# Lower Thames Crossing Tunnels & Approaches

## Tilbury Landfill Dust and Emissions Monitoring Plan 2026

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## Reviewer list

| Name | Role |
|---|---|
| Charlie Martin | Geoenvironmental Consultant |
| Richard Patten | Senior Design Manager |
| | |
| | |
| | |

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# Lower Thames Crossing

# Tilbury Landfill Dust and Emissions Monitoring Plan 2026

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# 1 Introduction

## 1.1 Background

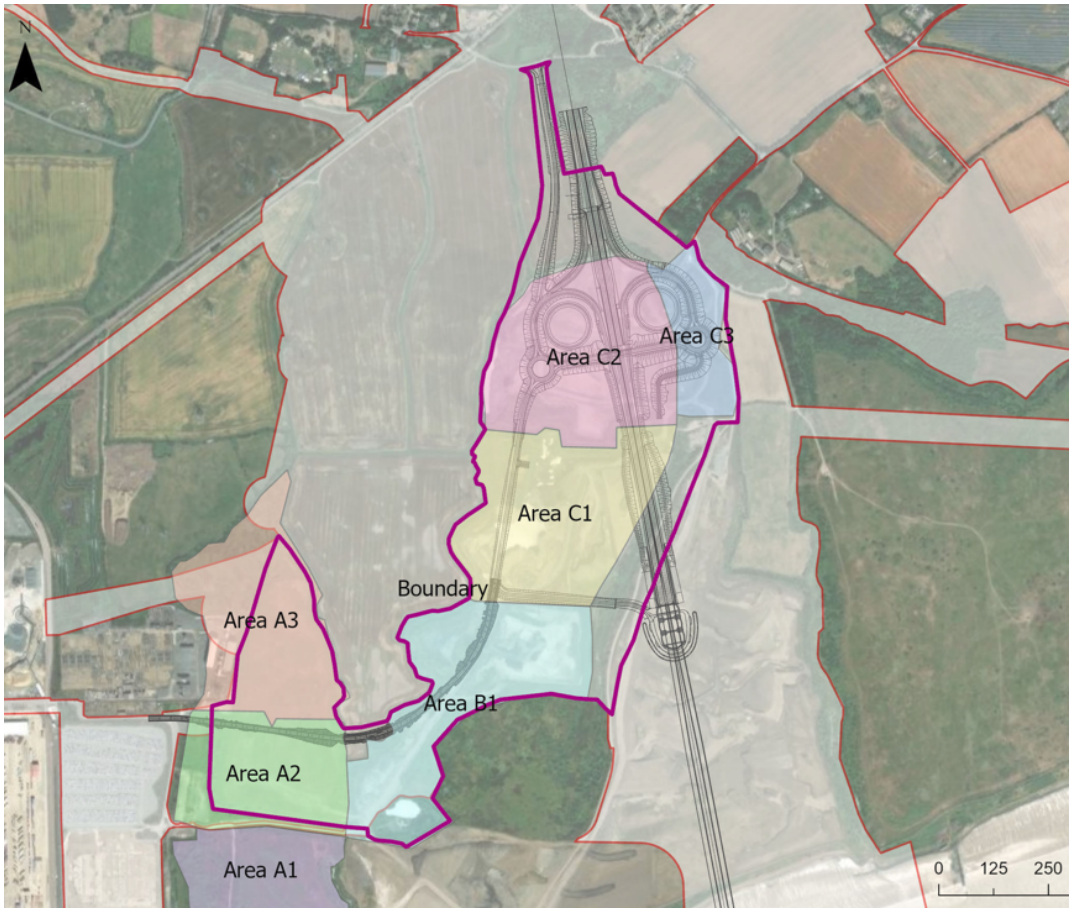
1.1.1 National Highways (NH) is seeking approval for a new Environmental Permit to continue landfilling and PFA recovery at the former Tilbury Ash Disposal site (formerly Environmental Permit EPR/GP3733DZ). The proposed new permit boundary, superimposed over the previous permit boundary, is shown in Figure 1-1.

1.1.2 National Highways wishes to create the required development levels for the Lower Thames Crossing scheme using waste derived from the adjacent Goshems Farm Deposit for Recovery site (formerly Environmental Permit EPR/WP3094EP).

1.1.3 The Site was formerly permitted to operate as a non-hazardous landfill under the conditions of an Environmental Permit, with the most recent variation (EPR/GP3733DZ/V007) issued on 09 December 2025.

1.1.4 The Environment Agency required a Dust and Environmental Management Plan (DEMP) to be prepared for the previous Environmental Permit. In accordance with the approach agreed with the Environment Agency, this document provides an updated DEMP for the new permit, reflecting the intention to continue the activities authorised under the former permit.

**Figure 1-1 Site location and permit boundary**



## 1.2 Site location

1.2.1 The site is located in Tilbury, Essex in the Thurrock local authority area, centred at national grid reference TQ 668 759. It is not located within an Air Quality Management Area[1].

1.2.2 Pulverised fuel ash (PFA) deposited from Tilbury power station has been progressively removed by Ingrebourne Valley Limited (IVL) since 2017. In order to complete the Lower Thames Crossing highway scheme, National Highways proposes to continue to excavate PFA for use in ecological mitigation and deposit waste to create the required ground levels. The required waste will be derived from within the adjacent Goshems Farm Deposit for Recovery site and from within the Tilbury Ash Disposal site.

1.2.3 This DEMP mirrors the requirements of the Air Quality Management Plan (AQMP) for North Portal Surface Works (HE540039-BMJ-EAQ-TA_S07_ZZ-PL-ZZ-000001) which has been prepared as part of the Environmental Management Plan (EMP) required by the Development Consent Order (DCO) for Lower Thames Crossing. EMP documents are prepared prior to the construction of each planned work stage for the Lower Thames Crossing scheme. The Air Quality Management Plan sets out the measures to mitigate dust impacts in accordance with the measures outlined in the Code of Construction Plan (CoCP) and best practice, to reduce all impacts to a non-significant level.

## 1.3 Scope

1.3.1 This document details the proposed mitigation and operational management measures that will be taken in association with the proposed landfilling and PFA recovery activities. The objective of this document is to specify a range of measures to manage the potential environmental impacts relating to dust emissions that could arise as a result of the landfilling operation. A series of control measures will be implemented to minimise the potential risks to the environment and receptors surrounding the site.

