identifies appropriate site-specific mitigation. These measures are related to whether the site is a low-, medium- or high-risk site. The highest risk category of a site (of all activities being undertaken) is recommended when considering appropriate mitigation measures for the site. Where risk is assigned as 'negligible', no mitigation measures beyond those required by legislation are required. However, additional mitigation measures may be applied as good practice.

A selection of these measures is specified as suitable to mitigate dust emissions from activities, based on professional judgement.

Step 4 Determine significant effects

Following Step 2 (definition of the proposed scheme and the surroundings and identification of the risk of dust effects occurring for each activity), and Step 3 (identification of appropriate site-specific mitigation), the significance of the potential dust effects can be determined. The recommended mitigation measures should normally be sufficient to reduce construction dust impacts to a not significant effect.

The approach in Step 4 of the IAQM dust assessment guidance has been adopted to determine the significance of effects with regard to dust emissions. The guidance states the following:

'*For almost all construction activity, the aim should be to prevent significant effects on receptors through the use of effective mitigation. Experience shows that this is normally possible. Hence the residual effect will normally be 'not significant'*.'

IAQM guidance also states that:

'*Even with a rigorous DMP* [Dust Management Plan] *in place, it is not possible to guarantee that the dust mitigation measures will be effective all the time, and if, for example, dust emissions occur under adverse weather conditions, or there is an interruption to the water supply used for dust suppression, the local community may experience occasional, short-term dust annoyance. The likely scale of this would not normally be considered sufficient to change the conclusion that with mitigation the effects will be 'not significant'*.'

Step 4 of IAQM guidance recognises that the key to the above approach is that it assumes that the regulators ensure that the proposed mitigation measures are implemented. The management plan would include the necessary systems and procedures to facilitate on-going.

Appendix B Air Quality Standards and Air Quality Objectives

The effects of air quality on proposed and existing receptors is typically assessed by comparing modelled or monitored pollutant concentrations against prevailing air quality objectives (AQOs) embedded in the Air Quality (England) Regulations 2000, as amended. These are transposed into Table A.1, below.

Table A.1 Ambient AQOs relevant to the assessment

Pollutant	AQOs	Measured as	Dates to be achieved and maintained thereafter
NO_2	200 µg/m^3, not to be exceeded more than 18 times per year	1-hour mean	31 December 2005
	40 µg/m^3	Annual mean	31 December 2005
PM_{10}	50 µg/m^3, not to be exceeded more than 35 times per year	24-hour mean	31 December 2004
	40 µg/m^3	Annual mean	31 December 2004
$PM_{2.5}$	25 µg/m^3	Annual mean	01 January 2020

The Local Air Quality Management Technical Guidance (Department for Environment, Food and Rural Affairs (Defra), 2016) ('TG16') also recommends the receptors where the AQOs should be applied, as outlined in Table A.2.

Table A.2 Examples of where the air quality objectives should apply, as per TG16

Averaging Period Objectives	Objectives should apply at	Objectives should generally not apply at
Annual mean	All locations where members of the public might be regularly exposed. Building façades of residential properties, schools, hospitals, care homes etc.	Building façades of offices or other places of work where members of the public do not have regular access. Hotels, unless people live there as their permanent residence. Gardens of residential properties. Kerbside sites (as opposed to locations at the building façade), or any other location where public exposure is expected to be short term.

Averaging Period Objectives	Objectives should apply at	Objectives should generally not apply at
24-hour mean and 8-hour mean	All locations where the annual mean objective would apply, together with hotels. Gardens of residential properties (not at peripheries or front gardens unless exposure is likely there).	Kerbside sites (as opposed to locations at the building façade), or any other location where public exposure is expected to be short term.
1-hour mean	All locations where the annual mean and: 24 and 8-hour mean objectives apply. Kerbside sites (for example, pavements of busy shopping streets). Those parts of car parks, bus stations and railway stations etc. which are not fully enclosed, where members of the public might reasonably be expected to spend one hour or more. Any outdoor locations where members of the public might reasonably expect to spend one hour or longer.	Kerbside sites where the public would not be expected to have regular access.

Appendix C Mitigation recommended for implementation at the Roadstone Coatings Site

The Mott MacDonald (2013) assessment considered a series of mitigation measures to reduce dust emissions that were incorporated into the design of the Aggregates site and these are outlined below:

- Dust generating activities have, as far as practicable, been sited where prevailing winds will blow dust away from sensitive receptors;
- The need for transportation and handling has been minimised by using a conveyor as opposed to vehicular traffic / haul roads and by placing adequate storage facilities close to the processing areas;
- Storage areas have been located away from sensitive receptors and will be covered as far as is feasible; and
- Site access and exit routes, routes around the site and parking areas are located away from sensitive receptors.

