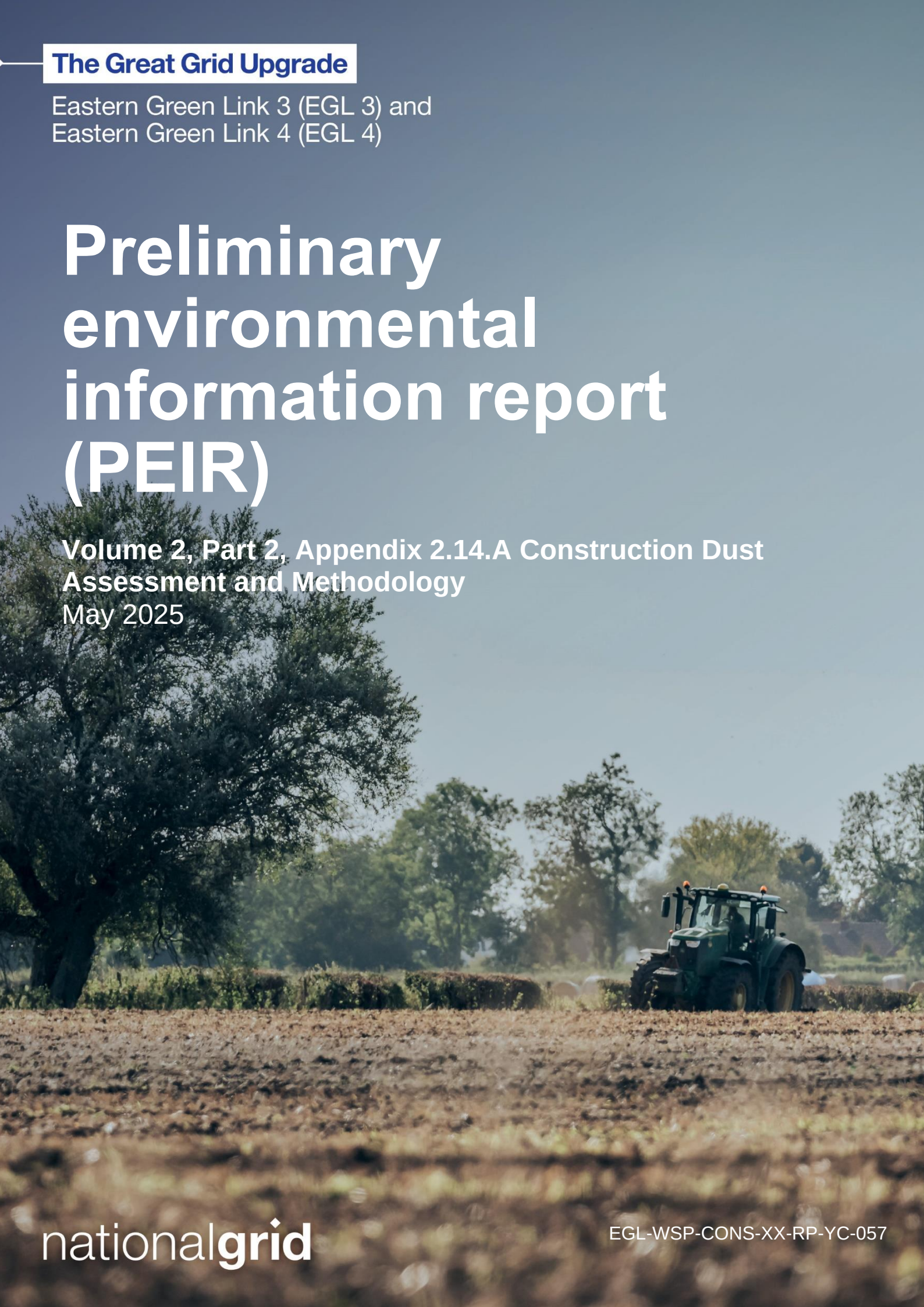
The Great Grid Upgrade

Eastern Green Link 3 (EGL 3) and
Eastern Green Link 4 (EGL 4)

# Preliminary environmental information report (PEIR)

**Volume 2, Part 2, Appendix 2.14.A Construction Dust Assessment and Methodology**

May 2025



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EGL-WSP-CONS-XX-RP-YC-057

# Contents

# 2.14.A. Construction Dust Assessment and Methodology

## 2.14.A.1 Methodology

2.14.A.1.1 The construction dust assessment has been carried out in accordance with the Institute of Air Quality Management (IAQM) construction dust guidance (Ref 2.14.A.1).