1.3.2 The components of the DEMP are set out within this document as follows:

- Section 2 – Site overview
- Section 3 - Potential for dust generation;
- Section 4 - Dust assessment; and
- Section 5 – Dust control measures
- Section 6 – Monitoring
- Section 7 - Site management
- Section 8 – Contingency plan.

[1] https://uk-air.defra.gov.uk/aqma/maps/

# 2 Site overview

## 2.1 Site surroundings

2.1.1 The Site sits within the East Tilbury Marshes, a predominantly agricultural area characterised by low-lying terrain. While Tilbury is the nearest settlement, the closest individual residence is Buckland, positioned roughly 100m east of the Site boundary. Further beyond this are farm properties, located approximately 150m to the northeast and around 350m to the north of the Site.-east and around

2.1.2 Receptors within 100m of the permit boundary are listed in Table 2-1.

**Table 2-1 Receptors within 100m of permit boundary**

| Receptor | Receptor type | Distance from permit boundary (m) | Direction |
|---|---|---|---|
| West Tilbury Marshes Complex Local Wildlife Site (LWS) (Th39) | Ecological | Within permit | South, east, west |
| Port of Tilbury Ltd depot (Tilbury 2) (former Tilbury B Power Station and substation | Industrial | Adjacent | West |
| Agricultural land | Agriculture | Adjacent | North, east, west |
| Surface water features including drainage ditches, Tilbury Main | Water body | Adjacent | South, east, west |
| Tilbury Riverfront LWS, formerly Coalhouse Fort Marshes (Th89) | Ecological | Adjacent | South |
| Grade II Buckland | Listed building | 100 | East |

## 2.2 Site Description

2.2.1 The Site forms part of the land associated with the former Tilbury Ash Disposal Site and is positioned at National Grid Reference TQ 668 759. The area of the proposed Environmental Permit is shown in Figure 2-1.

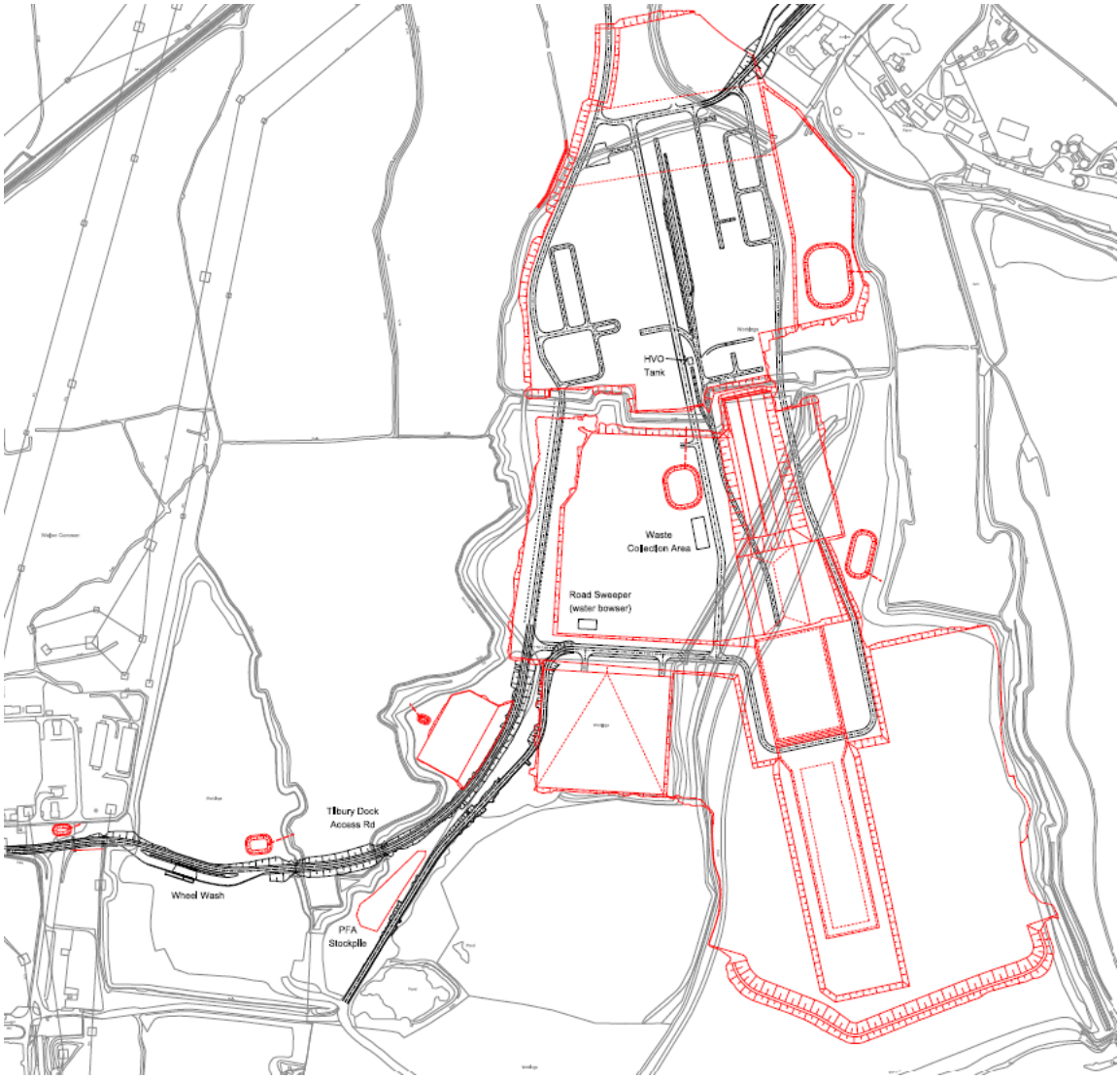
**Figure 2-1 Tilbury Landfill permit boundary**


2.2.2 The infrastructure on site will include:

- Fuel (HVO) storage in bunded tanks;
- Waste collection area for unacceptable materials;
- Water bowser;
- PFA stockpile area;
- Drainage attenuation ponds;
- Wheel wash.

2.2.3 The main site infrastructure is shown on Figure 2-2 which also shows the internal haul roads to be constructed. The main access road will be from the Port of Tilbury to the west, which is currently formed of hardstanding. This access road will be retained and strengthened for use until the new access road is constructed. New haul roads will be constructed within the site boundary.

