Dust & Emission Management Plan

BATPA08-DEMP

Land Off Severn Road, Severnside, BS10 7SE

Issued by:

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1. Introduction

This document has been produced to identify and manage potential emissions arising from the increase of the site's annual waste throughput to 450,000 tonnes per annum, amend the existing operating hours and install a bespoke wash plant in order to facilitate the recovery of materials and saleable aggregates from the waste delivered to the site.

1.1. Guidance

The following guidance has been reviewed in the production of this document, to assess and manage potential fugitive emissions arising from works at the site:

- Environment Agency – Control and monitor emissions for your environmental permit – updated 24/11/2022 https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#emissions-that-do-not-have-set-limits
- Institute of Air Quality Management's (IAQM) – Guidance on the Assessment of dust from demolition and construction (v2.2 January 2024)
    - Stoaling *et al.* (2024). IAQM Guidance on the assessment of dust from demolition and construction, Institute of Air Quality Management, London

The Environment Agency's guidance on how to control and monitor emissions for environmental permits details requirements when an emission management plan for dust is required. The guidance notes that a dust management plan must be produced if applying for a bespoke permit for any of the activities listed below and your site is in either of the locations listed below:

If you carry out any of these activities:

- *keeping or treating (or both) aggregates, soils, ashes or similar materials*
- *keeping or treating (or both) wood*
- *keeping or treating (or both) household, commercial or industrial waste in a waste transfer station*
- *keeping or treating (or both) household, commercial or industrial waste in a materials recycling facility*
- *keeping or treating (or both) scrap metal*
- *keeping or treating (or both) biowaste in the open, including the finished material*
- *disposing of household, commercial or industrial waste in a landfill*
- *recovery of household, commercial or industrial waste by deposit for recovery*
- *receiving, processing or producing fine or dusty materials*

And you are in either of these locations:

- *in, or within 2km of, an air quality management area for PM_{10}*

- *within 500m of a sensitive receptor such as a home, school, hospital or nursing home, food preparation facility or similar*
- *within 250m of a sensitive receptor when treating biowaste*

1.2. Summary

Following the IAQM & EA guidance, this document covers the following:

a) Site context including local sensitive receptors
b) Environmental setting including other local contributors of dust and emissions
c) Emissions sources on site and dust risk assessment
d) Dust emission mitigation measures
e) Summary

2. Site Context

2.1. Site details

The site is located to the West of Bristol, within South Gloucestershire. The centre of the site is located at approximate National Grid Reference (NGR) 354591, 181034.

The site is currently operated as an existing waste recycling facility which accepts up to 250,000 tonnes per annum of construction and demolition wastes which are processed into re-usable aggregate products. The proposals seek to add a wash plant within the site.

Table 1. Site referencing information

	Details
Site name	Hallen
Site address	Land Off Severn Road, Severnside, BS10 7SE
National grid reference	NGR 354591, 181034

2.2. Surrounding land uses

Hallen industrial estate is located immediately adjacent to the site on the west of the site. Immediately to the north of the site is the Flogas Avonmouth LPG storage terminal (above ground). A designated recreational route runs adjacent to the north east border of the site. The M49 motorway runs near to the to the south east border of the site. The nearest residential dwelling is located 375m southeast of the site, at Severn Road, beyond the line of the M49. The village of Hallen lies approximately 750m to the south east, beyond the M49 motorway. Severn Road and the service road from it are located to the south west of the site.

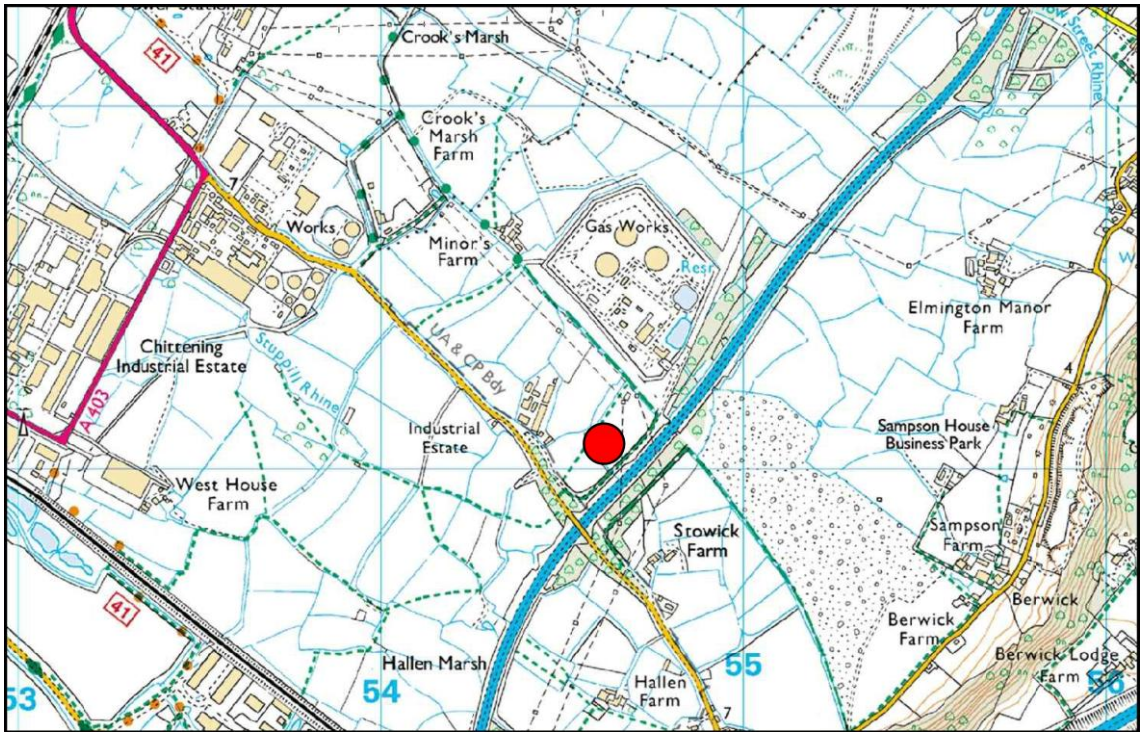


Figure 1. Site location map (772-025-01 rev C)

Figure 2. Aerial photo of the site

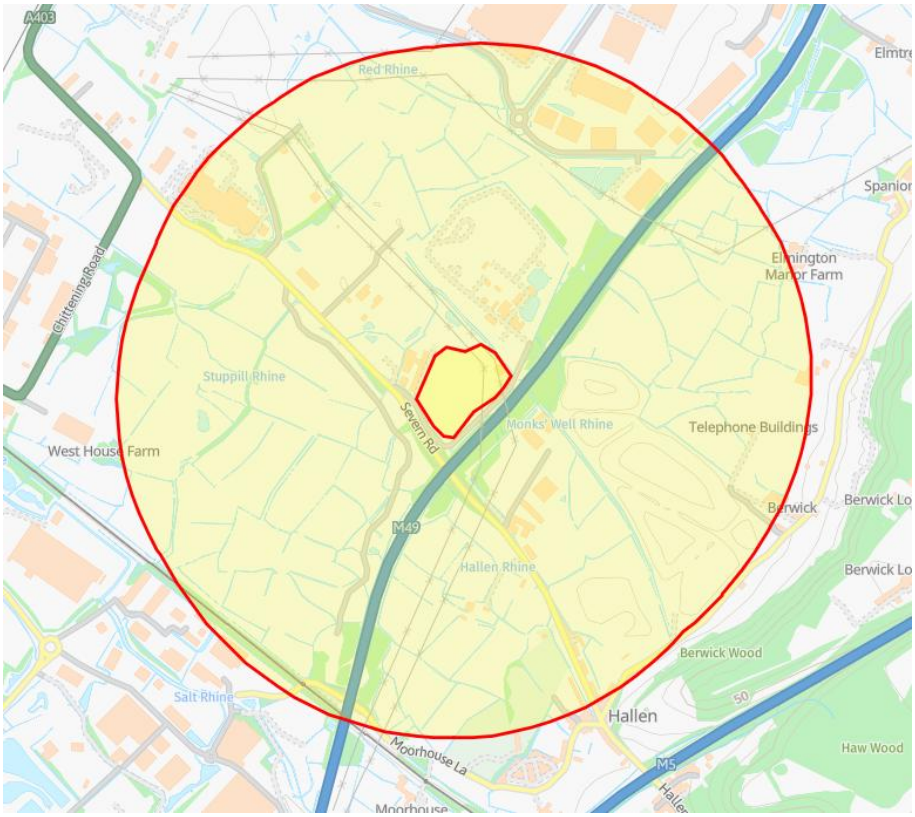


Figure 3. Site location showing 1000m buffer

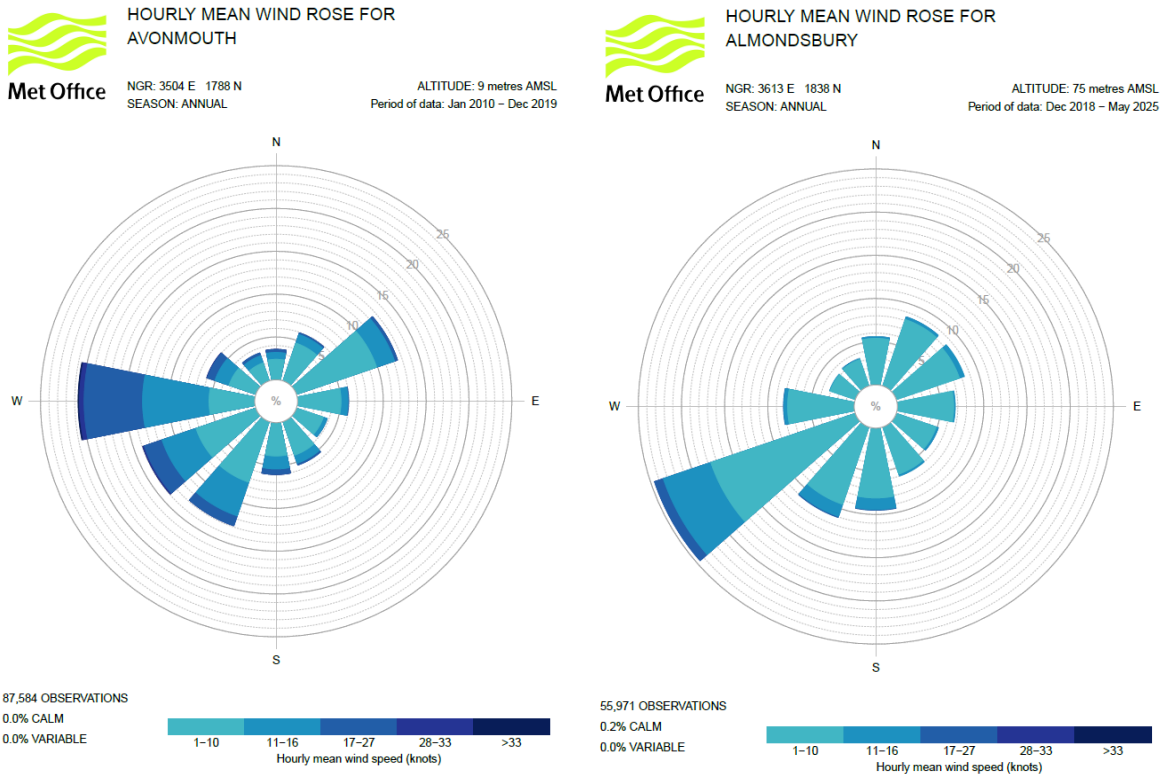
Some of the immediate surrounding land remains agricultural although the area is interspersed with heavy industrial development and infrastructure as a backdrop and extensive development is continuing in areas around the site, pursuant to the historic industrial consents and safeguarded employment designation of the parts of the area.

Table 2. Distance to closest human receptor

Distance to human receptor (direction)	Receptor type	
20m (west)	Industrial	Hallen Industrial Estate
150m (north)	Industrial	Flogas Avonmouth LPG storage terminal
150m (west)	Commercial	Boscombe Business Park
200m (east)	Commercial	East Cliff Business Park
250m (east)	Industrial	Berwick Farm Landfill Site (closed)
350m (south east)	Residential	Fringe of Hallen village
575m (south)	Agricultural	Hallen Farm
750m (south east)	Recreational	Old Elizabethan Rugby Club
750m (north west)	Industrial	Energy from waste plant
750m (north east)	Agricultural	Elmington Manor Farm
1000m (south east)	Residential	Village of Hallen
1000m (north)	Commercial	Central Park Warehouse and Distribution Park

2.3. Prevailing wind

Windrose data for the closest stations is presented in Figure 4. Avonmouth station was the closest and similar altitude, however, this station closed in 2019 (see Figure 4 (a)). The next closest station is at Almondsbury, which opened in 2018 (see Figure 4 (b)) and is at a higher altitude. The prevailing wind at Avonmouth was from the West, whilst the prevailing wind at Almondsbury is South West.