2.14.A.1.2 The steps for assessing dust emissions in accordance with the IAQM construction dust guidance (Ref 2.14.A.1) are detailed in the following sections.

### Step 1

2.14.A.1.3 Step 1 screens the requirement for a more detailed assessment. Should human receptors be identified within 250 m of the draft Order Limits or 50 m from the construction vehicle route up to 250 m from the proposed bellmouths, then the assessment proceeds to Step 2. Additionally, should ecological receptors be identified within 50 m of the draft Order Limits or 50 m from the construction vehicle route up to 250 m from the proposed bellmouths, then the assessment also proceeds to Step 2.

2.14.A.1.4 However Natural England raised concerns on the Grimsby to Walpole Project about the study area for ecological receptors being too small. In order to be consistent with the approach on Grimsby to Walpole Project, the study area for construction phase dust for the Projects is therefore as follows:

- Up to 250 m from the draft Order Limits for human receptors and up to 200 m from the draft Order Limits for ecological receptors.
- For human receptors - Up to 50 m from the route(s) used by construction vehicles on the public highway, up to 250 m from the proposed bellmouths.
- For ecological receptors - Up to 200 m from the route(s) used by construction vehicles on the public highway, up to 250 m from the proposed bellmouths.

2.14.A.1.5 Should sensitive receptors not be present within the relevant distances then negligible impacts would be expected and further assessment is not necessary.

### Step 2

2.14.A.1.6 Step 2 assesses the risk of potential dust impacts. A site is allocated a risk category based on two factors:

- The scale and nature of the works, which determines the potential dust emission magnitude as: small, medium, or large (Step 2A); and,
- The sensitivity of the area to dust impacts, which can be defined as low, medium, or high sensitivity (Step 2B).

2.14.A.1.7 The two factors are combined in Step 2C to determine the risk of dust impacts without mitigation applied.

2.14.A.1.8 Step 2A defines the potential magnitude of dust emission through the construction phase. The relevant criteria are summarised in **Table 2.14.A-1**.

**Table 2.14.A-1 – Construction dust magnitude of emissions**

| Magnitude | Activity | Criteria |
|---|---|---|
| Large | Demolition | Total building volume greater than 75,000 $m^3$<br>Potentially dusty construction material (e.g. concrete)<br>On-site crushing and screening<br>Demolition activities greater than 12 m above ground level |
| | Earthworks | Total site area greater than 110,000 $m^2$<br>Potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size)<br>More than 10 heavy earth moving vehicles active at any one time<br>Formation of bunds greater than 6 m in height |
| | Construction | Total building volume greater than 75,000 $m^3$<br>On site concrete batching<br>Sandblasting |
| | Trackout | More than 50 Heavy Duty Vehicle (HDV) outward trips per day<br>Potentially dusty surface material (e.g. high clay content)<br>Unpaved road length greater than 100 m |
| Medium | Demolition | Total building volume 12,000 $m^3$ to 75,000 $m^3$<br>Potentially dusty construction material<br>Demolition activities 6 m to 12 m above ground level |
| | Earthworks | Total site area 18,000 $m^2$ to 110,000 $m^2$<br>Moderately dusty soil type (e.g. silt)<br>5 to 10 heavy earth moving vehicles active at any one time<br>Formation of bunds 3 m to 6 m in height |
| | Construction | Total building volume 12,000 $m^3$ to 75,000 $m^3$<br>Potentially dusty construction material (e.g. concrete)<br>On site concrete batching |
| | Trackout | 20 to 50 HDV outward trips per day<br>Moderately dusty surface material (e.g. high clay content)<br>Unpaved road length 50 m to 100 m |
| Small | Demolition | Total building volume under 12,000 $m^3$<br>Construction material with low potential for dust release (e.g. metal cladding or timber)<br>Demolition activities less than 6 m above ground level<br>Demolition during wetter months |
| | Earthworks | Total site area less than 18,000 $m^2$ |

| Magnitude | Activity | Criteria |
|---|---|---|
| | | Soil type with large grain size (e.g. sand)<br>Less than 5 heavy earth moving vehicles active at any one time<br>Formation of bunds less than 3 m in height |
| | Construction | Total building volume less than 12,000 $m^3$<br>Construction material with low potential for dust release (e.g. metal cladding or timber) |
| | Trackout | Less than 20 HDV outward trips per day<br>Surface material with low potential for dust release<br>Unpaved road length less than 50 m |

2.14.A.1.9 Step 2B defines the sensitivity of the area around the site to potential dust impacts. The influencing factors are shown in **Table 2.14.A-2**.