**Figure 2-2 Proposed Infrastructure**




## 2.3 Description of Site Operations

2.3.1 The purpose of the landfilling is to create the required construction platform areas for the Lower Thames Crossing scheme, shown in Figure 2-3. These will be created using waste derived from the adjacent Goshems Farm Deposit for Recovery site or from within the Site itself. The material comprises arisings from construction activity and is mainly clay or clay-bound material.

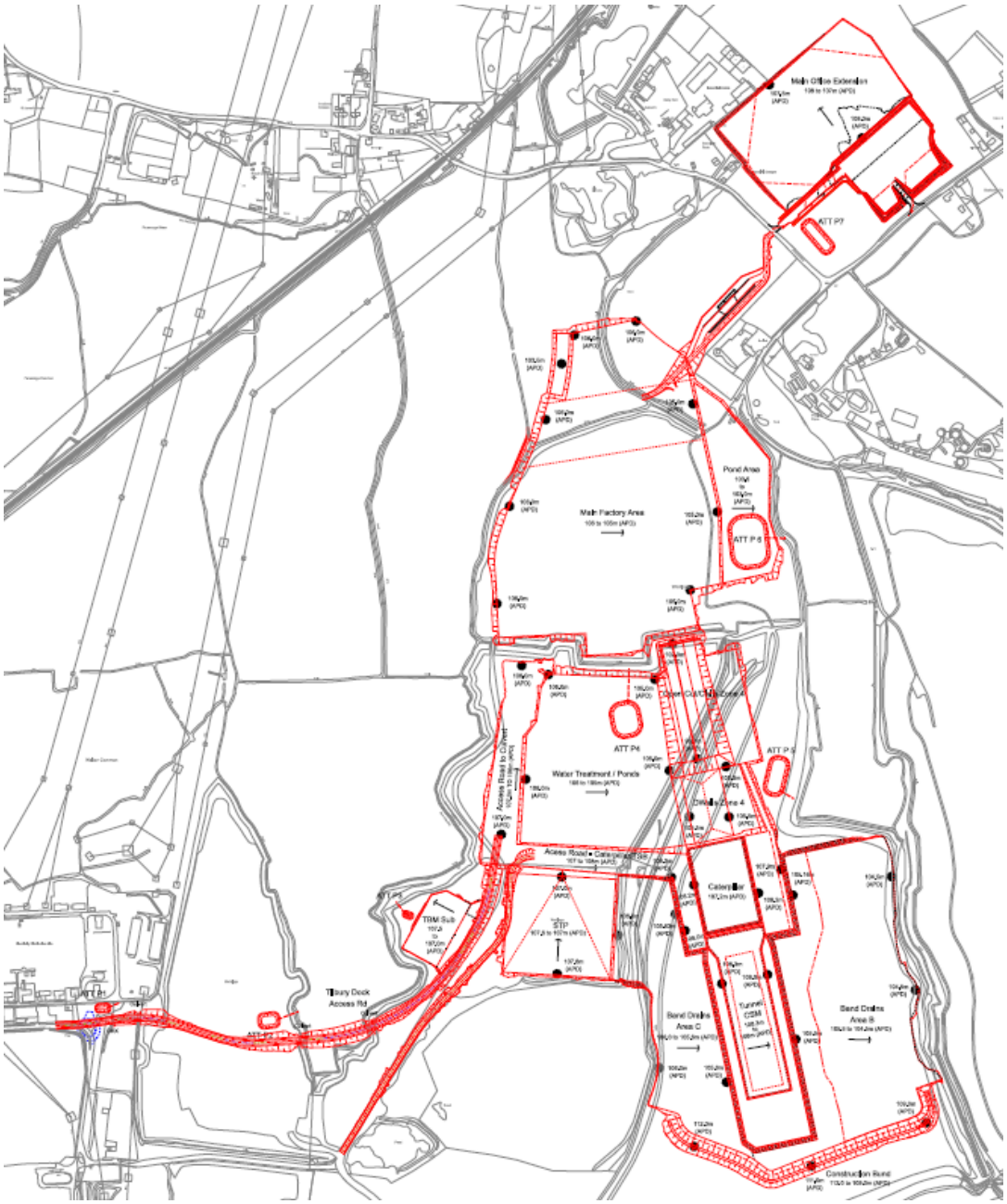
2.3.2 In addition to the deposit of waste, existing deposits of PFA will be excavated where suitable material exists and stockpiled in a designated area within the Site boundary for reuse in the creation of Open Mosaic Habitat at a later date.

2.3.3 The material will be moved on dedicated internal haul roads and transported to the working area, where they will be deposited and compacted to the required engineering specification.

2.3.4 Once the construction platform levels have been reached through the landfilling activity, construction of the Lower Thames Crossing scheme will begin with the establishment of various factories and other infrastructure required for the tunnel construction.

2.3.5 Restoration of the Site will be completed as part of the wider Lower Thames Crossing scheme, which comprises a mix of open mosaic habitat and highway infrastructure. The previous Environmental Permit allowed for a 3 year period of aftercare, based on the low risk and non-biodegradable nature of the waste materials disposed of at the Site. The aftercare period for this permit is to be determined, but National Highways and their Contractor BMJV will be responsible for monitoring the performance of the landscaping and infrastructure and making good any defects.

**Figure 2-3 Proposed construction platform levels**




2.3.6 The landfilling for the construction working platforms is expected to take approximately 2 years to complete. The Site will accept only the permitted waste types detailed in the Site Operating Plan and Waste Acceptance Procedures.