Mott MacDonald also recommended proposed operational phase dust mitigation measures, split into Site Activities and Site Traffic groupings. These are outlined below:

- Site Activities
    - Identify responsible person in charge
    - Restrict the duration of dust emitting activities
    - Limit drop heights in stockpiling, processing and loading operations
    - Use water as dust suppressant where applicable (both on roads and storage areas)
    - Protect activities from wind
    - Store materials under cover wherever feasible
    - Limit spillage and facilitate its removal by the use of hard surfaces
    - Protect conveyors by use of wind and roof boards and shelter transfer points from wind
    - Use scrapers to clean conveyor belts and collect scrapings for disposal
    - Good maintenance of all plant, vehicles and equipment
- Site Traffic
    - Restrict vehicle speed

  - Effective vehicle cleaning and specific wheel washing on leaving site
  - Road sweepers to be used regularly
  - All vehicles to switch off engines – no idling
  - All loads entering and leaving site to be covered
  - Load and unload in areas protected from wind
  - Use paved roads where practicable
- Additionally, alongside the above proposed mitigation measures to minimise dust risk, if dust cannot be avoided then site activities will be suspended and postponed until such a time that the dust has returned to acceptable levels, at which point site activities can be resumed.

Appendix D Layout of Railheads relative to the Proposed Development

Figure D.1: Lease Demise (Blue line) for the Freightliner operation with access rights over the road shaded brown

Figure D.2: Lease Demise (Blue line) for the Freightliner operation with access rights over the road shaded brown

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APPENDIX F
ODOUR RESPONSE

ARUP

Brookgate Land Limited

Cambridge North

Post Submission Odour Response

Reference: 267983-ARP-REP-OdourResponse-1.0

Issue 1.0 | 05 September 2022

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 267983-00

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ARUP

Document Verification

Project title	Cambridge North
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		Signature			

Issue Document Verification with Document ✓

Contents

Appendices

1. Introduction

This document has been prepared by Ove Arup and Partners Ltd (Arup) in response to the objection received from the Minerals and Waste Planning Authority (MWPA) on the Proposed Development (22/02771/OUT) regarding the proximity to the Cambridge Waste Transfer Station (CWTS). The CWTS lies within a Waste Management Area (WMA) and under Policy 16 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan[1] a Consultation Area is designated around the WMA to ensure that sites within the WMA are safeguarded[2]. The concern raised by the MWPA is regarding the potential interactions between the safeguarded sites and the different uses within the Proposed Development (i.e. how a safeguarded site may affect a proposed use, and how a proposed use may affect a safeguarded site). The MWPA also stated that the typical issues that arise regarding safeguarded facilities often relate to dust, noise, light, odour, traffic, and general amenity. This document addresses the potential odour interaction, more specifically, the potential for odour from the safeguarded CWTS to affect the Proposed Development.

As stated in the MWPA objection document, the Proposed Development site lies within the consultation area for the Cowley Road WMA. As set out in Policy 26 of the emerging North East Cambridge Area Action Plan[3], it is proposed that the safeguarded 'Veolia Waste Recycling Transfer Station' (referred to in this document as the CWTS) will be relocated. However, it is understood that an alternative site has not yet been identified, and until that occurs it should be assumed that the facility may be operating from this location for the foreseeable future.

An odour statement accompanied the planning application for the Proposed Development which assessed the potential odour impacts from the Cambridge Water Recycling Centre (CWRC) located in the WMA. The MWPA objection document also stated the following in reference to CWRC, referred to as the Water Recycling Area (WRA):

"*The MWPA is satisfied, that subject to no objections being raised by Anglian Water or the Environmental Health Officer, that the Odour Assessment adequately demonstrates that the Proposed Development will not be significantly adversely affected by its proximity to the WRA.*"

Therefore, the CWRC is not discussed further.

2. Policy and Guidance

2.1 Policy context

The MWPA makes reference to Policy 16 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan[1] regarding Mineral Allocation Areas (MAAs), Mineral Development Areas (MDAs), WMAs, Transport Infrastructure Areas (TIAs) and WRAs:

"*Development within a CA will only be permitted where it is demonstrated that the development will:*

(c) not prejudice the existing or future use of the area (i.e. the MAA, MDA, WMA, TIA or WRA) for which the CA has been designated; and

(d) not result in unacceptable amenity issues or adverse impacts to human health for the occupiers or users of such new development, due to the ongoing or future use of the area for which the CA has been designated

[…]

[1] Peterborough City Council, Cambridgeshire County Council (2021) Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036, Adopted July 2021

[2] Protected from development that would prejudice operations within the area, or to protect development that would be adversely affected by such operations (for example residential development being located close to a waste site and subsequently suffering amenity issues).