(a) Avonmouth Windrose (2010-2019) **(b) Almondsbury Windrose (2018-2025)**

Figure 4. Windrose data

2.4. Proposed development

The site has obtained planning permission (ref: P24/02312/MW dated: 08/05/2025) for the formation of new recycling plant with associated works for the washing and grading of construction, demolition and excavation wastes to produce recovered aggregates, increase to the quantity of material recycled at the site and extension to existing operating hours to 24-hour operation.

3. Current Environmental Setting

The current environmental setting for the site has been taken from the following sources: Groundsure Enviro Insight; Groundsure Geo Insight; and MAGIC website.

3.1. Environmental Sensitivity

- The Severn Estuary 1,738m north west has a number of designations:
    - Site of Special Scientific Interest (SSSI),
    - Special Area of Conservation (SAC),
    - Special Protection Area (SPA) and
    - RAMSAR site.
- There is one Local Nature Reserves (LNR) within 2000m of the site, recorded at a distance of 1,387m south (Lawrence Weston Moor LNR).
- There are no National Nature Reserves (NNR) within 2,000m of the site.
- There are 5 Ancient Woodland within 2000m of the site, recorded as Ancient and Semi-Natural Woodland.
- There are no World Heritage Sites within 2,000m of the site.
- There are no Environmentally Sensitive Areas within 2,000m of the site.
- There are no Areas of Outstanding Natural Beauty (AONB) within 2,000m of the site.
- There are no National Parks (NP) within 2,000m of the site.
- There are no Nitrate Sensitive Areas, within 2000m of the site.
- The Bristol & Bath Green Belt falls within 2000m of the site, recorded to the east of the M49 motorway.
- There are no Air Quality Management areas within 2000m of the site.

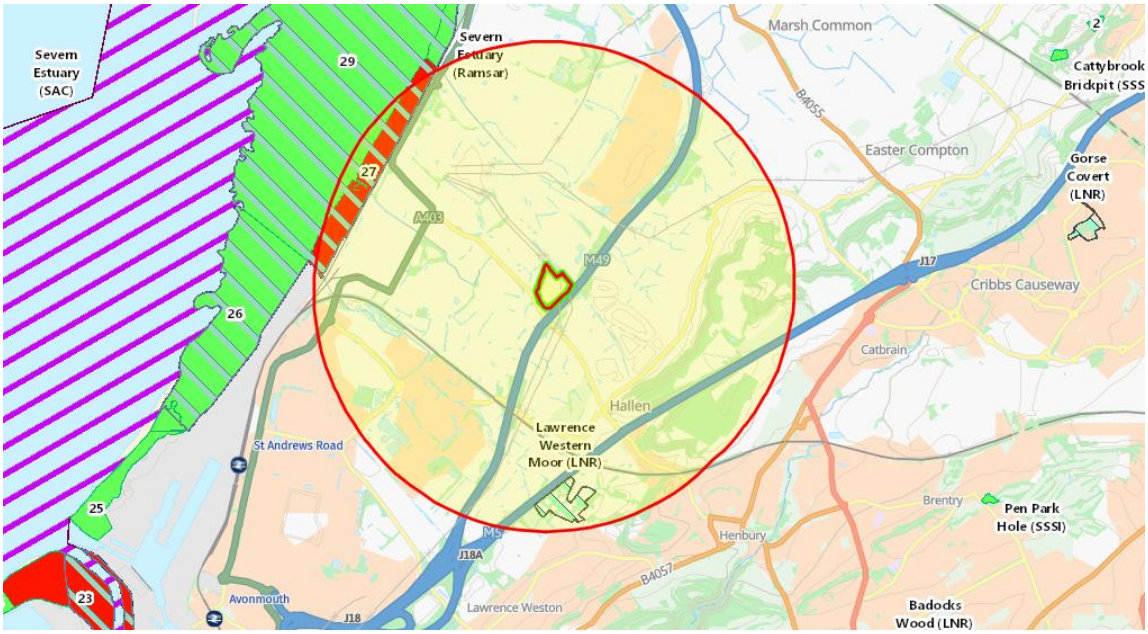


Figure 5. Environmental sensitivity (2000m)

3.2. Current Industrial Data

3.2.1. Environmental Permits

- There are no records of an IPC Authorisation within 500m of the site.
- There are 11 historical tanks recorded within 500m of the site, relating to the gas works to the north (now Flogas Avonmouth LPG storage terminal)
- There are 19 records of Licensed Industrial Activities (Part A(1)) relating to the gas works to the north (now Flogas Avonmouth LPG storage terminal) and Seabank gas power station to the north west
- The Environment Agency have nine records of pollution incidents within 500m of the site – the closest was noted 42m west which was a diesel spill and recorded as category 3 'minor impact' or 4 'no impact' on water, land and air.

3.2.2. Landfill and Other Waste Sites

- There is 1records from Environment Agency/Natural Resources Wales of active or recent landfill within 500m of the study site (Berwick Farm Landfill Site (closed)).
- There are no records of historical landfill (BGS records) within 500m of the site.
- There are no records of historical landfill (LA/mapping records) within 500m of the site.
- There is one record of historical landfill (EA/NRW records) within 500m of the site at Crooks Marh Farm (surrendered 1979)

- There are 19 recorded Licensed Waste Sites within 500m of the study site that are active or recently closed. These include land related to the application site.

3.3. Air Quality Management Areas

The Defra Air Information Resource (AIR) website (https://uk-air.defra.gov.uk/aqma/maps/) details all the Air Quality Management Areas AQMAs declared by local authorities.

There are no AQMAs for PM_{10} within 2km of the site.

A plan showing the closest AQMAs to the Hallen site along with details of the pollutants monitored are presented in Figure 6 and Table 3, respectively. There are no AQMAs for PM_{10} within 6.50km of the site.

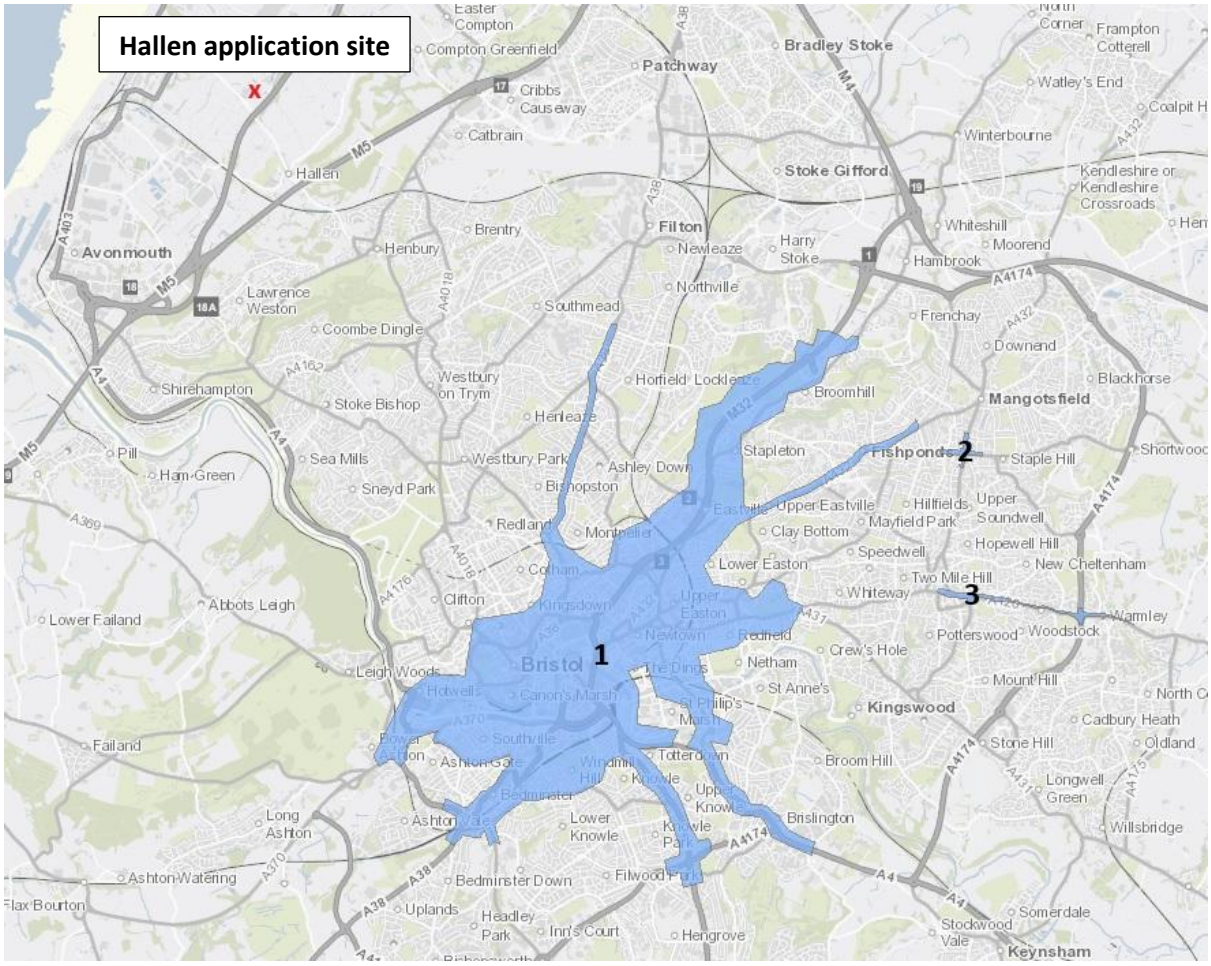


Figure 6. Closest AQMAs to the Hallen application site

Table 3. Summary of AQMAs and pollutants

Ref	AQMA	Approx. distance from site (km)	Date Declared	Date Amended	Date Revoked	Pollutants
1	Bristol AQMA	6.50	01/05/2001	01/05/2003 01/05/2008 26/10/2011		• Particulate Matter PM_{10} • Nitrogen dioxide NO_2 • Nitrogen dioxide NO_2
2	Staple Hill AQMA	12.50	14/04/2010	25/05/2012		• Nitrogen dioxide NO_2
3	Kingswood - Warmley AQMA	11.00	14/04/2010	25/05/2012 16/12/2015		• Nitrogen dioxide NO_2
	Cribbs Causeway AQMA	2.50	14/04/2010		22/07/2020	• Nitrogen dioxide NO_2
	M4, M5, M32 M49 Motorway Corridors AQMA	-	01/11/2001		15/03/2004	• Nitrogen dioxide NO_2

4. Dust Risk Assessment

4.1. Outline

To effectively control dust from site activities, it is important to evaluate the risk caused by the pollutants emitted. In accordance with the Institute of Air Quality Management's (IAQM) Guidance on the Assessment of dust from demolition and construction guidance, a dust risk assessment should carry out a risk assessment for each phase of works (demolition, earthworks, construction, trackout), and identify whether each phase of activity on-site represents a low, medium or high risk of dust generation and then identify suitable mitigation measures for the relevant level of risk.

The risk of dust from a site to have detrimental effects on amenity, health and the natural environment is related to:

- the activities being undertaken (demolition, earthworks, construction, trackout – including the number of vehicles and plant etc.);
- the potential scale of dust emissions for each development stage;
- the duration of these activities and timing;
- the prevailing meteorological conditions (wind speed, direction and rainfall) during activity;
- the size of the site;
- the topography of the location and natural barriers e.g. woodland;
- existing levels of background pollution and the adequacy of the mitigation measures applied to reduce or eliminate dust;
- the proximity of receptors to the activity at the site;
- the sensitivity of the receptors to dust; and
- the level of risk due to the scale of dust emissions on health, soiling (dirt deposited on surrounding structures) and the natural environment.

4.2. Assessment Procedure

The approach outlined below is based on the site evaluation process set out in the latest revision of the IAQM Guidance (v2.2 January 2024). To reflect their different potential impacts, this guidance breaks down activities on construction sites into the following four categories.

1. demolition;
2. earthworks;
3. construction; and
4. trackout.

The potential for dust emissions is to be assessed for each activity that is likely to take place. If an activity is not taking place, then it does not need to be assessed. The risk assessment categories assume that the most basic project controls are applied to every project.

The IAQM assessment methodology considers three separate dust impacts with account being taken of the sensitivity of the area that may experience these effects:

- annoyance due to dust soiling;
- the risk of health effects due to an increase in exposure to PM_{10}; and
- harm to ecological receptors with account being taken of the sensitivity of the area that may experience these effects.

A dust risk assessment is used to define appropriate mitigation measures to ensure that there will be no significant effect. The dust risk assessment procedure is undertaken in five steps:

1. Screen requirement for more detailed risk assessment
2. Assess risk of dust impacts
3. Determine site-specific mitigation for each activity
4. Examine residual effects
5. Prepare dust assessment report

4.3. Requirement for a Detailed Assessment

In accordance with the IAQM guidance, no further assessment is required if there are no receptors within a certain distance of the works. A detailed assessment is normally required where there is a 'human receptor' within:

- 250 m of the boundary of the site; and/or
- 50 m of the route(s) used by construction vehicles on the public highway, up to 250 m from the site entrance(s).