# 3 Potential for dust generation

## 3.1 Potential dust sources

3.1.1 The preparation, construction, operation and eventual restoration of Tilbury Landfill may give rise to dust emissions from a range of activities as detailed in Table 3-1. The dust risk assessment in the Air Quality Management Plan identified the activities on Site that have the greatest potential for dust emissions. These are:

- Earthwork, including emissions of dust the surface of the previously deposited wastes during periods of dry weather. Furthermore, materials handling, re-contouring and screening operations also have high dust emission potential.
- Construction activities (use of concrete in batching plants)
- Vehicle movements on internal haul roads

**Table 3-1 Potential dust sources**

| Activity | Potential for dust generation | Descriptions/location |
|---|---|---|
| Site preparation works: excavation, material handling & storage. | High | Temporary, intermittent operations. Potential for short term high dust emissions.<br>Re excavation, stockpiling and reprofiling of previously deposited waste and PFA.<br>Exposed waste surfaces and bund screening |
| Transport – internal movements | High | Track-out dust will be generated by dump-truck movements along the internal haul routes, especially during prolonged dry periods.<br>The movement of materials around the Site may also produce dust. |
| Construction activities: internal haul roads, office, welfare facilities and car park. | Low to moderate | The internal haul routes will be formed using imported Type 1 or 6C class stone. There is the potential for dust to be released during works involving cement. |
| Transport – access road | Low | The main access route on to the site for HGVs will be via the Port of Tilbury land to the west. The access road from the north will only be accessible by staff vehicles travelling to the site compound on Station Road, no construction traffic will be permitted to access the site from the north. |
| Material handing: inert infilling and screening operation. | High | Material to be deposited within the site may require screening to remove oversized materials if required. As material has already been screened and deposited once, the likelihood of this being required is low, but may be required as a contingency. |

| Activity | Potential for dust generation | Descriptions/location |
|---|---|---|
| | | If the material to be deposited is too wet, lime may need to be added to achieve the required engineering specification. The addition of lime may create dust.<br><br>Certain batches of PFA may require screening to remove oversize/unsuitable materials prior to stockpiling. |
| Restoration | High | Restoration will be completed as part of the wider Lower Thames Crossing scheme, which comprises a mix of open mosaic habitat and highway infrastructure. Works will involve the construction of highways and other road infrastructure, and the creation of landscaping areas. |

## 3.2 Potential dust effects

### Prevailing weather conditions

3.2.1 The most important parameters governing the generation and dispersal of fugitive dust are:

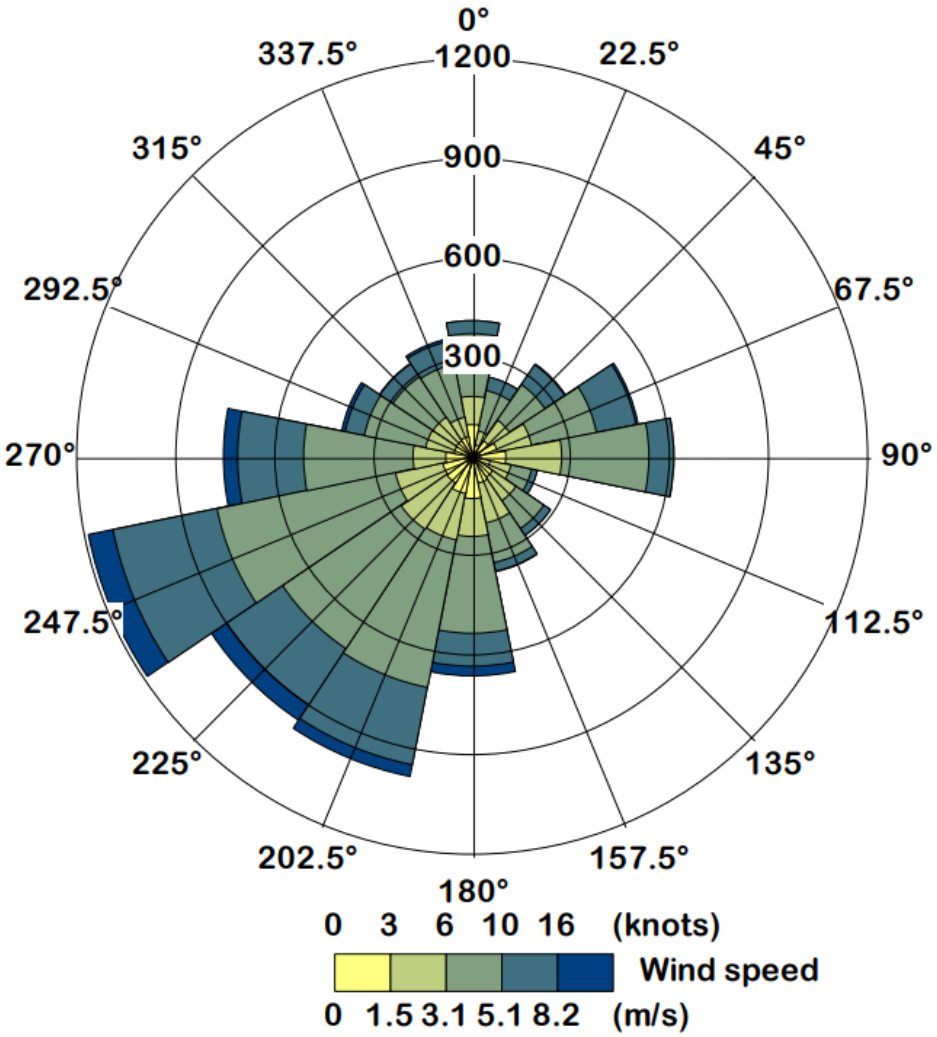
- wind speed - will affect the potential for dust entrainment and the distance it may travel;
- wind direction - determines where dust may be transported to and
- rainfall - determines how much dust is generated. Sufficient rainfall can suppress dust at the source. Studies show that the rainfall greater than 0.2mm/day is sufficient to suppress dust emissions [1].

### Wind speed and direction

3.2.2 Wind speed and direction data have been taken from the meteorological observation station at Gravesend-Broadness, which is located approximately 6.5km to the west of the Site. A windrose for this station is presented in Figure 3-1 2016 wind rose for Gravesend-Broadness (*sourced from Environmental Statement Chapter 5 – Air Quality)*, which indicates that the prevailing wind direction is from the south west and west, with a smaller percentage of the wind occurring from the east/northeast and northwest. On this basis, any receptors located to the north-east of the Site have the highest potential for impacts from any dust emissions originating from the Site.

3.2.3 Based on the receptors identified in Table 2-1, Buckland and Bowaters Farm (both residential properties) have the potential to be impacted by dust emissions from the Site.

**Figure 3-1 2016 wind rose for Gravesend-Broadness (*sourced from Environmental Statement Chapter 5 – Air Quality)***




## Rainfall

3.2.4 Relevant rainfall data applicable to the Site has been obtained from the Met Office of UK climate averages for 1991-2020[2]. The average annual rainfall greater than 0.2mm/day (the level at which dust emissions should be effectively suppressed) is approximately 150 – 160 days per year. It is therefore considered that on those days, the natural suppression afforded by rainfall will eliminate the generation of dust within the Site.