[3] Greater Cambridge Shared Planning (2020) Draft North East Cambridge, Area Action Plan, Regulation 18 consultation

When considering proposals for non-mineral and non-waste management development within a CA, then the agent of change principle will be applied to ensure that the operation of the protected infrastructure (i.e. MAA, MDA, WMA, TIA or WRA) is not in any way prejudiced."

The MWPA has also made reference to paragraph 187 of the National Planning Policy Framework[4] (NPPF), in the context of the 'agent of change':

"*187 Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed."*

In summary, both policies referenced state that the Proposed Development should not restrict or prejudice the operation of the current CWTS as a result of odour emissions from the CWTS activities.

2.2 Relevant guidance

2.2.1 Institute of Air Quality Management Guidance

The Institute of Air Quality Management (IAQM) guidance[5] states:

"*Before an adverse effect (such as disamenity, annoyance, nuisance or complaints) can occur, there must be odour exposure. For odour exposure to occur all three links in the source-pathway-receptor chain must be present*"

The guidance defines an odour source as, "*a means for the odour to get into the atmosphere*". If there is no source, there is no odour exposure and therefore no adverse effect to be assessed. The CWTS is discussed further to understand whether it constitutes as an odour source with an odour magnitude which could significantly impact the Proposed Development, in line with the IAQM guidance.

2.2.2 Environment Agency Guidance

The Environment Agency H4 odour guidance[6] provides permitting guidance for industrial site operators and prospective operators. The guidance provides further clarification around odour permit conditions which are relevant to the CWTS environmental permit.

3. Cambridge Waste Transfer Station

Veolia, the operator of the CWTS, were consulted to understand the operations of the site and any conditions which may affect odour emissions from the site.

The CWTS was granted planning permission[7] for 24-hour operation in 2019 and it is understood that the CWTS typically handles dry inert waste. However, the operator suggested that details of the specific waste handled at the site may change within the range of waste permitted to be handled, based on the licence granted by the Environment Agency. The current permit[8] (EPR/LB3331AQ) is for handling household,

[4] Ministry of Housing, Communities & Local Government (2021) National Planning Policy Framework

[5] Bull et al (2018). IAQM Guidance on the assessment of odour for planning – version 1.1, Institute of Air Quality Management, London. www.iaqm.co.uk/text/guidance/odour-guidance-2018

[6] Environment Agency (2011) H4 Odour Management (March 2011)

[7] Joint Development Control Committee (2019) Joint Director of Planning and Economic Development, Date: 18 December 2019, Application Number C/5000/19/CW, (19/0493/CTY (Cambridge City Council)

[8] Environment Agency, LIT 6956 SR2008 No 3 75kte – household commercial and industrial waste transfer station with treatment, Standard rules, Chapter 4, The Environmental Permitting (England and Wales) Regulations 2016

commercial and industrial waste. The permit also states the following conditions under the 2008 No 3 standard rules:

"*3.2.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable, to minimise, the odour.*

3.2.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan;

(b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency."

Following the Environment Agency H4 guidance, this is a standard 'odour boundary condition' which ensures that operators will not be in breach of the condition provided they are using appropriate measures. In other words, should the CWTS be in compliance of the permit conditions, there should be no significant emission of odour emitted from the site.

The IAQM guidance[5] states that national planning guidance requires that pollution control regimes (in this case, odour), regulated under an environmental permit, should be assumed to operate effectively. However, the most recent Environment Agency inspection was undertaken on 24th March 2022 which concluded compliance with the permit conditions and stated that all storage of waste under the permit is undertaken inside a building or within sealed containers. Therefore, based on the conditions of the permit, it can be concluded that there are no significant odour emissions from the CWTS.

4. Existing Baseline Conditions

Following IAQM guidance[5], complaints data had been sought to understand the existing baseline odour conditions in the context of the CWTS.

In 2019, the CWTS was granted planning permission[7] (C/05004/12/CW) to enable 24 hour operation of the site. The report produced[7] stated that there had been odour complaints reported by "immediately local businesses". However, the CWTS operator was also consulted to understand if there were any recent records of odour complaints. No odour complaints had been recorded in the last 2 years[9] (the latest records available).

This provides further evidence to support the conclusion that the CWTS is not a source of significant odour emissions.

5. Summary and Conclusions

The CWTS is not considered to be a source of significant odour emissions that would impact the amenity at the Proposed Development and therefore no odour assessment of the CWTS impact on the Proposed Development is considered necessary. This is based on the Environment Agency permit which conditions the operations to be, "free from odour at levels likely to cause pollution outside the site", and a lack of odour complaints in the last 2 years. Therefore, in terms of odour, as the CWTS is not expected to impact the Proposed Development, the Proposed Development is unlikely to restrict or prejudice the operation of the current safeguarded CWTS site and therefore complies with Policy 16 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan[1] and the NPPF[4].