Hallen industrial estate is located immediately adjacent to the site on the west of the site. Immediately to the north of the site is the Flogas Avonmouth LPG storage terminal (above ground). A designated recreational route runs adjacent to the north east border of the site. The M49 motorway runs near to the to the south east border of the site. The nearest residential dwelling is located 375m southeast of the site, at Severn Road, beyond the line of the M49. The village of Hallen lies approximately 750m to the south east, beyond the M49 motorway. Severn Road and the service road from it are located to the south west of the site.

Table 4. Human receptor within 250m

Distance to human receptor (direction)	Receptor type	
20m (west)	Industrial	Hallen Industrial Estate
150m (north)	Industrial	Flogas Avonmouth LPG storage terminal
150m (west)	Commercial	Boscombe Business Park
200m (east)	Commercial	East Cliff Business Park
250m (east)	Industrial	Berwick Farm Landfill Site (closed)

A detailed assessment of effects on 'ecological receptors' is also be required where an 'ecological receptor' is within:

- 50 m of the boundary of the site; and/or
- 50 m of the route(s) used by construction vehicles on the public highway, up to 500 m from the site entrance(s).

There is one statutory protected sites within 2,000m of the site (see Section 3.1). In the absence of protected ecological sites in the immediate vicinity of the site, the below table summarises the ecological receptors in relation to the permitted activities (Figure 5**Error! Reference source not found.**).

Table 5. Distance to closest ecological receptor

Distance to closest ecological receptor (direction)	Receptor type
1,738m (NW) Severn Estuary	Ecological (statutory)
Monks Well Rhine (10m north)	Ecological (non-statutory)
Drainage ditches only, which drain into Rhine network, trees (10m, north, south, east)	Ecological (non-statutory)

Based on the above criteria, there is a requirement to carry out a detailed assessment for both human and ecological receptors.

4.4. Dust Impacts

During the installation of the wash plant, there will be demolition and construction activities. Therefore assessments will be considered for the following prior to operation of the wash plant:

- Demolition
- Construction

During the operation of the plant, there will be no demolition or construction works as part of the permitted activities on the site, therefore only assessments will be considered for the following activities:

- Earthworks
- Trackout

The following sections will consider the potential effects of earthworks and trackout on the nearest receptors including:

- annoyance due to the deposition of dust; and
- harm to the natural environment.

The risk category for earthworks and trackout will be then be described based on the following two factors:

1. The scale and nature of the works, which determines the potential dust emission magnitude as negligible, small, medium or large and
2. The sensitivity of the area to dust impacts, which is defined as low, medium or high sensitivity.

These two factors will then be combined to determine the risk of dust impacts with no mitigation applied or earthworks and trackout activities.

4.5. Potential Dust Emission Magnitude

The dust emission magnitude is based on the scale of the anticipated works and is classified as Small, Medium, or Large. The following examples of potential dust emission magnitudes described in the IAQM guidance has been reproduced below for the earthworks and trackout elements of the proposed works.

4.5.1. Demolition Phase

- **Large**: Total building volume >75,000 m^3, potentially dusty construction material (e.g. concrete), on-site crushing and screening, demolition activities >12 m above ground level;
- **Medium**: Total building volume 12,000 m^3 – 75,000 m^3, potentially dusty construction material, demolition activities 6–12 m above ground level; and
- **Small**: Total building volume <12,000 m^3, construction material with low potential for dust release (e.g. metal cladding or timber), demolition activities <6 m above ground, demolition during wetter months.

The site activities related to breakout of concrete or crushing concrete and bricks is considered to have a small potential dust emission magnitude. This is due to the volumes being significantly below the threshold and, works carried out below 6m.

4.5.2. Construction Phase

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. Example definitions for construction are:

- **Large**: Total building volume >75,000 m^3, on site concrete batching, sandblasting;
- **Medium**: Total building volume 12,000 m^3 – 75,000 m^3, potentially dusty construction material (e.g. concrete), on site concrete batching; and
- **Small**: Total building volume <12,000 m^3, construction material with low potential for dust release (e.g. metal cladding or timber).

During construction of the yard and associated plant, the potential dust emission magnitude is considered to be small due to the total building volume being less than 12,000m^3. The concrete used in construction will be batched from off-site. There will be metal cladding to parts of the structure and the wash plant is fabricated from metal.

4.5.3. Earthworks Phase

Earthworks primarily cover excavation, haulage, tipping and stockpiling of soil type materials, as well as levelling the site and landscaping. The scale of potential dust emissions from this phase should be determined using the following criteria.

- **Large**: 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;
- **Medium**: 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; and
- **Small**: 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.

Based on the above descriptions, the earthworks magnitude for the site has been classified as Large.

4.5.4. Trackout Phase

Factors which determine the risk of dust emissions from trackout are vehicle size, vehicle speed, vehicle numbers, geology and duration. Only receptors within 50 m of the route used by vehicles on the public highway and up to 250 m from the site entrance are considered to be at risk from the effects of dust.

- **Large**: >50 HDV (>3.5t) outward movements in any one day, potentially dusty surface material (e.g. high clay content), unpaved road length >100 m;
- **Medium**: 20-50 HDV (>3.5t) outward movements in any one day, moderately dusty surface material (e.g. high clay content), unpaved road length 50 m – 100 m; and
- **Small**: <20 HDV (>3.5t) outward movements in any one day, surface material with low potential for dust release, unpaved road length <50 m.

The above numbers are for vehicles that leave the site after moving over unpaved ground, where they accumulate mud and dirt that can be tracked out onto the public highway. Based on the anticipated import volume and duration for each area of the site, the number of Heavy Duty Vehicles (HDV) a day leaving the site has been estimated and the associated magnitude calculated (**Error! Reference source not found.**). Materials being imported will likely have a high clay content, however, the unpaved road lengths will be less than 100m. A conservative approach would to assign a Large dust emission magnitude from trackout.

4.5.5. Summary of Dust Emission Magnitude

The anticipated dust emission magnitude for each activity to be carried out as part of the permitted works is presented in Table 6.

Table 6. Dust emission magnitude by activity

Activity	Dust Emission Magnitude
Demolition	Small
Construction	Small
Earthworks	Large
Trackout	Large

4.6. Sensitivity of the Area

The sensitivity of an area needs to take into account a number of factors such as:

- Specific sensitivities of receptors;
- Proximity and number of receptors;
- In the case of PM_{10}, the local background concentrations;
- Site specific factors, such as natural shelters (trees and other vegetation) to reduce the risk of wind-blown dust.

The type of receptors at different distances from the site boundary or, if known, from the dust generating activities, should be included. Consideration should be given to the number of human receptors within distance bands. Exact counting of the number of 'human receptors', is not required. A residential unit is counted as one receptor, whilst a large distribution warehouse might be counted as 100 receptors. The distance and type of receptor is based on Figure 7, which shows the approximate permit boundary with a 250m buffer.

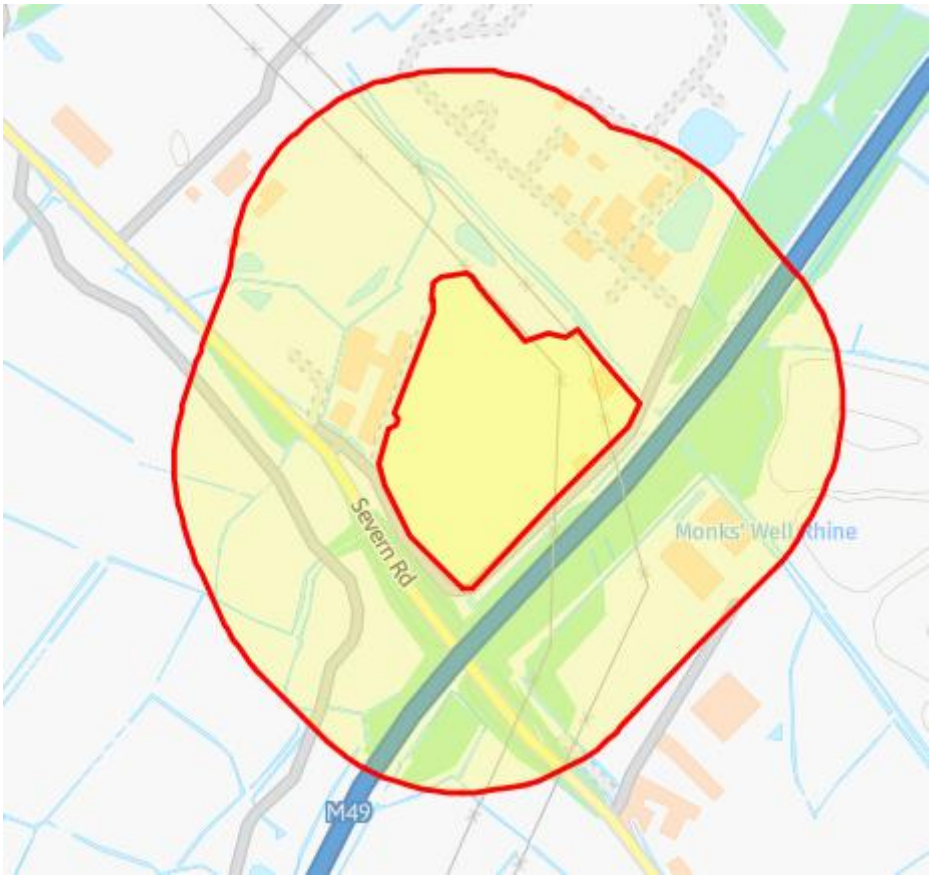


Figure 7. Site location plan and surrounding land uses (permit boundary plus 250m buffer)

The route traffic will use to access the site should also be considered to enable the presence of trackout receptors to be included in the assessment. As general guidance, without site-specific mitigation, trackout may occur the following distances along the public highway as measured from the site exit:

- 500 m from large sites;
- 200 m from medium sites; and
- 50 m from small sites

The impact declines with distance from the site, and it is only necessary to consider trackout up to 50m from the edge of the road.

HGV's access the site from the northwest, avoiding the village of Hallen and other residential areas to the south east of the site, where weight restrictions exist.

The site is accessed via Severn Road to the south west of the site and then via a private road. Only one receptors has been identified within 500m of the site exit along the traffic route, which is Hallen Industrial estate/warehouses. A plan showing the construction traffic route within 500m of the site exit along with a 50m buffer from the edge of the road is presented in Figure 8.

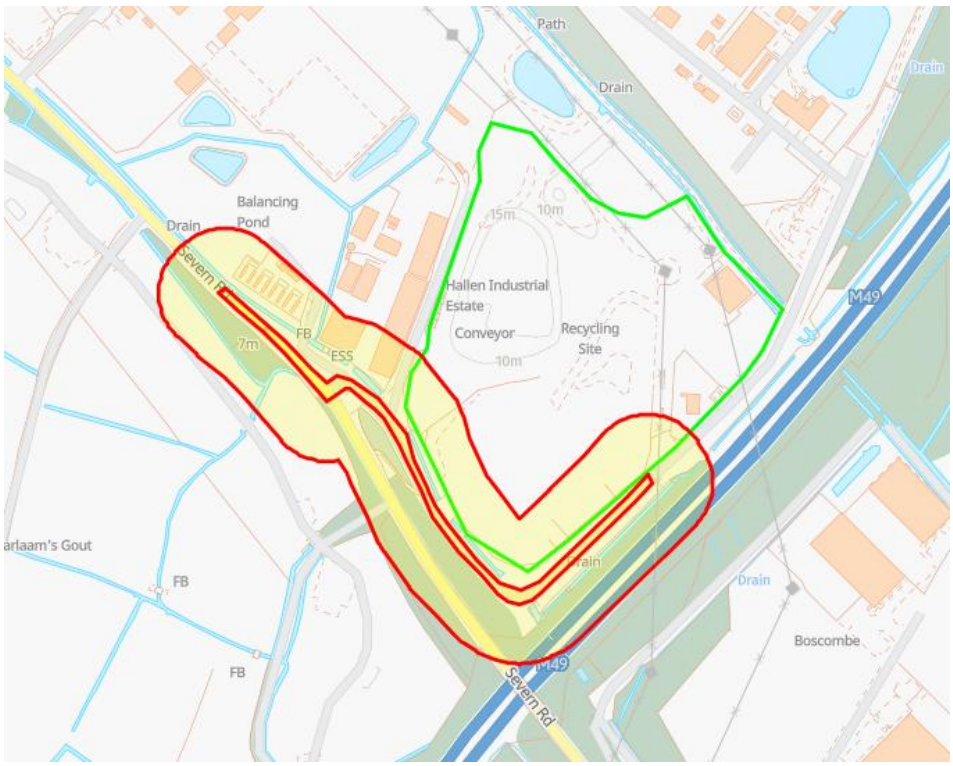


Figure 8. Trackout route (500m) with 50m buffer

4.6.1. Human Receptor Dust Soiling Sensitivity

The sensitivity of people and property to soiling from dust is difficult to categories as there is no unified sensitivity classification scheme that covers all the impacts which may affect different receptors. The below sensitivities are considered for the nearest human receptors to the proposed site:

High sensitivity receptor – surrounding land where:

- users can reasonably expect enjoyment of a high level of amenity; or
- the appearance, aesthetics or value of their property would be diminished by soiling; and
- the people or property would reasonably be expected to be present continuously, or at least regularly for extended periods, as part of the normal pattern of use of the land.
- indicative examples include dwellings, museums and other culturally important collections, medium and long term car parks and car showrooms.

