VEOLIA ES UK LTD

AVONMOUTH DOCK WOOD TRANSFER STATION

N Berth, Bristol Port, Avonmouth

DUST & EMISSION MANAGEMENT PLAN (DEMP)

VERSION NUMBER: 1
DATE: DECEMBER 2025

Issue and Revision Record

Revision	Date	Description of Changes
1	December 2025	New DEMP

1. Introduction

Avonmouth Dock Wood Transfer Station operates as a storage facility for pre-processed non hazardous wood chip prior to loading directly onto a vessel for export as recovered fuel.

Veolia recognises that operating a wood chip storage facility can result in the generation of dust with the potential to impact on the local environment and community. This document describes Avonmouth Dock site strategies for dust management and details and action plan for future operations.
The site is located in an operational commercial shipping port surrounded by similar storage and export facilities, the Severn Estuary SSSI and RAMSAR, some housing and the M5 motorway. The site operations are typically 08:00 to 17:00 Mondays to Friday, but are subject to opening Saturdays or Sundays depending on ship arrival times.

A layout of the site is included at the end of this document titled:

Avonmouth Site Plan

The site is located on the fringe of the wider Bristol Air Quality Management Area.
https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=36

Although the facility may experience dust emissions. The movement of waste is minimal and there is no treatment of waste taking place.

This document has been written in relation to the Veolia management system and as such will be subject to audit and or review.

1.1 Sensitive Receptors

Maps detailing the nearest sensitive human and environment receptors are included at the end of this document and titled as follows:

Avonmouth Receptor Plan

The maps include a wind rose showing average wind speed and direction. The wind rose data was taken from nearby Avonmouthr using the following data service.

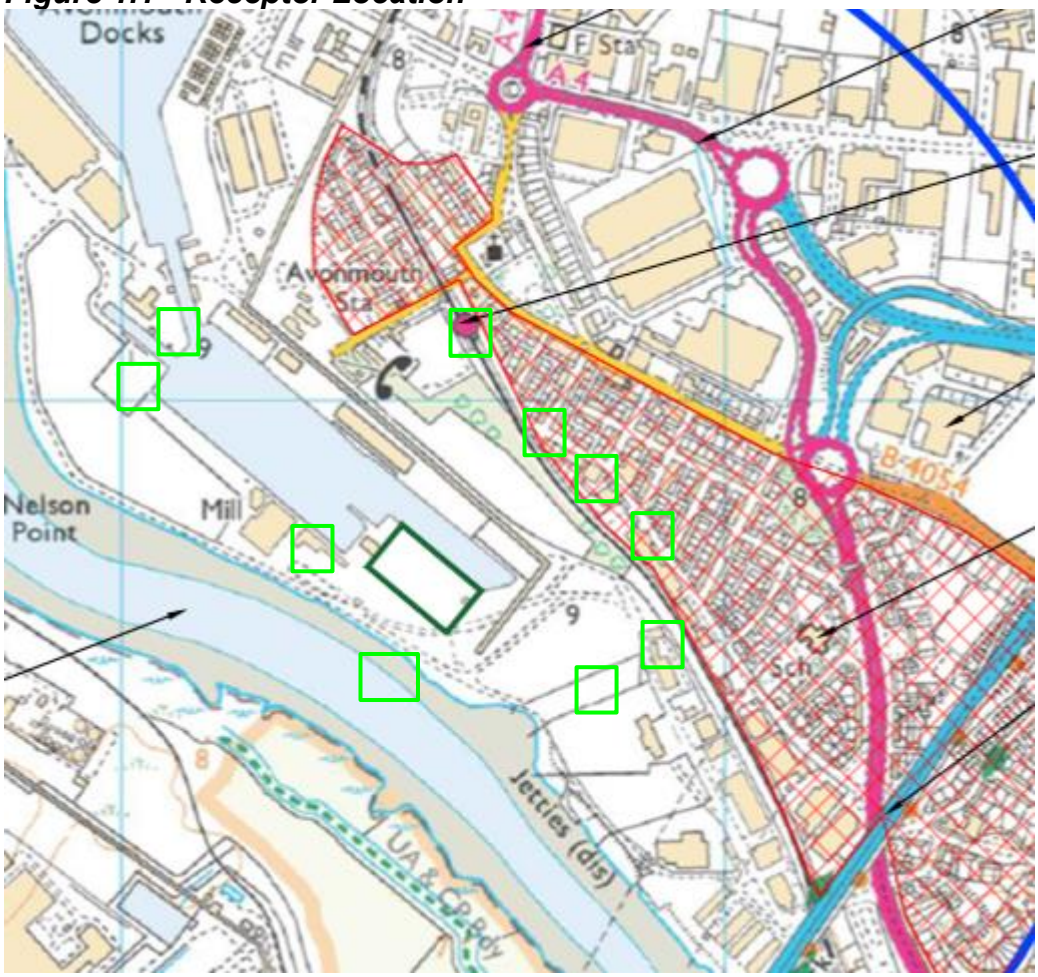
https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/avonmouth_united-kingdom_2656737