**Table 2.14.A-2 – Examples of factors defining sensitivity of an area**

| Receptor Sensitivity | Examples | |
|---|---|---|
| | Human Receptors | Ecological Receptors |
| High | Users expect high levels of amenity.<br>High aesthetic or value property.<br>People expected to be present continuously for extended periods of time.<br>Locations where members of the public are exposed over a time period relevant to the air quality objective for $PM_{10}$ e.g. residential properties, hospitals, schools and residential care homes. | Internationally or nationally designated site e.g. Special Area of Conservation, and the designated features may be affected by dust soiling.<br>Locations where there is a community of a particular dust sensitive species such as vascular species included in the Red Data List for Great Britain. |
| Medium | Users would expect to enjoy a reasonable level of amenity.<br>Aesthetics or value of their property could be diminished by soiling.<br>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 e.g. parks and places of work. | Nationally designated site e.g. Sites of Special Scientific Interest (SSSIs) with dust sensitive features.<br>Locations where there is a particularly important plant species, where its dust sensitivity is uncertain or unknown. |
| Low | Enjoyment of amenity would not reasonably be expected. | Locally designated site e.g. Local Nature Reserve (LNR) where the features may be affected by dust deposition. |

| Receptor Sensitivity | Examples | |
|---|---|---|
| | Human Receptors | Ecological Receptors |
| | Property would not be expected to be diminished in appearance.<br>Transient exposure, where people would only be expected to be present for limited periods. e.g. public footpaths, playing fields, shopping streets, playing fields, farmland, footpaths, short term car park and roads. | |

2.14.A.1.10 The guidance also provides the following factors to consider when determining the sensitivity of an area to potential dust impacts:

- Any history of dust generating activities in the area;
- The likelihood of concurrent dust generating activity on nearby sites;
- Any pre-existing screening between the source and receptors;
- Any conclusions drawn from analysing local meteorological data which accurately represent the area;
- The season during which works will take place;
- Any conclusions drawn from local topography;
- Duration of the potential impact, as a receptor may become more sensitive over time; and
- Any known specific receptor sensitivities which go beyond the classifications given in the document.

2.14.A.1.11 These factors were considered when undertaking the assessment.

2.14.A.1.12 The criteria for determining the sensitivity of the area to dust soiling effects on people and property is summarised in **Table 2.14.A-3**.

**Table 2.14.A-3 – Sensitivity of the area to dust soiling effects on people and property**

| Receptor Sensitivity | Number of Receptors | Distance from the Source (m) | | | |
|---|---|---|---|---|---|
| | | Less than 20 | Less than 50 | Less than 100 | Less than 250 |
| High | More than 100 | High | High | Medium | Low |
| | 10 - 100 | High | Medium | Low | Low |
| | 1 - 10 | Medium | Low | Low | Low |
| Medium | More than 1 | Medium | Low | Low | Low |
| Low | More than 1 | Low | Low | Low | Low |

2.14.A.1.13 **Table 2.14.A-4** outlines the criteria for determining the sensitivity of the area to human health impacts.

**Table 2.14.A-4 – Sensitivity of the area to human health impacts**

| Receptor Sensitivity | Annual Mean $PM_{10}$ Concentration | Number of Receptors | Distance from the Source (m) | | | |
|---|---|---|---|---|---|---|
| | | | Less than 20 | Less than 50 | Less than 100 | Less than 250 |
| High | Greater than 32µg/m$^3$ | More than 100 | High | High | High | Medium |
| | | 10 - 100 | High | High | Medium | Low |
| | | 1 - 10 | High | Medium | Low | Low |
| | 28-32µg/m$^3$ | More than 100 | High | High | Medium | Low |
| | | 10 - 100 | High | Medium | Low | Low |
| | | 1 - 10 | High | Medium | Low | Low |
| | 24-28µg/m$^3$ | More than 100 | High | Medium | Low | Low |
| | | 10 - 100 | High | Medium | Low | Low |
| | | 1 - 10 | Medium | Low | Low | Low |
| | Less than 24µg/m$^3$ | More than 100 | Medium | Low | Low | Low |
| | | 10 - 100 | Low | Low | Low | Low |
| | | 1 - 10 | Low | Low | Low | Low |
| Medium | Greater than 32µg/m$^3$ | More than 10 | High | Medium | Low | Low |
| | | 1 - 10 | Medium | Low | Low | Low |

| Receptor Sensitivity | Annual Mean $PM_{10}$ Concentration | Number of Receptors | Distance from the Source (m) | | | |
|---|---|---|---|---|---|---|
| | | | Less than 20 | Less than 50 | Less than 100 | Less than 250 |
| | 28-32µg/$m^3$ | More than 10 | Medium | Low | Low | Low |
| | | 1 - 10 | Low | Low | Low | Low |
| | 24-28µg/$m^3$ | More than 10 | Low | Low | Low | Low |
| | | 1 - 10 | Low | Low | Low | Low |
| | Less than 24µg/$m^3$ | More than 10 | Low | Low | Low | Low |
| | | 1 - 10 | Low | Low | Low | Low |
| Low | - | More than 1 | Low | Low | Low | Low |

2.14.A.1.14 **Table 2.14.A-5** outlines the criteria for determining the sensitivity of the area to ecological impacts.