Medium sensitivity receptor

- users would expect to enjoy a reasonable level of amenity, but would not reasonably expect to enjoy the same level of amenity as in their home; or
- the appearance, aesthetics or value of their property could be diminished by soiling; or
- the people or property wouldn't reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land.
- indicative examples include parks and places of work

Low sensitivity receptor

- The enjoyment of amenity would not reasonably be expected; or
- Property would not reasonably be expected to be diminished in appearance, aesthetics or value by soiling; or
- There is transient exposure, where the people or property would reasonably be expected to be present only for limited periods of time as part of the normal pattern of use of the land.
- Indicative examples include playing fields, farmland (unless commercially sensitive horticultural), footpaths, short-term car parks and roads.

4.6.2. Sensitivities of People to Dust Soiling Effects – *Demolition*

Based on the site location the surrounding land uses described in Section 2.2, the sensitivity of the area to dust and soiling effects on people and property from earthwork activities at different distances based on the number of receptors is presented in Table 7.

Table 7. Sensitivity of the area to dust and soiling effects on people and property – demolition

Receptor Sensitivity	Number of Receptors	Distance from the Source (m)			
		<50	<100	<150	<250
High	>100	Negligible	Negligible	Negligible	Negligible
	10-100	Negligible	Negligible	Negligible	Negligible
	1-10	Negligible	Negligible	Negligible	Negligible
Medium	>100	Low	Low	Low	Low
	10-100	Negligible	Negligible	Negligible	Negligible
	1-10	Negligible	Negligible	Negligible	Negligible
Low	>1	Low	Low	Low	Low

The sensitivity of the majority of the receptors are considered 'negligible', therefore no mitigation measures beyond those required by accepted best practice will be required. Low risk has been assigned where large commercial warehouses exist within 250m of the site.

4.6.3. Sensitivities of People to Dust Soiling Effects – *Construction*

Based on the site location the surrounding land uses described in Section 2.2, the sensitivity of the area to dust and soiling effects on people and property from earthwork activities at different distances based on the number of receptors is presented in Table 9.

Table 8. Sensitivity of the area to dust and soiling effects on people and property – construction

Receptor Sensitivity	Number of Receptors	Distance from the Source (m)			
		<50	<100	<150	<250
High	>100	Negligible	Negligible	Negligible	Negligible
	10-100	Negligible	Negligible	Negligible	Negligible
	1-10	Negligible	Negligible	Negligible	Negligible
Medium	>100	Low	Low	Low	Low
	10-100	Negligible	Negligible	Negligible	Negligible
	1-10	Negligible	Negligible	Negligible	Negligible
Low	>1	Low	Low	Low	Low

The sensitivity of the majority of the receptors are considered 'negligible', therefore no mitigation measures beyond those required by accepted best practice will be required. Low risk has been assigned where large commercial warehouses exist within 250m of the site.

4.6.4. Sensitivities of People to Dust Soiling Effects – *Earthworks*

Based on the site location the surrounding land uses described in Section 2.2, the sensitivity of the area to dust and soiling effects on people and property from earthwork activities at different distances based on the number of receptors is presented in Table 9.

Table 9. Sensitivity of the area to dust and soiling effects on people and property – earthworks

Receptor Sensitivity	Number of Receptors	Distance from the Source (m)			
		<50	<100	<150	<250
High	>100	Negligible	Negligible	Negligible	Negligible
	10-100	Negligible	Negligible	Negligible	Negligible
	1-10	Negligible	Negligible	Negligible	Negligible
Medium	>100	Low	Low	Low	Low
	10-100	Negligible	Negligible	Negligible	Negligible
	1-10	Negligible	Negligible	Negligible	Negligible
Low	>1	Low	Low	Low	Low

The sensitivity of the majority of the receptors are considered 'negligible', therefore no mitigation measures beyond those required by accepted best practice will be required. Low risk has been assigned where large commercial warehouses exist within 250m of the site.

4.6.5. Sensitivities of People to Dust Soiling Effects – *Trackout*

Based on the site location the surrounding land uses described in Section 2.2, the sensitivity of the area to dust and soiling effects on people and property from trackout activities at different distances based on the number of receptors is presented in Table 10.

Table 10. Sensitivity of the area to dust and soiling effects on people and property – trackout

Receptor Sensitivity	Number of Receptors	Distance from the Source (m)	
		<50	>50m
Medium	>100	Low	Negligible
	10-100	Negligible	Negligible
	1-10	Negligible	Negligible
Low	>1	Low	Negligible

The sensitivity of the majority of the receptors are considered 'negligible', therefore no mitigation measures beyond those required by accepted best practice will be required. Low risk has been assigned where large commercial warehouses exist within 250m of the site.

4.6.6. Ecological Receptor Sensitivity

Dust deposition due to demolition, earthworks, construction and trackout has the potential to affect sensitive habitats and plant communities.

Dust can have two types of effect on vegetation: physical and chemical. Direct physical effects include reduced photosynthesis, respiration and transpiration through smothering. Chemical changes to soils or watercourses may lead to a loss of plants or animals for example via changes in

acidity. Indirect effects can include increased susceptibility to stresses such as pathogens and air pollution. These changes are likely to occur only as a result of long-term demolition and construction works adjacent to a sensitive habitat. Often impacts will be reversible once the works are completed, and dust emissions cease.

Ecological reports will either be High, medium or low sensitivity, and the following summarises possible sensitivities:

High sensitivity receptor

- Locations with an international or national designation *and* the designated features may be affected by dust soiling; or
- Locations where there is a community of a particularly dust sensitive species such as vascular species included in the Red data List for Great Britain.
- Indicative examples include a Special Area of Conservation (SAC) designated for acid heathlands or a local site designated for lichens adjacent to the demolition of a large site containing concrete (alkali) buildings

Medium sensitivity receptor

- Locations where there is a particularly important plant species, where its dust sensitivity is uncertain or unknown; or
- Locations with a national designation where the features may be affected by dust deposition.
- Indicative example is a Site of Special Scientific Interest (SSSI) with dust sensitive features

Low sensitivity receptor

- locations with a local designation where the features may be affected by dust deposition.
- indicative example is a local Nature Reserve with dust sensitive features.

4.6.7. Sensitivities of Receptors to Ecological Effects – *Demolition*

Based on the environmental sensitivity described in Section 3.1, the sensitivity of the area to ecological impacts from earthwork activities at different distances is presented in Table 14.

Table 11. Sensitivity of the area to ecological impacts – trackout

Receptor Sensitivity	Distance from the Source (m)
	<50
High	Negligible
Medium	Negligible
Low	Negligible

4.6.8. Sensitivities of Receptors to Ecological Effects – *Construction*

Based on the environmental sensitivity described in Section 3.1, the sensitivity of the area to ecological impacts from earthwork activities at different distances is presented in Table 12.

Table 12. Sensitivity of the area to ecological impacts – construction

Receptor Sensitivity	Distance from the Source (m)
	<50
High	Negligible
Medium	Negligible
Low	Negligible

4.6.9. Sensitivities of Receptors to Ecological Effects – *Earthworks*

Based on the environmental sensitivity described in Section 3.1, the sensitivity of the area to ecological impacts from earthwork activities at different distances is presented in Table 13.

Table 13. Sensitivity of the area to ecological impacts – earthworks

Receptor Sensitivity	Distance from the Source (m)			
	<50	<100	<150	<250
High	Negligible	Negligible	Negligible	Negligible
Medium	Negligible	Negligible	Negligible	Negligible
Low	Negligible	Negligible	Negligible	Negligible

4.6.10. Sensitivities of Receptors to Ecological Effects – *Trackout*

Based on the environmental sensitivity described in Section 3.1, the sensitivity of the area to ecological impacts from earthwork activities at different distances is presented in Table 14.

Table 14. Sensitivity of the area to ecological impacts – trackout

Receptor Sensitivity	Distance from the Source (m)
	<50
High	Negligible
Medium	Negligible
Low	Negligible

4.6.11. Additional Factors for Sensitivity

Ground conditions

The site is currently an operational aggregate recycling yard. The majority of the site is formed of impermeable surfacing in the form of concrete yards and asphalt roads. There are a number of trees on the boundary of the site, which will remain as part of these works, so will provide screening to human receptors e.g. along M49 to the east of the site.

Natural barriers

Along the eastern boundary beyond the M49 motorway, there are natural barriers in the form of woodland which will reduce airborne concentrations due to impaction.

4.7. Risk of Dust Impact

The dust emission magnitude (Section 4.5) should be combined with the sensitivity of the area to determine the *risk* of impacts with no mitigation applied.

Mitigation is discussed in Section 5. Where the risk category is 'negligible', no mitigation measures beyond those required by accepted best practice will be required.

4.7.1. Demolition

The risk of dust impacts from the large-scale earthworks for each of the receptor sensitivities (low, medium and high) is presented in Table 15. The maximum level of risk is estimated to be low.

Table 15. Risk of dust impacts – demolition

Sensitivity of Area	Dust Emission Magnitude
	Large
High	Negligible
Medium	Low Risk
Low	Negligible

4.7.2. Construction

The risk of dust impacts from the large-scale earthworks for each of the receptor sensitivities (low, medium and high) is presented in Table 16. The maximum level of risk is estimated to be low.

Table 16. Risk of dust impacts – construction

Sensitivity of Area	Dust Emission Magnitude
	Large
High	Negligible
Medium	Low Risk
Low	Negligible

4.7.3. Earthworks

The risk of dust impacts from the large-scale earthworks for each of the receptor sensitivities (low, medium and high) is presented in Table 17. The maximum level of risk is estimated to be low.

Table 17. Risk of dust impacts - earthworks

Sensitivity of Area	Dust Emission Magnitude
	Large
High	Negligible
Medium	Low Risk
Low	Negligible

4.7.4. Trackout

The risk of dust impacts from the large-scale trackout for each of the receptor sensitivities (low, medium and high) is presented in Table 18. The maximum level of risk is estimated to be low.

Table 18. Risk of dust impacts - trackout

Sensitivity of Area	Dust Emission Magnitude
	Large
High	Negligible
Medium	Negligible
Low	Negligible

4.7.5. Summary

A summary of the dust risk from earthworks and trackout in relation to dust soiling, human health and ecology is presented in Table 19. The highest level of risk relates to dust soiling from earthworks and is deemed Low risk.

Table 19. Summary of dust risk

Potential Impact	Risk			
	Demolition	Construction	Earthworks	Trackout
Dust soiling	Low risk	Low risk	Low Risk	Negligible
Human health	Negligible	Negligible	Negligible	Negligible
Ecological	Negligible	Negligible	Negligible	Negligible

5. Dust Emission Mitigation Measures

The assessments of dust impact from the works carried out above, the highest level of risk of dust impact from demolition is low, construction is low, earthworks is low and negligible for trackout. During the permitted works, there will a potential for dust to be generated. The main sources of particle emissions during the permitted activities will include:

- Haulage routes, vehicle and construction traffic
- Materials handling, storage and spreading

The hierarchy to control the emissions of dust and other emissions and reduce human exposure:

1. prevention
2. suppression
3. containment

The following mitigation measures will be put in place where necessary to reduce the impact of fugitive dust emissions from the works.

5.1. Site layout, housekeeping and operations

5.1.1. Haul routes

Unpaved haul routes can account for a significant proportion of fugitive dust emissions, especially in dry or windy conditions, when the generation of dust through the movement of vehicles is exacerbated. The following mitigation measures will be adopted whenever possible and according to ground conditions:

- Internal haul roads and yard areas will be constructed using concrete. Material storage areas will be constructed using selected granular materials as far as possible, to minimise road-going vehicles travelling on 'unmade ground' and muddy areas to reduce muddy track-out;
- A powered automated drive over wheel wash will be installed as part of the wash plant;
- Regularly inspect haul routes for integrity and repair if required;
- Lay roads to a camber to prevent puddles;
- During periods of wet weather, lorries will be restricted from leaving haul roads and picking up unnecessary debris on site, thereby eliminating the issue at source.

5.1.2. Vehicles

The movement of importation lorries from the working areas represents one of the activities that has the potential to generate dust, mud, grit and dirt both within the site and onto the public

highway. The following controls to reduce dust and particulates associated with vehicles - such as that from exhaust emissions, the contact of tyres on the road surface or dust blowing from materials carried:

- The site will be accessed via a single accessed point off Severn Road to the south of the site. Severn Road is an asphalt surfaced road which is easy to clean with the use of a road sweeper.
- All vehicles should switch off engines – no idling;
- All loads entering site to be covered;
- A wheel wash system will be in place along with provision of road sweepers to reduce muddy track-out onto Severn Road.
- A site speed limit of 10mph shall be implemented with signage along haul routes to remind drivers;
- Use mobile sprinkler systems to clean internal and external roads as required;
- The site supervisor will have the responsibility for ensuring that nuisances and hazards arising from the movement of lorries out of the site is minimised.
- A record of weather conditions shall be kept;
- During periods of prolonged dry weather, a mobile water bowser will be available on-site and will be used to suppress dust arising's along the full extent of the haul road (including up to the exit).