The site is located within an operational commercial port (Bristol Port) with some housing and some businesses located nearby. The Severn Estuary/River Avon SSSI and RAMSAR site is adjacent to the site.
A summary of these receptors is included in the following table.

Table 1.1 Nearby sensitive receptors

Map Key	Sensitive Receptors	Closest Receptors	Approx. Distance from Site	Direction in relation to site
1	Residential	Portview Road	257m	NE
2	Commercial	Angela's Tavern	260m	N
3	Commercial	Remedx	280m	E
4	Commercial	Molson Group	284m	SE
5	Commercial	One Scientific	338m	E
6	Commercial	ADM Milling	209m	W
7	Commercial	Tarmac Aggregates	585m	NW
8	Commercial	Remix Dry Mortar	563m	NW
9	Public	Avonmouth Train Station	400m	N
10	Environmental	Severn Estuary SSSI/RAMSAR	176m	S

Figure 1.1 - Receptor Location



1.2 Other sources of Dust

Given the location of the Avonmouth Dock site within the commercial port there are a number of facilities with the potential for producing dust within the area. The other operators within the port that operate processes prone to dust are ADM Milling (flour milling company) location 6 on the map, Remix Dry Mortar (Mortar production and storage) location 8 on the map and Tarmac Aggregates (production and storage of marine aggregate) location 7 on the map.

2. Operations at Avonmouth Dock Wood TS

2.1 Waste Deliveries to Avonmouth Dock

Waste is delivered to site using the port and local road infrastructure and access road to site. Vehicle types will include Articulated walking floor vehicles and Roll on/ off Type vehicles.

Only Veolia Internal waste movements from our own waste wood processing site will be accepted. The process removes contraries and fines resulting in a fraction less likely to produce dust when moved.

All containers will be sheeted/ covered to reduce dust emissions while in transit.

All waste delivery vehicles will be weighed before leaving the Avonmouth wood processing site (2 miles away in Avonmouth) and recorded using the on site weighbridge system

All drivers are instructed to sheet/ cover all loads which are delivered to the site. If any loads are tipped on site which are identified as dusty will follow the procedure below.

Dusty loads - If any loads are identified as potential for being dusty during the unloading process are to stop as soon as identified. If following assessment iwt is identified that the load is too dusty, the load should be rejected. If the load can be unloaded, but suspect dust emissions could cause a nuisance, then the waste can be damped down using the mobile bowser on site.

Table 2.1 - Waste delivery vehicle dust control

Waste type	**Emission control**
Processed Waste wood (wood chip)	All vehicles will be sheeted or covered to remove dust emission while in transit.