**Table 2.14.A-5 – Sensitivity of the area to ecological impacts**

| Receptor Sensitivity | Distance from the Source | | | |
|---|---|---|---|---|
| | Less than 20 m | Less than 50 m | Less than 100 m* | Less than 200 m* |
| High | High | Medium | Low | Low |
| Medium | Medium | Low | Low | Low |
| Low | Low | Low | Low | Low |

*Deviation from guidance following advice from Natural England

2.14.A.1.15 Step 2C combines the dust emission magnitude with the sensitivity of the area to determine the risk of unmitigated impacts.

2.14.A.1.16 **Table 2.14.A-6** outlines the risk category from demolition activities.

**Table 2.14.A-6 – Dust risk category from demolition activities**

| Receptor Sensitivity | Dust Emission Magnitude | | |
|---|---|---|---|
| | Large | Medium | Small |
| High | High Risk | Medium Risk | Medium Risk |
| Medium | High Risk | Medium Risk | Low Risk |
| Low | Medium Risk | Low Risk | Negligible |

2.14.A.1.17 **Table 2.14.A-7** outlines the risk category from earthworks and construction activities.

**Table 2.14.A-7 – Dust risk category from construction and earthwork activities**

| Receptor Sensitivity | Dust Emission Magnitude | | |
|---|---|---|---|
| | Large | Medium | Small |
| High | High Risk | Medium Risk | Low Risk |
| Medium | Medium Risk | Medium Risk | Low Risk |
| Low | Low Risk | Low Risk | Negligible |

2.14.A.1.18 **Table 2.14.A-8** outlines the risk category from trackout activities.

**Table 2.14.A-8 – Dust risk category from trackout activities**

| Receptor Sensitivity | Dust Emission Magnitude | | |
|---|---|---|---|
| | Large | Medium | Small |
| High | High Risk | Medium Risk | Low Risk |
| Medium | Medium Risk | Medium Risk | Low Risk |
| Low | Low Risk | Low Risk | Negligible |

### Step 3

2.14.A.1.19 Step 3 requires the identification of site-specific mitigation measures within the guidance to reduce potential dust impacts based upon the relevant risk categories identified in Step 2. For sites with negligible risk, mitigation measures beyond those required by legislation are not required. However, additional controls may be applied as part of good practice.

### Step 4

2.14.A.1.20 Once the risk of dust impacts has been determined and the appropriate mitigation measures identified, the final step is to determine the significance of any residual impacts. For almost all construction activity, the aim should be to control effects using effective mitigation. Experience shows that this is normally possible, hence the residual effect will normally not be significant.

## 2.14.A.2 Assessment

### Step 1

2.14.A.2.1 The undertaking of activities such as excavation, ground works, cutting, construction and storage of materials has the potential to result in fugitive dust emissions throughout the construction phase. Vehicle movements both on-site and on the local road network also have the potential to result in the re-suspension of dust from

highway surfaces. This construction dust assessment has been carried out to assess the risk associated with dust emissions from construction related activities associated with the Projects.

2.14.A.2.2 The potential for impacts at sensitive locations depends significantly on local meteorology during the undertaking of dust generating activities, with the most potential significant effects likely to occur during dry and windy conditions.

2.14.A.2.3 A desk-study identified sensitive human receptors within 250 m of the draft Order Limits, mostly residential properties and farms in the area.