3.2.5 Rainfall is typically lower during the summer months, combined with higher temperatures to increase the drying time of material. The potential for dust generation and subsequent transfer of airborne dust emissions beyond the Site boundary is therefore higher during the summer months.

[2] https://www.metoffice.gov.uk/research/climate/maps-and-data/location-specific-long-term-averages/u10kkgu1u

# 4 Dust assessment

4.1.1 In support of the Development Consent Order (DCO) application, a construction dust risk assessment was completed in accordance with guidance on the assessment of dust from demolition and construction (IAQM, 2014) and included as part of the Environmental Impact Assessment for the Lower Thames Crossing scheme. Given the size of the project and location of receptors, the overall dust risk potential was rated 'large' in the Environmental Statement, based on DMRB LA105 classification.

4.1.2 This in turn led to the development of mitigation measures following best practice guidance, which states that, with the application of suitable mitigation measures, impacts can be reduced to a negligible level. Best practice mitigations are included in the REAC which forms part of the Code of Construction Practice (CoCP) control document for the Lower Thames Crossing scheme.

4.1.3 Table 4-1 signposts to sections of the Environmental Statement relevant to dust, including the appropriate mitigation measures for all on-site activities.

**Table 4-1 Summary of construction assessment details within the ES**

| Topic | ES Reference |
|---|---|
| **Works Plans** | ES Chapter 2 – Project Description (Application Document 6.2)<br>ES Works Plans (Application Document 2.6) |
| **Air Quality Legislation & Policy** | ES Appendix 5.5 – Air Quality Legislation and policy (Application Document 6.3) |
| **Construction Dust Assessment** | ES Chapter 5 – Air Quality (Application Document 6.2)<br>Section 5.3: Assessment Methodology<br>Section 5.5: Project Design and Mitigation<br>Section 5.6: Assessment of likely significant effects |
| **Construction Dust Buffers for Project Components** | ES Figure 5.1: Construction Dust Study Area (Application Document 6.2). |
| **Construction Period Mitigation** | ES Appendix 2.2. Code of Construction Practice (CoCP) (Application Document 6.3)<br>Register of Environmental Actions and Commitments (REAC) |

4.1.4 A further assessment has been undertaken, which is presented in the Air Quality Management Plan [6]. This considers site-specific activities and updated versions of the IAQM guidance which had been published in 2024. The AQMP contains measures to mitigate dust impacts in accordance with the measures outlined in the CoCP and best practice to reduce all impacts to a negligible level. The dust control measures set out in this document mirror the mitigation measures in the AQMP.

# 5 Dust control measures

5.1.1 Mitigation measures following best practice guidance for the control of dust are included within the AQMP.

**Table 5-1 Dust Control Measures**

| Activity | Dust Control Measures |
|---|---|
| Management procedures | The day-to-day operations at the site will be the responsibility of BMJV, who will ensure that the measures set out in the AQMP (and, by extension, this DEMP) are implemented fully and appropriately.<br>BMJV will also be responsible for ensuring that all permit conditions are fully complied with. This responsibility may be exercised directly or delegated to competent, appropriately trained personnel. Duties will include oversight of:<br>• Managing and coordinating vehicle movements across the site<br>• Supervising all activities involving loading, tipping, and the handling of materials<br>• Implementing and monitoring the site's dust-control systems set out in the AQMP<br>• Organising routine checks, cleaning regimes, and maintenance for plant and equipment |
| | All personnel will be trained in the procedures required to manage site activities effectively and to minimise potential dust emissions. Staff are expected to report to the site manager whenever visible dust is noticed, or if any operation appears likely to generate dust. |
| | Daily visual inspections of the site will be carried out by BMJV, or an appropriately trained operator. The inspection will consist of a site walk with observations made of any dust emissions (see **Appendix A** for example inspection checklist).<br>Particular attention will be paid to any areas where professional experience would suggest that current operations have a higher than normal risk of dust emissions. This should include regular dust soiling checks (weekly) of surfaces such as cars within 100 m of the site boundary, with cleaning to be provided if significant dust soiling is evident and found to be as a direct consequence of the work. |
| | If significant dust is identified beyond the site boundary, a Dust Event Form will be completed (see example in **Appendix B**), and investigation/remedial action will be taken. The BJMV will review Dust Event Forms regularly to ensure that any necessary actions have been implemented, and to identify problem areas where additional mitigation against further dust emissions may be necessary.<br>The frequency of visual inspections will be increased when activities with a high potential to produce dust are being carried out on site and during periods of adverse weather<br>If site personnel identify dust leaving the site that could cause nuisance off-site, or if any dust-related complaint is received, the event will recorded on a Dust Complaints Form (see example in **Appendix C**). The procedure under 'complaints' below will then be implemented. |

| Activity | Dust Control Measures |
|---|---|
| | Where a dust issue is traced to a particular source, immediate mitigation measures will be implemented. These may include damping the material with water or covering it with clean, non-dust-forming material to prevent further airborne emissions. |
| Complaints | If exceptional dust emissions occur, or any complaints are received, they will be investigated by BMJV or a delegated representative, who will record the complaint.<br>BMJV will identify the cause, take appropriate measures to reduce emissions in a timely manner and record the measures taken to resolve the issue.<br>A dedicated complaints log will be maintained on site, recording all issues reported either directly to the site management or passed on through the relevant regulatory bodies. An example dust complaint form is provided in **Appendix C**. |
| | The Environment Agency will be notified in writing within two weeks of any dust-related complaint, and the notification will include the investigation findings and details of any remedial measures implemented. |
| Dust from track out and internal haul roads | Use of water-assisted dust sweepers on the access and local roads to remove any material tracked out of the site. |
| | Ensure vehicles entering and leaving the Site are securely covered to prevent escape of materials during transport. |
| | Only the designated construction vehicle route (i.e. via Port of Tilbury land to the west) will be used for track out. |
| | Wheel washes will be used for vehicles leaving the site via the Port access to the west. |
| | Internal haul roads will be maintained in good repair and subject to the inspection procedures in “Management Procedures” above to ensure dust generation is kept to a minimum. |
| Excavation activities | Generation of stockpiles of excavated material will be minimised as far as is reasonably practicable. |
| | Dust suppression techniques will be implemented, including water spraying in dry weather, wheel washing facilities for vehicles leaving the site and covering stockpiled material. |
| | Areas will be covered with hardstanding as soon as possible on completion of filling or revegetated to stabilise surfaces. |
| | Ensure sand and other aggregates will be stored in bunded areas and not allowed to dry out, unless required for a particular process, in which case ensure that appropriate additional control measures are in place to prevent escape |
| | Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored with suitable emission control systems to prevent escape. For small supplies of fine powder materials ensure bags are sealed after use ad stored appropriately to prevent dust. |