2.2 Overview of Waste area, Dust, and Other Emission Control

Table 2.2 - Site locations of potential dust sources

Key	Activity	Emission type	Control
1	Storage area (direct tip into formed waste pile)	Dust	Damping of loads whilst tipping
2	Loading of export bound vessel (dockside)	Dust	Damping of shovel bucket prior to loading into the ship

The site is designed to process an annual throughput of 40,000t. Incoming wood chip will be formed into storage piles (150m3 and no more than 4m high) up to 3,000t in total (the

capacity of the outgoing vessels) Once the site is full no further inputs from the wood processing facility will be accepted until the ship has been loaded. The site will only accept wood chip from the Veolia processing site in Avonmouth.
The whole storage area is constructed with an impermeable concrete surface. The operational area will be cleaned regularly to control dust emissions.

Waste delivery vehicles will access the site via the main port access road and head to the site for tipping.

Once the vehicle has been accepted, the vehicle will head to the storage pad for waste tipping and further waste acceptance procedure.

When the delivery vehicle has completed tipping it will exit via the port access road.

The tipped waste will be formed into a wood stockpile to await loading directly onto a ship. The piles can be damped down using the onsite water bowser should they be seen to generate dust.

Daily sweeping of the operational area will be carried out and a mechanical sweeper will be utilised as required should the daily walkaround of the site identify elevated dust.

A layout of the site is included at the end of this plan

2.3 Mobile Plant and Equipment.

Nitrogen Dioxide gas is a by-product of internal combustion engines and the site uses several items of plant with internal combustion engines. The following table lists the type, mobile and emission ratings for the mobile plant and equipment used on site:

Description	Make	Model	Emission Rating
Loading Shovel	Caterpillar	938	Tier 4

All plant is owned by Veolia and fall under an R&M agreement with Finnings/ Caterpillar for five years. The agreement fully follows the manufacturers specification and carried out by recognised agents.

3. *Responsibility for Implementation of the DEMP*

The following manager is responsible for the DEMP at Avonmouth Dock:

Paul Grierson - Operations Manager WAMITAB training, experience of waste management facilities in the region

Annual reviews of the DEMP will take place. Veolia QHS officers will carry out reviews of the DEMP. QHS officers have experience of waste management facilitates and are Veolia recognised officers for waste site audits.

3.2 Sources and Control of Fugitive Dust/Particulate Emissions

Sources

Table 3.1: Source-Pathway-Receptor Routes

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Mud	tracking dust on wheels and vehicles, then mud dropping off wheels/vehicles when dry	Table 1.1	Visual soiling, also consequent resuspension as airborne particulates	Unlikely to have mud brought on to the site given the source input is coming from a Veolia wood processing site 2 miles and transport to the site is via established main roads and port network. Remove mud before vehicles leave the site. Long port entrance road ensures residual mud drops off before vehicles reach the public highway.
Debris	falling off lorries	Table 1.1	Visual soiling, also consequent resuspension as airborne particulates	Waste only leaves the site via ship and is loaded directly at the dockside. Loading is contained within the ship at all times. Cover lorries before leaving the site.
Tipping, storage and loading of wastes in the open	Atmospheric dispersion	Table 1.1	Visual soiling and airborne particulates	Minimise source strength by means of low drop heights. Piles can be damped down using the on site water bowser if required.
Vehicle exhaust emissions	Atmospheric dispersion	Table 1.1	Airborne particulates	Regulatory controls and best-practice measures to minimise source strength

Non road going machinery exhaust emissions	Atmospheric dispersion	Table 1.1	Airborne particulates	Regulatory controls and best-practice measures to minimise source strength
Storage piles	Atmospheric dispersion	Table 1.1	Airborne particulate	Pile management. Ensure the pile is maintained as low as possible. Damping of pile as required
Mobile plant movements	Atmospheric dispersion	Table 1.1	Airborne particulate	Ensure cleaning of the process area. Sweep the process area daily to avoid build up.