5.1.3. Site entrances/exits

The following control measures to help prevent dust being spread outside the site boundary by site vehicles at entrances and exits:

- Vehicles will be visually inspected before exit to check that no mud is carried out on the wheels or body of the vehicle;
- Wash or clean all vehicles as required before leaving the site;
- Visual inspections of the site roads will be carried out daily, however, staff will report any problems with mud or debris on the site roads immediately to the site supervisor;
- The deposit of material on the public highway will be treated as an emergency and will be cleaned with a road sweeper;
- All information of vehicles entering/leaving site will be recorded in spreadsheet and weather conditions recorded.

5.2. Earthworks

Earthwork activities can be a potential source of dust outside the site if they are not properly controlled. The following will be put in place to mitigate fugitive dust during earthworks:

- All dusty activities should be damped down, especially during dry weather;
- No fires shall be lit on the site;
- Minimise drop heights to control the fall of materials;
- All operations shall occur as far away from potential receptors as practicable;
- The wash plant uses water to help segregate materials into different size fractions

5.3. Stockpiles and storage mounds

The use of long-term stockpiles on site should be avoided wherever possible. If necessary, the following measures should be in place:

- Make sure that stockpiles exist for the shortest possible time.
- Stockpiles shall not exceed 3 metres in height in the case of topsoil, or exceed 5m in height in the case of subsoil and all other materials
- Whenever possible stockpiles or mounds will be kept away from sensitive receptors, watercourses and surface drains.
- Take into account the predominant wind direction when siting stockpiles to reduce the likelihood of affecting sensitive receptors

5.4. Dust suppression

5.4.1. Damping Down

Haul routes will be washed down or damped down both within and outside the site as required during dry conditions. The following will be utilised whenever necessary during the works:

- During dry weather the haul roads will dampened down with water spray systems or towable bowsers to minimise dust generation;
- Use wet cleaning methods or mechanical road sweepers on all roads during periods of dry weather;

- Where possible use sustainable sources of water, such as from dewatering or extraction;
- A powered automated drove over wheel wash system forms part of the wash plant.

5.4.2. Road Sweeper

- Use mechanical road sweepers on roads inside and outside of the site as required;
- Clean road edges and pavements using wet cleaning methods;
- Where possible use sustainable sources of water, such as from dewatering or extraction

5.5. Monitoring

5.5.1. Site monitoring protocols

If the above mitigation measures described above are followed correctly, then formation of dust and harmful emissions from construction sites should be minimised as much as possible. The following will in place to monitor potential fugitive dust:

- Employ good practice methods;
- Keep an accurate log of complaints from the public;
- Determine the prevailing wind direction across the site using data from a nearby weather station;
- Carry out a visual inspection of site activities, dust controls and site conditions and record in a daily dust log as required;
- Inspections for the appearance of dust at the site boundary will take place and any actions taken will be recorded;
- If complaints arise from sensitive receptors, then consider monitoring as flows:
  - Identify which location(s) need to be monitored and carry out visual soiling assessments
  - If required, consider also monitoring dust deposition and soiling rates as these can be used to indicate nuisance
- Distribute contact numbers so that residents can complain about dust directly to the operator.

5.5.2. Weather

Metrological information will be collected and recorded using the Met Office local weather information website and will include:

- When working close to sensitive receptors regular checks on the wind direction will dictate areas of stockpiling. Alternative "fall back" work areas will be assessed to provide alternative solutions if activities are causing concern.

5.6. Local Liaison

5.6.1. General

The site will be operated with due respect to the local environs. Working hours will be adhered to and persons employed on the site will be required to deal with any issues raised by third parties in a courteous and responsive manner. The Technically Competent Manager or their representative will be assigned to the site for contact by members of the public or other interested parties.

5.6.2. Notice Board

A notice board is to be located near the site entrance giving a telephone number for the site to communicate comments or complaints to the operator. It shall also provide information about the project including operating times.

5.6.3. Complaint procedure

Contact numbers will be distributed so that residents can complain about dust directly to the operator. All complaints will be noted in the site diary and a record of the complaint, including and action taken to alleviate the problem will be recorded.

6. Summary

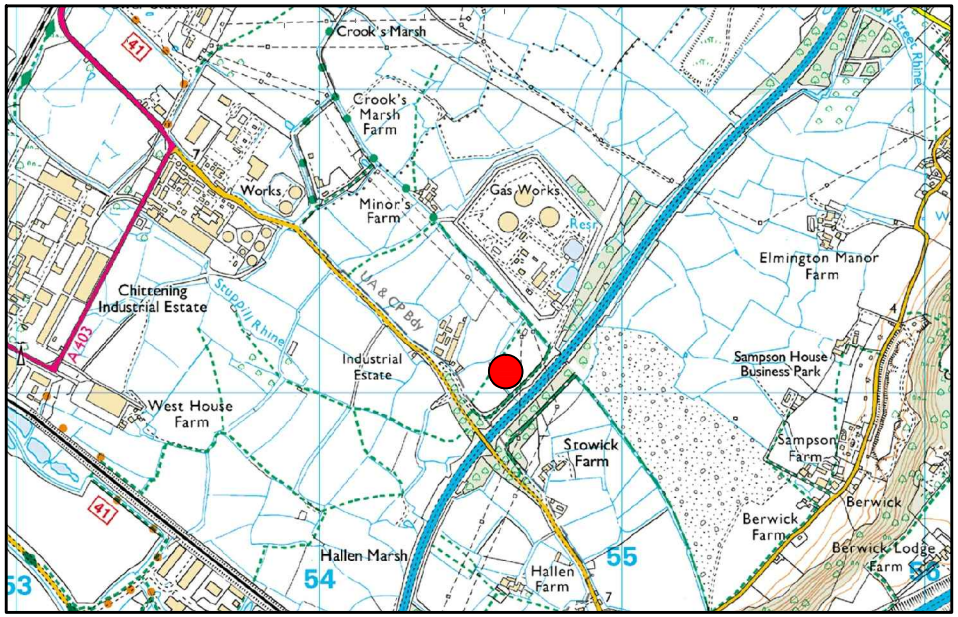
The proposed variation to the recycling operation to include a wash plant and increase tonnages recycled has the potential to generate dust during earthworks. Guidance from the Environment Agency and Institute of Air Quality Management has been followed in the production of this dust management plan. There are human receptors within 250 m of the boundary of the site and ecological receptors within 50m, therefore it was required to carry out a dust risk assessment.

The dust impacts from the proposed works have been identified as demolition, construction, earthworks and trackout. The potential dust emission magnitude for demolition and construction is assessed as small, and earthworks and trackout was assessed as large. The sensitivity of the area in relation to human and ecological receptors to dust from earthworks and trackout was assessed and the risk calculated as low risk for human receptors and negligible for ecological receptors.

A summary of the overall dust impact noted that the risk was negligible for human health and ecology from demolition, construction, earthworks and trackout. The maximum risk of dust soiling from all activities is considered low for demolition, construction and earthworks. The risk of dust soiling from trackout is considered negligible.

Dust emission mitigation measures have been recommended for site layout, operations, earthworks, along with details of dust suppression, monitoring and local liaison for the works.

Overall, the risk for fugitive dust generation should be low or negligible provided the mitigation measures are implemented and monitored as required throughout the works.



Scale Bar (1:25,000)

0 km 0.2 0.4 0.6 0.8 1 km

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Title: SITE LOCATION MAP

Drawing No: 2763/772/01

Client: Bristol & Avon Ltd

Site: Land at Hallen, off Severn Road, Avonmouth

Date:	Printed At:
27 November 2013	A4

Scale:	Revision:	Drawn By:
1:25,000	-	RS

Client No:	Job No:	Checked:
772	2763	-

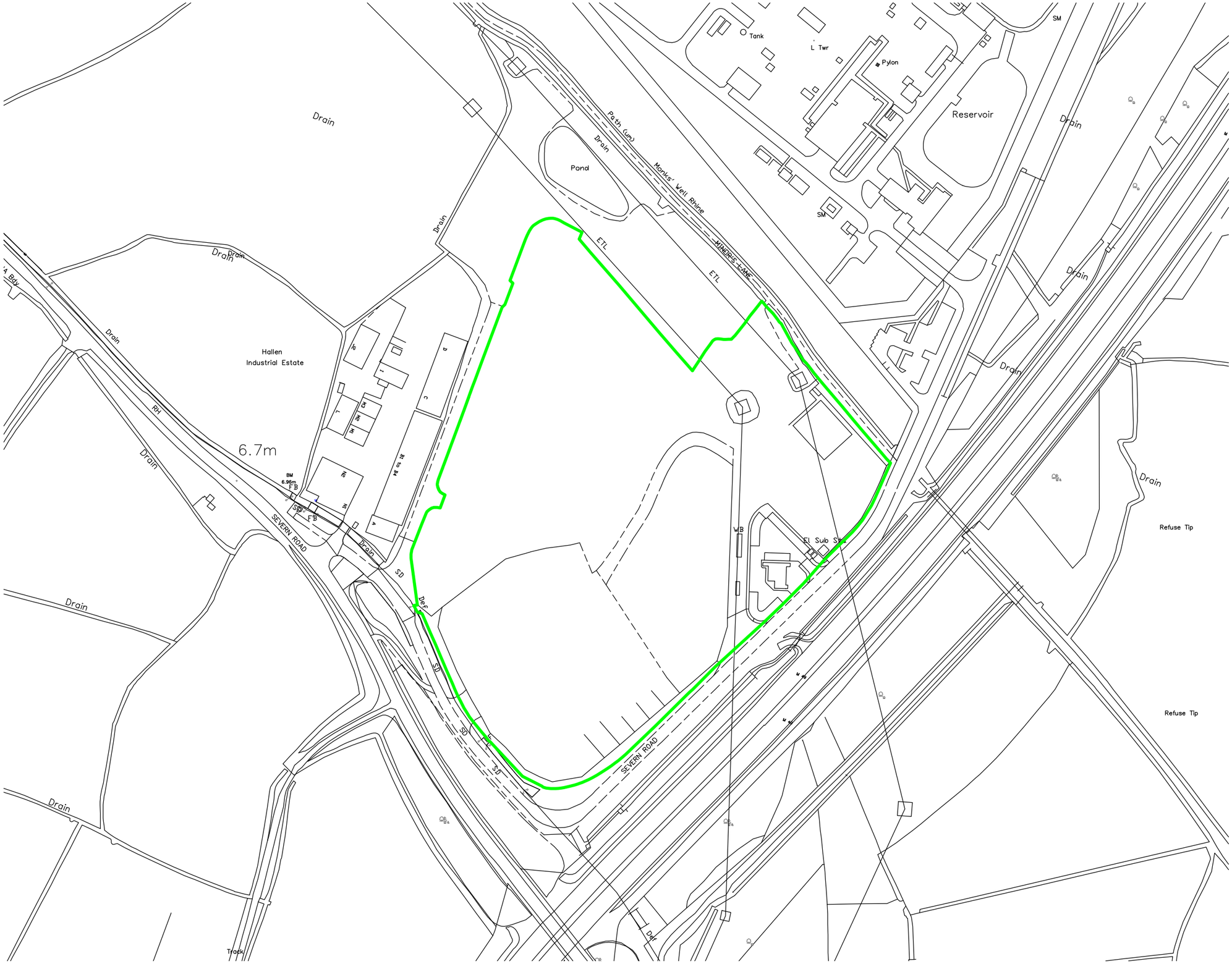
KEY:

Site Location

Notes:

Revision Details:

Rev:	Description:	Date:
-	Initial drawing	27/11/13



NOTES

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REVISION HISTORY

Rev:	Date:	Init:	Description:
-	01.12.23	RS	Initial drawing

KEY:

Permit boundary

Scale Bar (1:2,500)