| Activity | Dust Control Measures |
|---|---|
| Vehicle and plant emissions | All on-road heavy vehicles will comply with the standards set within the London Low Emission Zone (LEZ) across all sites within Order Limits for the relevant class of vehicle. |
| | All Non-Road Mobile Machinery (NRMM) net power 37kW to 560kW would comply with the engine emission standards set by London's Low Emission Zone for NRMM across all sites within Order Limits. From 1 September 2020, NRMM used on any site would therefore be required to meet emission standard Stage IIIB as a minimum. From 1 January 2025, NRMM used on any site would be required to meet emission standard Stage IV as a minimum. |
| | Ensure all vehicle engines, mobile and fixed plant stationed on site are not left running or idling unnecessarily. |
| | Use low emission vehicles and plant fitted with catalysts, diesel particulate filters or similar devices where reasonably practicable. |
| | Use ultra-low sulphur fuels in plant and vehicles where reasonably practicable. |
| | Keep vehicles and plant well maintained, routine servicing is to be completed in accordance with the manufacturer's guidance and records maintained for the work undertaken. |
| Dust management good practice | Undertake on-site and off-site inspections to monitor dust as detailed in "Management Procedures" above. |
| | Plan site layout so that machinery, stockpiles, mounds and dust causing activities are located away from receptors, as far as this is reasonably practicable |
| | Erect suitable solid screens or barriers around dusty activities or the site boundary |
| | Avoid site runoff of water or mud |
| | Remove waste materials that have a potential to produce dust from site as soon as reasonably practicable |
| | Cover or fence stockpiles to prevent wind whipping |
| | Cutting/grinding/sawing equipment to use water as dust suppressant or suitable local extract ventilation |
| | Ensure an adequate water supply on the site for effective dust/particulate matter suppression, using recycled water where reasonably practicable |
| | Use covered skips to reduce escape of dust |
| | Ensure equipment is readily available on site to clean any spillages and clean up spillages as soon as reasonably practicable after the spill is identified, following the site Pollution Prevention Management Plan (PPMP) |

# 6 Monitoring

## 6.1 Visual dust monitoring

6.1.1 Daily visual inspections of the site will be carried out by BMJV, or an appropriately trained operator. The inspection will consist of a site walk on site with observations made of any dust emissions (**Appendix A**). Particular attention will be paid to any areas where professional experience would suggest that current operations have a higher-than-normal risk of dust emissions.

6.1.2 This will include weekly dust soiling checks of surfaces such as cars within 100m of the site boundary, with cleaning to be provided if significant dust soiling is evident and found to be as a direct consequence of the LTC work packages.

6.1.3 If significant dust is identified beyond the site boundary, a Dust Event Form will be completed (see **Appendix B**), and investigation/remedial action will be taken, as outlined in the following sections. The BJMV will review Dust Event Forms regularly to ensure that any necessary actions have been implemented, and to identify problem areas where additional mitigation against further dust emissions may be necessary.

6.1.4 Meteorological conditions at the time of any significant dust emissions will be recorded in the Dust Event Form (**Appendix B**).

6.1.5 The frequency of inspections is to be adjusted when on-site activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.

## 6.2 Plant and vehicle emissions

6.2.1 Vehicle and plant emissions are required to be monitored and reported. NRMM registers should be kept by both subcontractors and BMJV. NRMM auditing is to be conducted monthly to ensure compliance with EMS.

## 6.3 Air quality monitoring

6.3.1 The air quality assessment has assessed the risk of dust from the site as low. For low risk sites, IAQM guidance advises that quantitative air quality monitoring is not required.

# 7 Site management

## 7.1 Responsibilities

7.1.1 The day-to-day operations at the site will be the responsibility of BJMV, who will ensure that the measures set out in Table 5-1 are implemented fully and appropriately, and that the monitoring and response protocols set are adhered to.

7.1.2 The name and contact details of the environment manager/engineer or the site manager will be displayed at the site entrance. These signs will also include the address and phone number for BMJV head office.

## 7.2 Training

7.2.1 All staff on site will be made aware of their individual responsibilities for preventing and controlling dust emissions. Employees will be informed of the importance of effective dust management and the key techniques available to minimise dust from the various site activities. This information will be included in the induction programme provided to all new starters.

7.2.2 Additional, task-specific training will be delivered to:

- operatives involved in the application of water-based dust-suppression systems; and
- all personnel who may observe or identify dust emissions, emphasising the need to promptly report actual or potential dust issues, as well as any failures in dust-control equipment, to the appropriate supervisor.

7.2.3 Training will also address emergency procedures, ensuring staff are able to respond quickly and appropriately in the event that dust-control measures fail or unexpected emissions occur.