[9] As of 31 August 2022, the date at which the operator responded with this statement.

Abbreviations/Glossary

Abbreviation	Description
CWRC	Cambridge Water Recycling Centre
CWTS	Cambridge Waste Transfer Site
IAQM	Institute of Air Quality Management
MAA	Mineral Allocation Area
MDA	Mineral Development Area
MWPA	Minerals and Waste Planning Authority
NPPF	National Planning Policy Framework
TIA	Transport Infrastructure Area
WMA	Waste Management Area
WRA	Water Recycling Area

Appendix A

Attachments

A.1 CWTS Operator correspondence

[redacted]

From: [redacted]@veolia.com>
Sent: 31 August 2022 21:49
To: [redacted]
Cc: [redacted]
Subject: Re: Cambridge Waste Transfer Station Enquiry in relation to Land North Of Cambridge North Station
Attachments: Cambridge Permit 1 of 2.pdf; Cambridge Permit 2 of 2.pdf; 20220324 CAR 104734-0421272.pdf

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi [redacted]

I will answer as specifically as I can but a lot of the details (e.g. types of waste we handle) could always change in future based on our Environmental Permit.

Please find attached copy of our permit (including conditions relating to Odour) and the latest inspection report from the Environment Agency (from March this year). As per the report, the EA are happy we are fully compliant with our permit conditions which include the management of Odour, dust etc.

We have had no complaints relating to odour in the last 2 years (and possibly longer, but that is speaking from the records in our current system without having to access an archived system).

I sincerely hope this helps,

[redacted]
Senior Business Manager - Cambridge, St Albans & Elstow
United Kingdom

[redacted]
Cowley Rd, Cambridge, CB4 0DN

www.veolia.co.uk

A.2 Shared CWTS environmental permit documentation

LIT 6956
SR2008 NO3 _75KTE - HOUSEHOLD COMMERCIAL AND INDUSTRIAL WASTE TRANSFER STATION WITH TREATMENT Standard rules

Chapter 4, The Environmental Permitting (England and Wales) Regulations 2016

Environment Agency

Standard rules SR2008 No3 75kte - household, commercial and industrial waste transfer station with treatment – existing permits

Introductory note

This introductory note does not form part of these standard rules.

These standard rules are only available for existing SR2008No3 permit-holders. New applicants should use standard rules SR2015 No6.

SR2008No3_75kte (version6.0)

When referred to in an environmental permit, these rules will allow the operator to operate a Household, Commercial and Industrial Waste Transfer Station with waste treatment at a specified location, provided that the permitted activities are not carried out within 500 metres of a European Site[1], Ramsar site or a Site of Special Scientific Interest (SSSI); or within 50m of any well, spring or borehole used for the supply of water for human consumption. This must include private water supplies. Furthermore, specified waste cannot be treated outside a building within a specified Air Quality Management Area (AQMA)[2].

Permitted wastes are limited to non-hazardous wastes and do not include hazardous wastes such as asbestos. The total quantity of waste that can be accepted at a site under these rules must be less than 75,000 tonnes a year. With the exception of specified waste, all bulking, transfer or treatment of non-hazardous waste must be carried out inside a building. Wastes can be bulked up for disposal or recovery elsewhere and can also be treated by sorting, separation, screening, baling, shredding, crushing and compaction. These rules will not permit the burning of any wastes, either in the open, inside buildings or in any form of incinerator.

These rules do not allow any point source emission into surface waters or groundwater. However, under the emissions of substances not controlled by emission limits rule:

- Liquids may be discharged into a sewer subject to a consent issued by the local water company.
- Liquids may be taken off-site in a tanker for disposal or recovery.
- Clean surface water from roofs, or from areas of the site that are not being used in connection with storing and treating waste, may be discharged directly to surface waters, or to groundwater by seepage through the soil via a soakaway.

This permit allows waste recovery activities. Please note that any processed materials will continue to be regulated as waste until they meet the end of waste test in accordance with Article 6 of Directive 2008/98/EC. You can demonstrate that you have met the end of waste tests by either:

- meeting all the criteria set out in any relevant and applicable EU End of Waste regulations; or
- a case by case assessment taking into account the applicable case law, which includes meeting all the requirements of a relevant and applicable Quality Protocol or Defined Industry Code of Practice (e.g. CL:AIRE Development Industry CoP).

End of Introductory Note

[1] A candidate or Special Area of Conservation (cSAC or SAC) and proposed or Special Protection Area (pSPA or SPA) in England and Wales.

[2]An Air Quality Management Area which has been designated due to concerns about particulate matter in the form of PM_{10}.

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