Table 3.2: Measures that will be used on site to control dust/particulates (PM_{10}) and other emissions

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
Preventative Measures			
Site Speed limit, 'no idling' policy and minimisation of vehicle movements on site	Reducing vehicle movements and idling should reduce emissions from vehicles. Procurement policy to only purchase clean burn road vehicles and non-road going mobile machinery.	Site signs showing speed limit. Site speed is limited to 10MPH Regular site inspections to check compliance. Loading shovel have telemetry which reports idle time.	In use at all times during site operations
Minimising drop heights and movement of material.	Minimising the height at which waste is handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds.	Material moved into piles once tipped and then again onto ship for export. Reducing the need to move around the site	In use at all times during site operations

Cleaning	Having consistent, regular cleaning intervals that are supported by management, will ensure the site is regularly checked and issues are remedied to prevent and remove dust and particulate build up.	Site operations staff to ensure dust is minimised at all times. daily cleaning to take place of storage areas, roadways and hardstanding of the site.	In use at all times during site operations Daily clean of storage area, roadways and site hard standing. Frequency to be increased if dust is visibly building up around the site, roadways or processing areas. Use of manual brushes and use of mechanical road sweeper as required by site management assessment
Sheeting of vehicles	Prevents the escape of debris, dust and particulates from vehicles as they travel.	Drivers notified of sheeting vehicle requirements	In use at all times during site operations
Brush down of vehicles on exit (As required)	May remove some dirt, dust and particulates from the lower parts of vehicles.	If delivery vehicles become dusty from the discharged waste. Site supervisor will assess the dustiness of a vehicle via a visual assessment of dust adhered to the outsides of the vehicle and make the decision to use brushes to clean down vehicles on the process pad to remove any debris and thick layers of dust before allowing the vehicle to leave	Waste acceptance. If the vehicles become visibly dusty
Ceasing operation during high winds and/or prevailing wind direction	Mobilisation of dust and particulates is likely to be greater during periods of strong winds and hence ceasing operation at these times may reduce peak pollution events.	Anemometer used by site staff to assess wind condition prior to waste movement	In use at all times during site operations. Wind speed above 25 mph
Easy to clean concrete impermeable surfaces	Creating an easy to clean impermeable surface, using materials such as concrete as opposed to unmade (rocky or muddy) ground within the site and on site	Process areas are on a concrete impermeable surface.	In use at all times during site operations

	haul roads. This should reduce the amount of dust and particulate generated at ground level by vehicles and site activities.		
Reduction in operations (waste throughput, vehicle size, operational hours)	Mobilisation of dust and particulates is likely to be greater during periods of strong winds and hence ceasing operation at these times may reduce peak pollution events.	Anemometer used by site staff to assess wind condition prior to waste movement	In use at all times during site operations. Wind speed above 25 mph
Remedial Measures			
Wood stored in piles can be damped if required Once piles are formed no movement of waste until loading on to vessel for export	Material movements minimal	Once waste is tipped it is formed directly into piles where it will be stored until loaded on a ship	In use at all times during site operations.
On-site sweeping	Sweeping could be effective in managing larger debris, dust and particulates but may also cause the mobilisation of smaller particles. Road sweeping vehicles damp down dust and particulates whilst brushing and collecting dust and particulates from the road surface, particularly at the kerbside. This may generate dust and particulate movement that may become a Health and Safety issue if the filters and spray bars on the sweepers are not maintained.	Road sweepers to be used if the surface requires cleaning. All plant can be moved to enable cleaning in order to prevent dust build up The measures on site are designed to prevent off site release of dust. In the unlikely event of dust leaving the site and accumulating on the haul road or highway, a	Sweeping carried out daily. Road sweeping plant will be used to clean the haul road and the site as required following assessment by the site manager should the need arise. A mechanical sweeper will be on hand for use as required at short notice.

		mechanical road sweeper will be used to clean. Regular inspection of the haul road and highway will be carried out.	
Water suppression with hoses	Damping down of site areas using hoses can reduce dust and particulate re-suspension and may assist in the cleaning of the site if combined with sweeping.	Daily monitoring of the process area surface should be carried out. Dampen down with water as required.	Daily monitoring