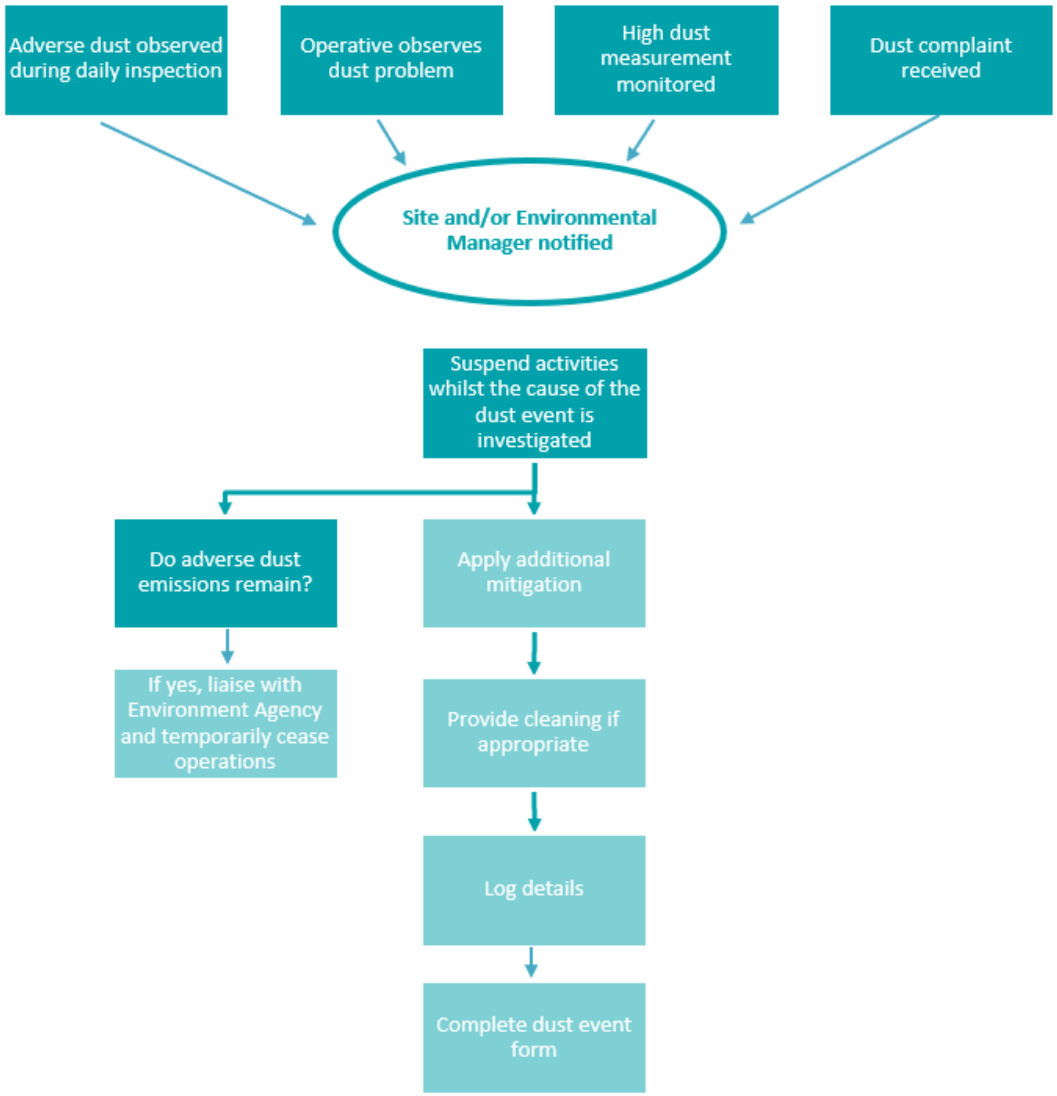
## 7.3 Incident reporting

7.3.1 The flowchart in Figure 7-1 illustrates the contingency measures to be adopted in the event of significant dust being reported.

7.3.2 Should visual inspections or complaints of high dust levels be reported to the Site Manager, the dust event form will be completed (see **Appendix B**).

7.3.3 Any incidents that have created significant dust issues off site shall be reported to the EA as appropriate.

**Figure 7-1 Dust event response flowchart**




## 7.4 Complaints

7.4.1 If any exceptional dust emissions occur, or any complaints are received, they will be investigated by the BJMV or a delegated representative, who will record the complaint. They will then identify the cause, take appropriate measures to reduce emissions in a timely manner, and record the measures taken.

7.4.2 Complaints may be notified by a member of the public either directly to the Site management or indirectly through the regulator. National Highways Customer Contact Centre receives all public complaints and enquiries for National Highways nationwide through a phone line and email account 24 hours a day, seven days a week.

7.4.3 Complaints received directly by the Site management will be recorded in the Site log book and in the Dust Complaint Form (**Appendix C**). The following details shall be recorded:

- Name and address of complainant (if provided);
- Date, time and duration of offending dust;
- Locality of complaint, if not at the address provided;
- Summary of resulting investigations and actions taken; and
- Date at which the complainant was updated with the outcome / remedial actions undertaken, if required.

7.4.4 The purpose of the complaints-response procedure is to investigate any reported incident and review the operational practices and dust-control measures that were in place at the time. This enables the site to identify where additional controls may be needed to prevent similar issues from arising in the future. Where appropriate, both the complainant and the Environment Agency will be informed of the investigation outcome and any corrective actions undertaken.

7.4.5 Investigations will include, but not be limited to the following:

- visit by a member of Site management to location of complainant to verify the issue (if complaint is made after the event this may not be possible);
- a review of site activities in operation at the time of the incident;
- a review of the dust monitoring results for the period of the incident, if applicable;
- a review of control measures and dust suppression in place at the time of the incident;
- a review of the meteorological conditions at the time of the incident;
- reporting of findings

## 7.5 Liaison with community and regulators

7.5.1 BMJV's Site Manager, or a designated representative, will act as the main point of contact for the regulator and the local community regarding any matters related to off-site dust emissions. Maintaining open and constructive communication with nearby residents is an important part of reducing concern and building confidence in site operations.

7.5.2 Where relevant, key information will be shared between the site and the community/regulator. This may include:

- An explanation of the monitoring programme and a summary of recent dust-monitoring results
- Updates on the site's operational layout, including the timing and location of forthcoming activities
- An overview of current dust-control measures and details of any improvements implemented or planned
- Contact details for the site to ensure residents can easily raise issues between meetings

- Opportunities for community members to raise concerns or highlight anxieties, along with measures taken to address them

## 7.6 Record keeping

7.6.1 The operator will retain records relating to dust management, including monitoring data, any contingency actions taken, investigations undertaken, and all complaints received, for a minimum of two years. These records will be made available to the regulator upon request for inspection.

## 7.7 DEMP update and review

7.7.1 This DEMP is a live, controlled document forming part of the site's operational management framework. It will be reviewed at least once each year. As it provides day-to-day guidance for site activities, the DEMP will also be updated whenever circumstances warrant, including:

- when significant alterations are made to plant, equipment, or operational practices
- when the regulator requests an update to the document
- when investigations into dust issues lead to the introduction of new control measures not already covered within the DEMP.

# 8 Contingency plan

8.1.1 The construction dust assessment presented in the AQMP concluded that the level of risk from dust is low. Best practice measures are considered appropriate to mitigate this level of risk, however adverse weather incidents have been identified as events that may require contingency action in order to prevent dust emissions.

### Adverse Weather

8.1.2 During extreme weather conditions, such as long periods of dry weather and/or high wind speeds, there is a risk that dust may be entrained or dispersed over a greater distance. During any such events, water suppression will be used in order to prevent dust emissions beyond the site boundary.