0 m 20 40 60 80 100 m

Oaktree Environmental Ltd

Waste, Planning and Environmental Consultants

DRAWING TITLE

PERMIT BOUNDARY PLAN

CLIENT

B & A Group

PROJECT/SITE

Aggregates Recycling Facility, off Severn Road, Hallen, Avonmouth

SCALE @ A3	CLIENT NO	JOB NO
1:2,500	772	012

DRAWING NUMBER	REV	STATUS
772-012-14	-	Issued

DRAWN BY	CHECKED	DATE
RS	HG	01.12.23

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ

t: 01606 558833 | e: sales@oaktree-environmental.co.uk

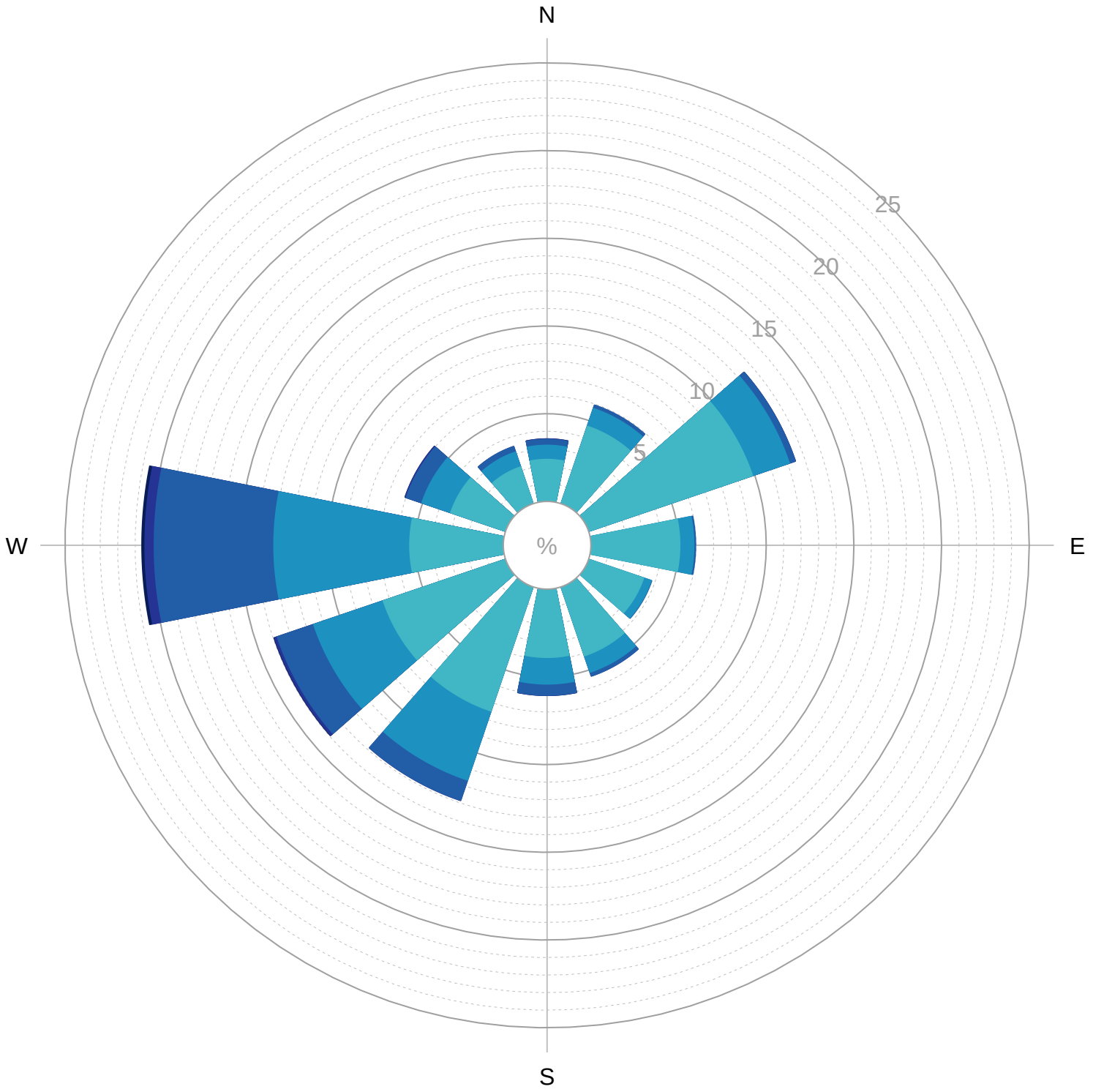
HOURLY MEAN WIND ROSE FOR AVONMOUTH

NGR: 3504 E 1788 N

ALTITUDE: 9 metres AMSL

SEASON: ANNUAL

Period of data: Jan 2010 − Dec 2019



87,584 OBSERVATIONS

0.0% CALM

0.0% VARIABLE

1−10 11−16 17−27 28−33 >33

Hourly mean wind speed (knots)

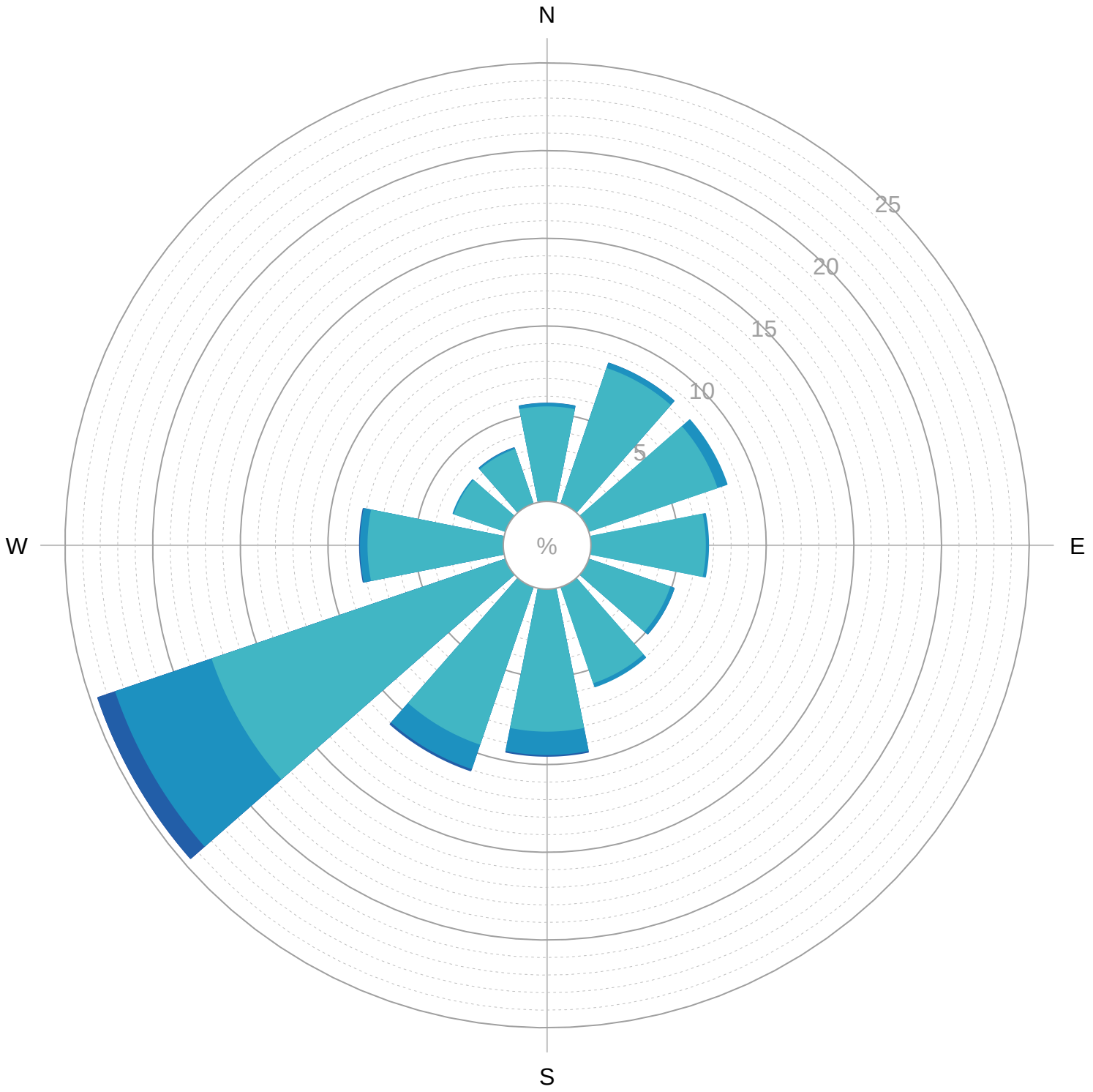
HOURLY MEAN WIND ROSE FOR ALMONDSBURY

NGR: 3613 E 1838 N

ALTITUDE: 75 metres AMSL

SEASON: ANNUAL

Period of data: Dec 2018 − May 2025



55,971 OBSERVATIONS

0.2% CALM

0.0% VARIABLE

1−10 11−16 17−27 28−33 >33

Hourly mean wind speed (knots)

Air Quality Management Areas

1. Introduction

The Defra Air Information Resource (AIR) website (https://uk-air.defra.gov.uk/aqma/maps/) details all the Air Quality Management Areas AQMAs declared by local authorities.

There are no AQMAs for PM_{10} within 2km of the site.

A plan showing the closest AQMAs to the Hallen site along with details of the pollutants monitored are presented in Figure 1 and Table 1, respectively. There are no AQMAs for PM_{10} within 6.50km of the site.

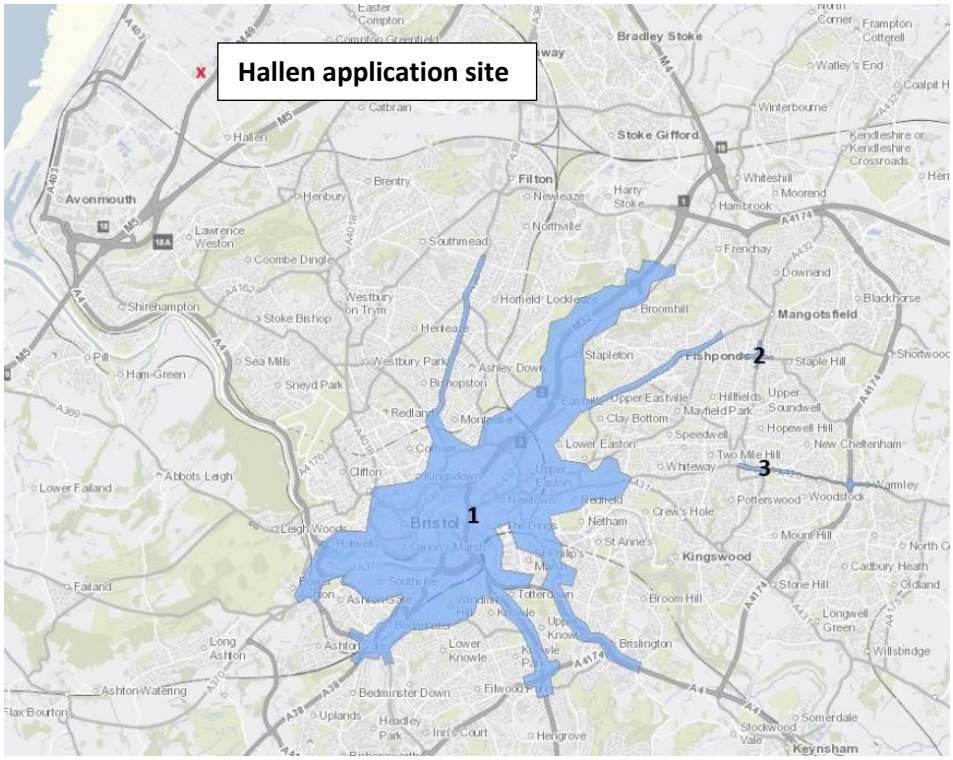


Figure 1. Closest AQMAs to the Hallen application site (see Table 1)

Table 1. Summary of AQMAs and pollutants

Ref	AQMA	Approx. distance from site (km)	Date Declared	Date Amended	Date Revoked	Pollutants
1	Bristol AQMA	6.50	01/05/2001	01/05/2003 01/05/2008 26/10/2011		• Particulate Matter PM_{10} • Nitrogen dioxide NO_2 • Nitrogen dioxide NO_2

Ref	AQMA	Approx. distance from site (km)	Date Declared	Date Amended	Date Revoked	Pollutants
2	Staple Hill AQMA	12.50	14/04/2010	25/05/2012		• Nitrogen dioxide NO_2
3	Kingswood - Warmley AQMA	11.00	14/04/2010	25/05/2012 16/12/2015		• Nitrogen dioxide NO_2
	Cribbs Causeway AQMA	2.50	14/04/2010		22/07/2020	• Nitrogen dioxide NO_2
	M4, M5, M32 M49 Motorway Corridors AQMA	-	01/11/2001		15/03/2004	• Nitrogen dioxide NO_2

2. AQMAs Declared by South Gloucestershire District Council

The following AQMAs have been declared by South Gloucestershire District Council. These are listed with most recent first.