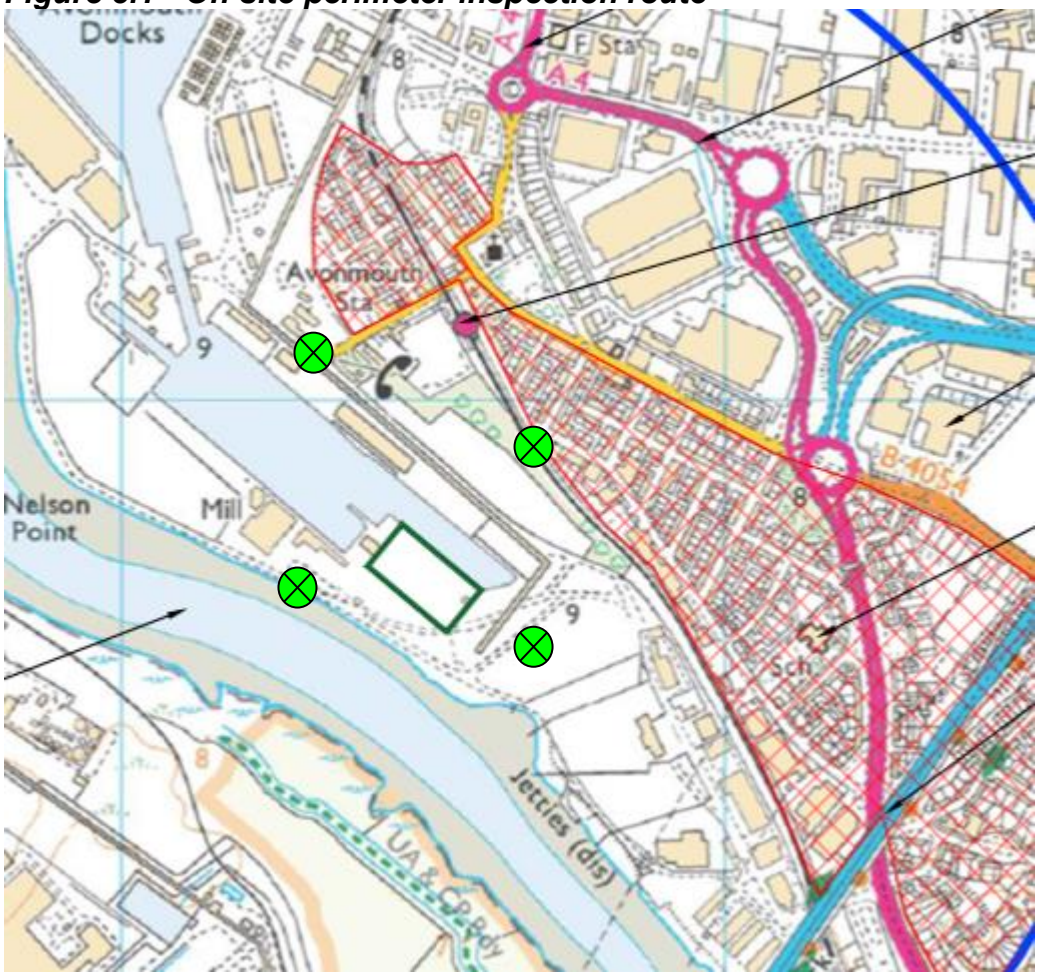
3.3 Other considerations

Water usage/ availability: The site has a mains water connection with a hydrant network surrounding it which will be used to fill the mobile water bowser. The water level of the mobile units is checked throughout the day and topped up as required.
In the event of a drought:In the event of a drought the bowser can always be filled from the hydrant network.

3.4 Visual Dust Monitoring

Off site perimeter inspections will take place to ensure dust emissions will not cause a nuisance. The dust inspections will take place twice per day. On site dust will be visually monitored by site staff which will include visible check of windrow dust levels, check of spray suppression systems (mobile and fixed) perimeter walk of the fence line and operational areas. Daily on site checks will be carried out and any issues reported to the supervisor. Sweeping and mechanical sweeping will be carried out as required above the daily routine in order to minimise dust generation. The moving of the mobile units will take place to ensure they are placed at optimum positions for dust control depending on the activity being carried out at the time.