8.1.3 Short-term weather forecasts will be used to plan site operations and hard standing will be wetted before winds blow towards sensitive receptors to prevent dust annoyance.

# 9 Reference Documents

| Document title | Document number /Link |
|---|---|
| [1] Arup & Ove Arup (1995) Environmental. Environment Effects of Dust from Surface Mineral Workings. | N/A |
| [2] Environmental Statement Chapter 5 – Air Quality | TR010032/APP/6.1 |
| [3] National Highways (2019) Design Manual for Roads and Bridges (DMRB) LA 105 Air Quality | https://www.standardsforhighways.co.uk/search/10191621-07df-44a3-892e-c1d5c7a28d90 |
| [4] Code of Construction Practice including Register of Environmental Actions and Commitments (REAC), First Iteration of Environmental Management Plan | TR010032/APP/6.3 |
| [5] SLR (2017) Tilbury Ash Disposal Site Dust Management Plan | 427.01526.00022 |
| [6] Lower Thames Crossing Tunnels & Approaches. Air Quality Management Plan – North Portal Surface Works (Work No. 5) | HE540039-BMJ-EAQ-TA_S07_ZZ-PL-ZZ-000001 |
| [7] Lower Thames Crossing Application Document 6.2 Environmental Statement Chapter 2 – Project Description | https://nsip-documents.planninginspectorate.gov.uk/published-documents/TR010032-001588-6.1%20Environmental%20Statement%20Chapter%202%20-%20Project%20Description.pdf |
| [8] Lower Thames Crossing Application Document 2.6 – Works Plans | https://nsip-documents.planninginspectorate.gov.uk/published-documents/TR010032-005707-National%20Highways%20-%20Other-%202.6%20Works%20Plans%20Volume%20C%20Composite%20(sheets%2021%20to%2049)_v7.0_clean.pdf |
| [9] Lower Thames Crossing Application Document 6.3 – Environmental Statement Appendix 5.5 – Air Quality Legislation and Policy | https://nsip-documents.planninginspectorate.gov.uk/published-documents/TR010032-001399-6.3%20Environmental%20Statement%20Appendix%205.5%20-%20Air%20Quality%20Legislation%20and%20Policy.pdf |
| [10] Lower Thames Crossing Application Documeny 6.2 – Environmental Statement Chapter 5 – Air Quality | https://nsip-documents.planninginspectorate.gov.uk/published-documents/TR010032-001591-6.1%20Environmental%20Statement%20Chapter%205%20-%20Air%20Quality.pdf |
| [11] Lower Thames Crossing Application Document 6.3 – Code of Construction Practice (CoCP) and Register of Environmental Actions and Commitments (REAC) | TR010032-005856-National Highways - Other- 6.3 ES Appendix 2.2 - Code of Construction Practice including Register of Environmental Actions and Commitments (REAC), First Iteration of Environmental Management Plan_v9.0_tracked changes.pdf |

# 10 Abbreviation and Glossary

| Abbreviation/Term | Explanation |
|---|---|
| **AQMP** | Air Quality Management Plan |
| **BMJV** | Bouygues Murphy Joint Venture (appointed Main Contractor) |
| **CoCP** | Code of Construction Plan |
| **DEMP** | Dust and Environmental Management Plan |
| **DCO** | Development Consent Order |
| **DMRB** | Design Manual for Roads and Bridges |
| **EMP** | Environmental Management Plan |
| **ES** | Environmental Statement |
| **IAQM** | Institute of Air Quality Management |
| **IVL** | Ingrebourne Valley Limited |
| **LTC** | Lower Thames Crossing |
| **NH** | National Highways |
| **PFA** | Pulverized fly ahs |
| **REAC** | Register of Environmental Actions and Commitments |
| **SAL** | site action level |
| **SoS** | Secretary of State |

# Appendix A Example Inspection Checklist

**Table B.1 Example inspection checklist**

| ***Month of:*** | | | | | | |
|---|---|---|---|---|---|---|
| **Inspected Items** | **Frequency** | **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** |
| Person completing the checklist | Initials | | | | | |
| Date of Inspection | Date | | | | | |
| Dust being controlled correctly by personnel | Weekly | | | | | |
| Visual inspection of mud/debris on haul routes | Weekly | | | | | |
| Visual inspection of dust soiling on local streets, cars and window sills | Weekly | | | | | |
| Bunded areas not drying out | Weekly | | | | | |
| Dust monitoring equipment operating satisfactorily | Weekly | | | | | |
| Wind direction | Weekly | | | | | |
| Wind speed | Weekly | | | | | |
| Weather forecast | Weekly | | | | | |

## Table B.2 Weekly Inspection Notes

| *Month of:* |
|---|
| **Week 1** |
| |
| **Week 2** |
| |
| **Week 3** |
| |
| **Week 4** |
| |
| **Week 5** |
| |

# Appendix B Dust Event Form

| Sheet No.: |
|---|
| Time & date form completed: |
| Date, time and duration of event: |
| Location of dust? |
| Weather conditions (i.e. dry, rain, fog, snow): |
| Cloud cover (cloud height – low, high, very high, none, partial complete): |
| Wind Strength (light, steady, strong. gusts): |
| Wind direction (from/to): |
| Description of dust event (i.e. colour, particle size, any other comments): |
| On-site activities at the time the dust emission occurred: |
| Has a previous event occurred relating to this source: |
| Any other relevant information: |
| Any upwind dust?: |
| Operating conditions at the time the dust emission occurred: |
| Any remedial actions taken or to be taken: |
| Form completed by (name & signature): |

# Appendix C Dust Complaint Form

| ***Sheet No.:*** | |
|---|---|
| **Date:** | **Time & date of complaint:** |
| Name and address of complainant: | |
| Date, time and duration of offending dust: | |
| Location of dust, if not at the above address: | |
| Weather conditions (i.e. dry, rain, fog, snow): | |
| Cloud cover (Cloud height (low, high, very high): none, slight, partial complete): | |
| Wind strength (light, steady, strong, gusting): | |
| Wind direction (from/to): | |
| Complainant's description of dust & any other comments (i.e. colour, particle size): | |
| Has complainant previously made complaint relating to the site: | |
| Any other relevant information: | |
| Any upwind dust?: | |
| On-site activities at the time the dust emission occurred: | |
| Operating conditions at the time the dust emission occurred: | |
| Any remedial actions taken or to be taken: | |
| Form completed by (name & signature): | |