Table 2. AQMAs declared by South Gloucestershire Council

AQMA	Description	Date Declared	Date Amended	Date Revoked	Pollutants
Kingswood - Warmley AQMA	Incorporates the A420 road extending from the South Gloucestershire/ Bristol City Council boundary to the east along Two Mile Hill Road, Regent Street, High Street Kingswood, Hill Street, Deanery Road, High Street Warmley and London Road to the junction of Goldney Avenue; to the south along Hanham Road (up to and including The Folly); to the south-east along Tower Road North to the junction of Crown Gardens; and includes any properties that lie within the outlined boundary. Prior to the 2015 amendment, it was previously named as the Kingswood AQMA. Due to the extension of Kingswood AQMA along the A420 to Warmley following the 2014 Warmley Detailed Assessment, the AQMA has been renamed as the Kingswood-Warmley AQMA to reflect that the AQMA now encompasses part of Warmley in addition to Kingswood.	14/04/2010	25/05/2012 16/12/2015		Nitrogen dioxide NO_2
Staple Hill AQMA	Incorporating Broad Street A4175, High Street B4465, Victoria Street and Soundwell Road A4017 crossroads. It extends along Broad St to the junction of York Rd, High St up to and including nos 40 to 49, Soundwell Rd up to and including nos 16a and 47, Victoria Street to the junction of Clarence Road, and includes any properties that lie within the outlined boundary.	14/04/2010	25/05/2012		Nitrogen dioxide NO_2
Cribbs Causeway AQMA	The area incorporates a single property Hollywood Cottage, Blackhorse Hill, which is adjacent to the M5 Junction 17 roundabout at Cribbs Causeway.	14/04/2010		22/07/2020	Nitrogen dioxide NO_2

AQMA	Description	Date Declared	Date Amended	Date Revoked	Pollutants
M4, M5, M32 M49 Motorway Corridors AQMA	The AQMA included a corridor of 110m either side of the edge of the M4, M5, M32 and M49 Motorways.	01/11/2001		15/03/2004	Nitrogen dioxide NO_2

Cells in the above table are empty where information has previously not been recorded

2.1. Kingswood AQMA

2.1.1. Amendment History

The below table provides information on the amendment history of this AQMA.

Table 3. Kingswood AQMA

AQMA Name	AQMA Status	Pollutants	Date
Kingswood AQMA	Declared	Nitrogen dioxide NO_2	14/04/2010
Kingswood AQMA	Amended	Nitrogen dioxide NO_2	25/05/2012
Kingswood - Warmley AQMA	Amended	Nitrogen dioxide NO_2	16/12/2015

2.1.2. Pollutants Declared

- 14/04/2010, Nitrogen dioxide NO_2 - Annual Mean
- 25/05/2012, Nitrogen dioxide NO_2 - Annual Mean
- 16/12/2015, Nitrogen dioxide NO_2 - Annual Mean

2.1.3. Kingswood AQMA (South Gloucestershire District Council) 14/04/2010

The designated area incorporates Regent Street A420 from the junction with Two Mile Hill Road across to the junction with South Road and extends to the junction with High Street and includes any properties that lie within the outlined boundary.

Source: County or Unitary Authority Road

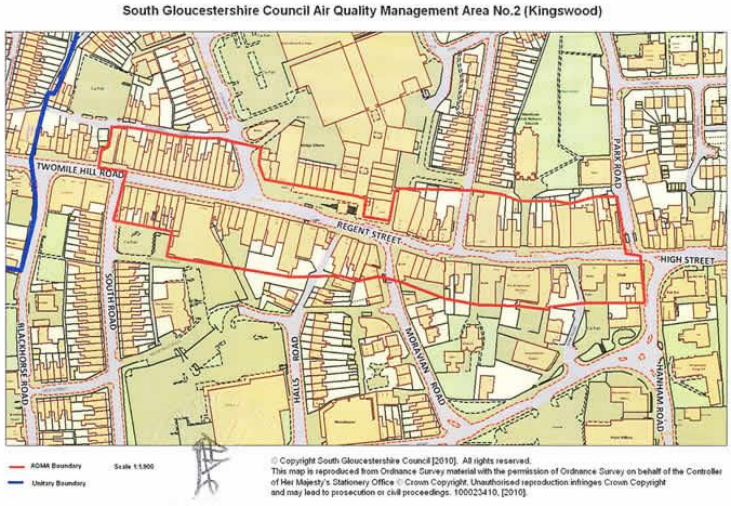


Figure 2. Kingswood AQMA (2010)

2.1.4. Kingswood AQMA (South Gloucestershire District Council) 25/05/2012

Incorporating the A420 Road extending from the South Gloucestershire/Bristol City Council boundary to the east along Two Mile Hill Rd, Regent St and High St to the junction of Poplar Terrace to the south along Hanham Rd up to and including the Folly and includes any properties that lie within the outlined boundary.

Source: Road transport unspecified

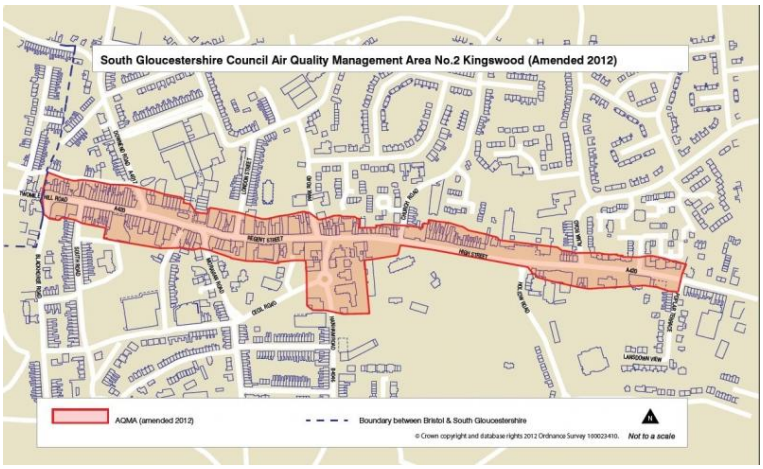


Figure 3. Kingswood AQMA (amended 2012)

2.1.5. Kingswood - Warmley AQMA (South Gloucestershire District Council) 16/12/2015

Incorporates the A420 road extending from the South Gloucestershire/ Bristol City Council boundary to the east along Two Mile Hill Road, Regent Street, High Street Kingswood, Hill Street, Deanery

Road, High Street Warmley and London Road to the junction of Goldney Avenue; to the south along Hanham Road (up to and including The Folly); to the south-east along Tower Road North to the junction of Crown Gardens; and includes any properties that lie within the outlined boundary. Prior to the 2015 amendment, it was previously named as the Kingswood AQMA. Due to the extension of Kingswood AQMA along the A420 to Warmley following the 2014 Warmley Detailed Assessment, the AQMA has been renamed as the Kingswood-Warmley AQMA to reflect that the AQMA now encompasses part of Warmley in addition to Kingswood.

Source: County or Unitary Authority Road

Figure 4. Kingswood AQMA (amended 2015)

2.2. Staple Hill AQMA

2.2.1. Amendment History

The below table provides information on the amendment history of this AQMA

Table 4. Staple Hill AQMA

AQMA Name	AQMA Status	Pollutants	Date
Staple Hill AQMA	Declared	Nitrogen dioxide NO_2	14/04/2010
Staple Hill AQMA	Amended	Nitrogen dioxide NO_2	25/05/2012

2.2.2. Pollutants Declared

- 14/04/2010, Nitrogen dioxide NO_2 - Annual Mean
- 25/05/2012, Nitrogen dioxide NO_2 - Annual Mean

2.2.3. Staple Hill AQMA (South Gloucestershire District Council) 14/04/2010

The designated area incorporates the Broad Street A4175, High Street B4465, Victoria Street and Soundwell Road A4017 crossroads. It extends along Broad Street to the junction with Seymour Road, along Soundwell Road to the road linking with Seymour Road and for distances of approximately 200m along High Street and approximately 170m along Victoria Street from the centre of the crossroads. The area includes any properties that lie within the outline boundary.

Source: County or Unitary Authority Road

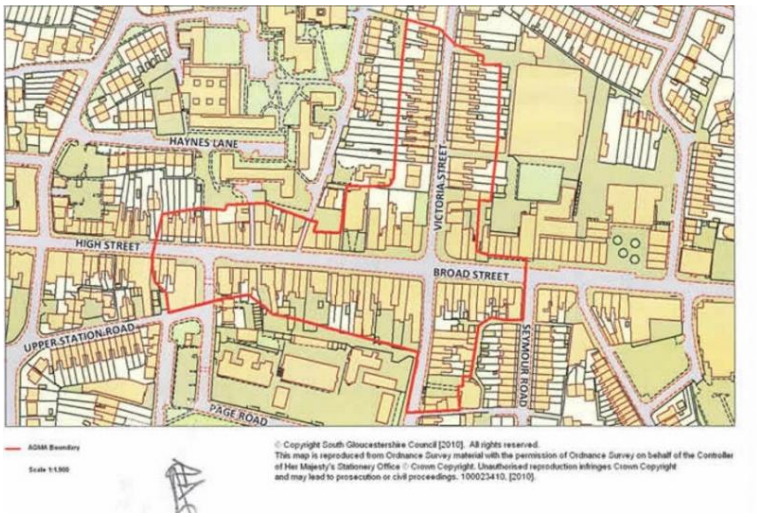


Figure 5. Staple Hill AQMA (2010)

2.2.4. Staple Hill AQMA (South Gloucestershire District Council) 25/05/2012

Incorporating Broad Street A4175, High Street B4465, Victoria Street and Soundwell Road A4017 crossroads. It extends along Broad St to the junction of York Rd, High St up to and including nos 40 to 49, Soundwell Rd up to and including nos 16a and 47, Victoria Street to the junction of Clarence Road, and includes any properties that lie within the outlined boundary.

Source: Road transport unspecified

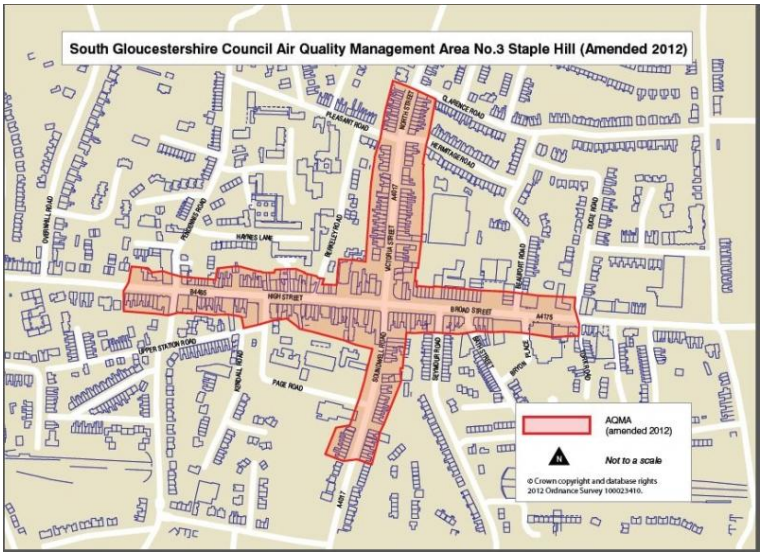


Figure 6. Staple Hill AQMA (amended 2012)

2.3. Cribbs Causeway AQMA

2.3.1. Amendment History

The below table provides information on the amendment history of this AQMA

Table 5. Cribbs Causeway AQMA

AQMA Name	AQMA Status	Pollutants	Date
Cribbs Causeway AQMA	Declared	Nitrogen dioxide NO_2	14/04/2010
Cribbs Causeway AQMA	Revoked	Nitrogen dioxide NO_2	22/07/2020

2.3.2. Pollutants Declared

- 14/04/2010, Nitrogen dioxide NO_2 - Annual Mean

2.3.3. Cribbs Causeway AQMA (South Gloucestershire District Council) 14/04/2010

The area incorporates a single property Hollywood Cottage, Blackhorse Hill, which is adjacent to the M5 Junction 17 roundabout at Cribbs Causeway.

Source: Mixture of road types

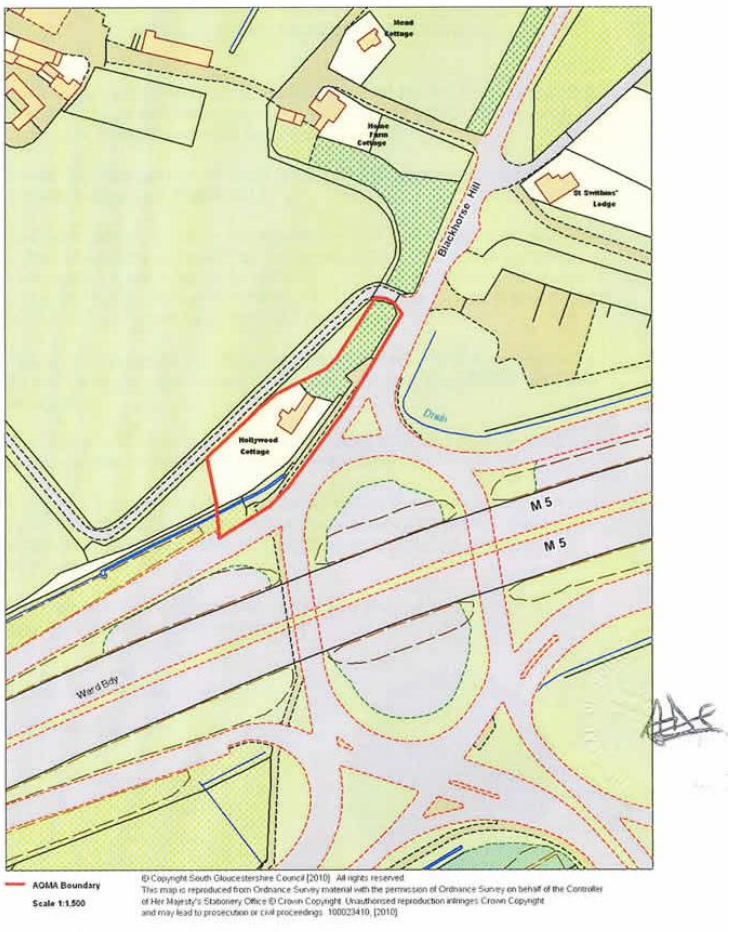


Figure 7. Cribbs Causeway AQMA

Further assessment of the Cribbs Causeway air quality management area by South Glos Council revealed that levels of nitrogen dioxide were below the annual mean objective in 2010. The 2011 monitoring results also showed nitrogen dioxide levels were below the annual mean objective. However, following Defra advice, the AQMA was retained, as pollutant concentrations can vary from one year to another and also in light of proposed development in the vicinity.