Figure 3.1 - Off site perimeter inspection route



Location Description	Direction
1. Port road	West
2. Port road	South east
3. Port access road	North west

4. Portview road	North east

Any visual signs of dust emissions leaving the site are to be reported to the responsible managers as shown in section 3.1.

3.6 Out of Hours Response

At the end of each working day site staff will sweep the site and damp windrows to minimise any dust creation whilst non operational. Veolia have a dedicated telephone number listed on the site entrance board and a senior manager is always available on a rota system should the need to take action arise outside of normal operating hours.

4. Particulate Matter Monitoring

Quarterly monitoring for PM_{10} will be undertaken by a suitably qualified and MCertified Company to ensure there is no release of particulate matter beyond the boundary. A summary report will be provided to the Environment Agency following the testing. The site is not located in an Air Quality management system and therefore a permanent monitoring system is not proposed. Should PM_{10} particulates be an issue at the site a revised DEMP will be submitted including a detailed monitoring programme.

5. Reporting and Complaints Response

Veolia sites operate under the certified Veolia Management System (VMS) including a dedicated procedure in relation to the complaints and non conformance reporting (Included for reference with this document). Following any complaint received, the on site team will investigate the potential issue and identify if any operations on site may have led to amenity concern as soon as reasonably practicable. Timely reporting of complaints allows for more accurate assessment of the concern.

All complaints/feedback are recorded on Veolia's internal reporting system EcoOnline/AVA, which includes notification of the complaint to relevant management lines and support functions across the organisation.

A response will be provided to the complainant as soon as reasonably practicable, depending on the outcome of the investigation and whether any remediation or mitigation is needed. Actions taken as a result of the complaint would be proportionate to the risk and outcome of the investigation itself.

5.1 Engagement with the Community

Community engagement is key to Veolia operations and local residents will be able to contact the site manager directly should they wish to discuss any concerns. The site manager or supervisor will visit any complainant to substantiate and discuss the issue. A record of any community engagement will be shared with the local EA officer.

5.2 Reporting of Complaints

All reports of complaint will be recorded on the Veolia reporting system

5.3 Management Responsibilities

Site ID board displays contact details for site management and out of hours notification. Managers in section 3.1 are responsible for ensuring the compliance of the DEMP.

5.4 Summary

Avonmouth Dock Wood TS site is committed to continuously reduce levels of fugitive dust generated by our Facility and is sensitive to the concerns of neighbouring businesses regarding the levels of dust experienced. Avonmouth Dock Wood TS site will ensure systems that facilitate communication with the site neighbours are maintained.

• Dust is predominantly controlled at source by good operational practices and the correct use and maintenance of plant;
• All potential sources of dust likely to arise at the facility are identified;
• Both staff and people outside of the site are not exposed to levels of dust that would result in annoyance and health issues;
• All appropriate measures are taken to minimise dust from the facility that may be

considered offensive at locations outside of the facility boundary; and
• The risk of dust related incidents are minimised by anticipating and planning the appropriate measures to control the dust accordingly.

The DEMP will be reviewed annually.

Dust Complaint Form

Customer Details	
Customer Name -	
Address – Postcode -	
Customer Contact Details -	
Tel -	
Email -	
Date -	
Complaint Ref Number -	
Complaint Details -	

Investigation Details	
Investigation carried out by -	
Position -	
Date & time investigation carried out -	
Weather conditions -	
Wind direction and speed -	
Investigation findings -	
Feedback given to Environment Agency and/or local authority -	
Date feedback given -	
Feedback given to public -	

Date feedback given -	
Review and Improve	
Improvements needed to prevent a reoccurrence -	
Proposed date for completion of the improvements -	
Actual date for completion -	
If different insert reason for delay -	
Does the dust management plan need to be updated -	
Date that the dust management plan was updated -	
Closure	
Site manager review date	
Site manager signature to confirm no further action required	

Site Plans

Layout Plan
Key Receptor Plan