2.3.4. Cribbs Causeway AQMA (South Gloucestershire District Council) 22/07/2020

The area incorporates a single property Hollywood Cottage, Blackhorse Hill, which is adjacent to the M5 Junction 17 roundabout at Cribbs Causeway.

Source: Mixture of road types

2.4. M4, M5, M32 and M49 motorways

South Gloucestershire Council previously declared an air quality management area with respect to the annual mean nitrogen dioxide objective 110 metres either side of the M4, M5, M32 and M49 motorways in November 2001. Following more work by South Glos Council, this was revoked in March 2004.

2.4.1. Amendment History

The below table provides information on the amendment history of this AQMA.

Table 6. M4, M5, M32 and M49 motorways AQMA

AQMA Name	AQMA Status	Pollutants	Date
M4, M5, M32 M49 Motorway Corridors AQMA	Declared	Nitrogen dioxide NO_2	01/11/2001
M4, M5, M32 M49 Motorway Corridors AQMA	Revoked	Nitrogen dioxide NO_2	15/03/2004

2.4.2. Pollutants Declared

- 01/11/2001, Nitrogen dioxide NO_2 - Annual Mean
- 15/03/2004, Nitrogen dioxide NO_2 - Annual Mean

2.4.3. M4, M5, M32 M49 Motorway Corridors AQMA (South Gloucestershire District Council) 01/11/2001

The AQMA included a corridor of 110m either side of the edge of the M4, M5, M32 and M49 Motorways.

Source: Road transport unspecified

There is no map of this AQMA available.

2.4.4. M4, M5, M32 M49 Motorway Corridors AQMA (South Gloucestershire District Council) 15/03/2004

The AQMA included a corridor of 110m either side of the edge of the M4, M5, M32 and M49 Motorways.

Source: Road transport unspecified

There is no map of this AQMA available.

3. AQMAs Declared by Bristol City Council

The following AQMAs have been declared by Bristol City Council.

These are listed with most recent first.

Table 7. Bristol AQMA

AQMA	Description	Date Declared	Date Amended	Date Revoked	Pollutants
Bristol AQMA	An area covering the city centre and parts of the main radial roads including the M32	01/05/2001	01/05/2003 01/05/2008 26/10/2011		Particulate Matter PM_{10} Nitrogen dioxide NO_2 Nitrogen dioxide NO_2

Cells in the above table are empty where information has previously not been recorded.

3.1. Bristol AQMA

3.1.1. Amendment History

The below table provides information on the amendment history of this AQMA.

Table 8. Bristol AQMA amendment history

AQMA Name	AQMA Status	Pollutants	Date
Bristol AQMA	Declared	Nitrogen dioxide NO_2 Particulate Matter PM_{10}	01/05/2001
Bristol AQMA	Amended	Nitrogen dioxide NO_2 Particulate Matter PM_{10}	01/05/2003

AQMA Name	AQMA Status	Pollutants	Date
Bristol AQMA	Amended	Particulate Matter PM_{10} Nitrogen dioxide NO_2	01/05/2008
Bristol AQMA	Amended	Particulate Matter PM_{10} Nitrogen dioxide NO_2	26/10/2011

3.1.2. Pollutants Declared

- 01/05/2001, Particulate Matter PM_{10} - 24-Hour Mean
- 01/05/2001, Nitrogen dioxide NO_2 - Annual Mean
- 01/05/2003, Nitrogen dioxide NO_2 - Annual Mean
- 01/05/2003, Particulate Matter PM_{10} - 24-Hour Mean
- 01/05/2008, Nitrogen dioxide NO_2 - Annual Mean
- 01/05/2008, Nitrogen dioxide NO_2 - 1-hour and Annual Mean
- 01/05/2008, Particulate Matter PM_{10} - 24-Hour Mean
- 26/10/2011, Nitrogen dioxide NO_2 - 1-hour and Annual Mean
- 26/10/2011, Particulate Matter PM_{10} - 24-Hour Mean

3.1.3. Bristol AQMA (Bristol City Council) 01/05/2001

An area covering the city centre and parts of the main radial roads including the M32.

Source: Transport and Industrial Source

There is no map of this AQMA available.

3.1.4. Bristol AQMA (Bristol City Council) 01/05/2003

An area covering the city centre and parts of the main radial roads including the M32.

Source: Transport and Industrial Source

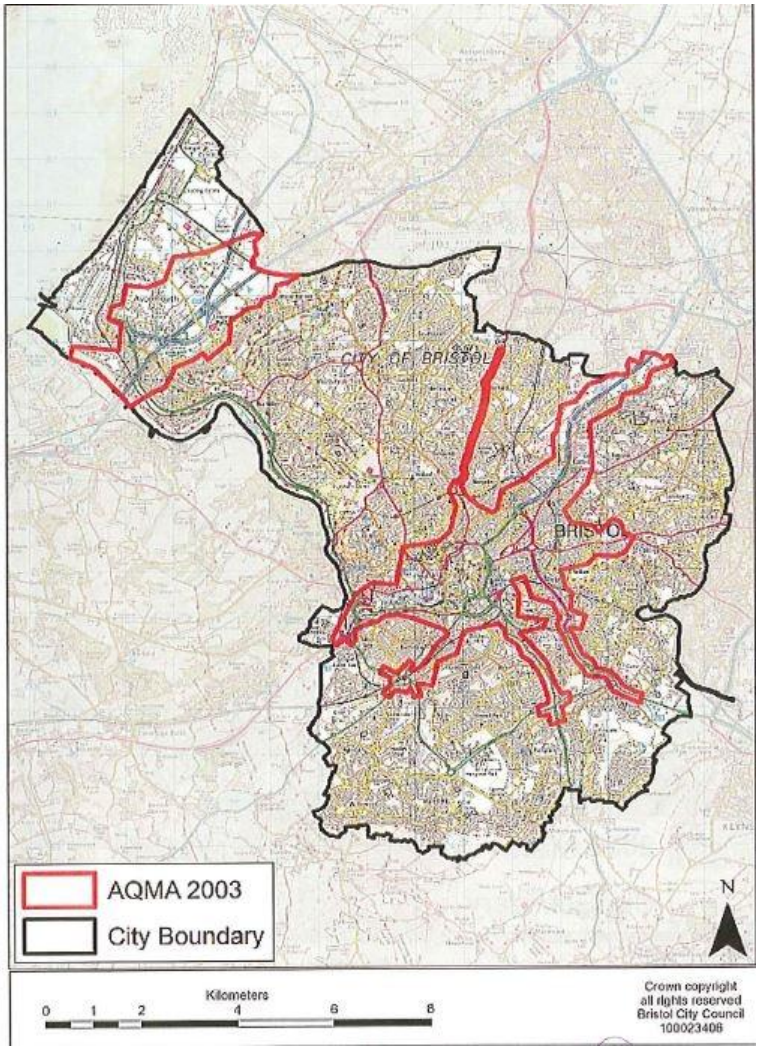


Figure 8. Bristol AQMA (2003)

3.1.5. Bristol AQMA (Bristol City Council) 01/05/2008

An area covering the city centre and parts of the main radial roads including the M32.

Source: Mixture of road types

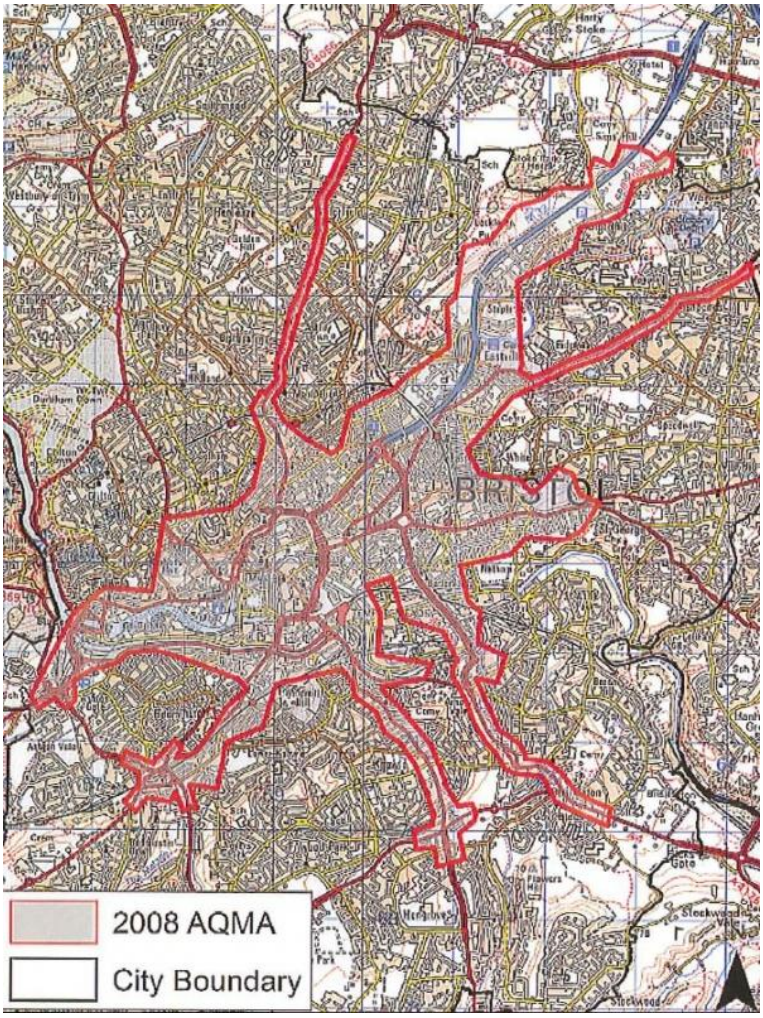


Figure 9. Bristol AQMA (amended 2008)

3.1.6. Bristol AQMA (Bristol City Council) 26/10/2011

An area covering the city centre and parts of the main radial roads including the M32

Source: Mixture of road types

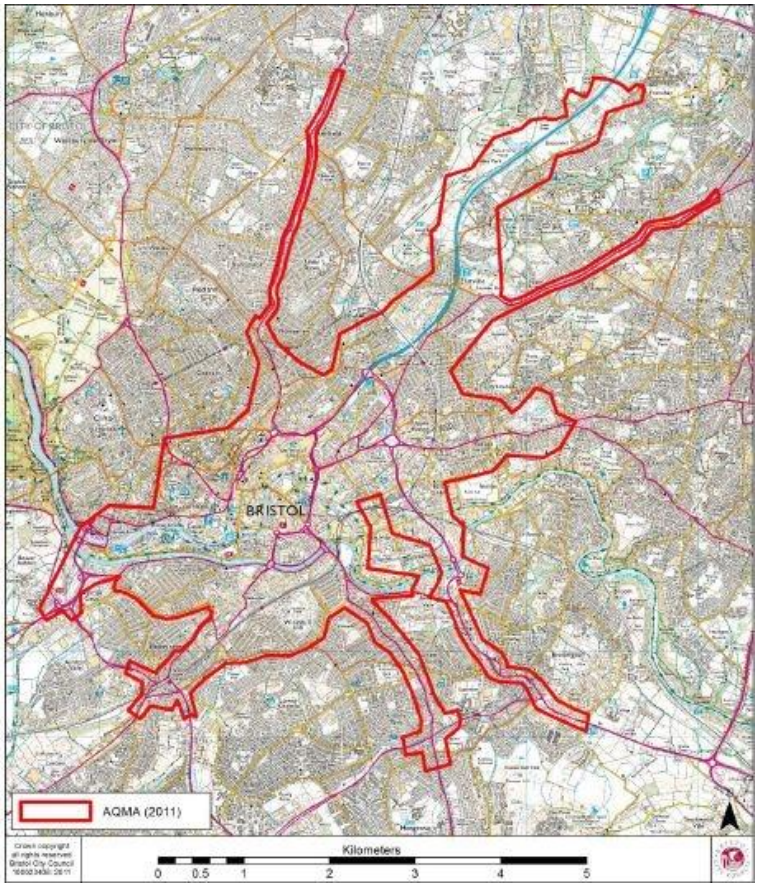


Figure 10. Bristol AQMA (amended 2011)