2.14.A.2.4 There are several ecological sites identified within 200 m of the draft Order Limits which are outlined in **Table 2.14.A-9** below and are displayed in **Volume 3, Part 2, Figure 14-2 Construction Dust Study Area.**

**Table 2.14.A-9 – Ecological sites within 200 m of draft Order Limits**

| Site Name | Designation |
|---|---|
| Welton Low Wood | Ancient Woodland (AW) |
| Greater Wash | Special Protection Area (SPA) |
| Willoughby Meadow | Site of Special Scientific Interest (SSSI) |
| North Level Main Drain at Tydd Gote | County Wildlife Site (CWS) |
| River Nene | CWS |
| Cross Keys Pool and Field | Local Wildlife Site (LWS) |
| Spendluffe Meadow | LWS |
| Frith Bank Drain | LWS |
| Willoughby Meadow West | LWS |
| Gunby Meadow | LWS |
| Gunby Park | LWS |
| Hobhole Drain, Boston Corporation Farm to Station Cottages | LWS |
| Hobhole Drain, Simmon House Bridge to Benington Bridge | LWS |
| Nene Bank Road Verges | LWS |
| Hunger Hill Pasture | LWS |
| Moulton River | LWS |
| Huttoft Car Terrace to Marsh Yard Dunes | LWS |
| Marsh Yard to Anderby Creek Dunes | LWS |
| River Lymn (Partney Bridge to Mill Bridge) | LWS |

| Site Name | Designation |
|---|---|
| Moggs Eye Sea Bank Ponds | LWS |
| Old Hall Farm, Great Steeping | LWS |
| South Bank Fosdyke | LWS |
| South Forty Foot Drain | LWS |
| Tydd Gote Bank | LWS |
| Welton Low Wood | LWS |
| Witham Way, Anton's Gowt to Boston | LWS |
| South Holland Main Drain Banks | LWS |
| Honington House Farm | CWS |

## Step 2A

### *Demolition*

2.14.A.2.5 The Projects do not include any proposed demolition activity, as such impacts from demolition have not been considered further in the assessment.

### *Earthworks*

2.14.A.2.6 The total site area is greater than 110,000 $m^2$ and the soil type mostly consists of silt. The number of heavy earth moving vehicles active at any one time is greater than 10 and bund heights are less than 3 m. As such the potential dust emission magnitude for construction is considered to be **large**.

### *Construction*

2.14.A.2.7 The total building volume is likely to be greater than 75,000 $m^3$ and construction materials would include concrete. There is potential for there to be on-site concrete batching. As such the potential dust emission magnitude for construction is considered to be **large**.

### *Trackout*

2.14.A.2.8 The maximum number of outward HDV movements per day is expected to be greater than 50. The access tracks for construction HDVs are expected to be unpaved and would be greater than 100 m in length. As such the magnitude of potential dust emissions from trackout is considered to be **large.**

2.14.A.2.9 The dust emission magnitude for each dust generating activity for the Projects is summarised in **Table 2.14.A-10** below.

**Table 2.14.A-10 – Dust emission magnitude summary**

| Activity | Dust emission magnitude |
|---|---|
| Demolition | Not Applicable |
| Earthworks | Large |
| Construction | Large |
| Trackout | Large |

### Step 2B

2.14.A.2.10 Receptors sensitive to potential dust impacts during earthworks and construction activities were approximated from a desktop study of the area up to 250 m from the site boundary. These are summarised in **Table 2.14.A-11**.

**Table 2.14.A-11 – Earthworks and construction dust sensitive receptors**

| Distance from Sites (m) | Approximate Number of Human Receptors | Approximate Number of Ecological Receptors* |
|---|---|---|
| Less than 20 | >100 with high sensitivity | 10-100 with high sensitivity |
| Less than 50 | >100 with high sensitivity | 10-100 with high sensitivity |
| Less than 100 | >100 with high sensitivity | 10-100 with high sensitivity |
| Less than 200 | >100 with high sensitivity | 10-100 with high sensitivity |
| Less than 250 | >100 with high sensitivity | N/A |

*Deviation from guidance following advice from Natural England

2.14.A.2.11 Receptors sensitive to potential dust impacts from trackout were approximated from a desktop study of the area up to 200 m from the road network within 250 m of the proposed bellmouths. These are summarised in **Table 2.14.A-12**.

**Table 2.14.A-12 – Trackout dust sensitive receptors**

| Distance from Sites (m) | Approximate Number of Human Receptors | Approximate Number of Ecological Receptors* |
|---|---|---|
| Less than 20 | >100 with high sensitivity | >1 with low sensitivity |
| Less than 50 | >100 with high sensitivity | >1 with low sensitivity |
| Less than 100 | N/A | >1 with low sensitivity |
| Less than 200 | N/A | >1 with low sensitivity |

*Deviation from guidance following advice from Natural England

2.14.A.2.12 In accordance with the IAQM construction dust guidance (Ref 2.14.A.1), the highest level of sensitivity should be recorded from the criteria outlined in the guidance.

2.14.A.2.13 The IAQM construction dust guidance (Ref 2.14.A.1) defines residential properties as being high sensitivity receptors to dust soiling impacts and therefore the sensitivity of the surrounding area for dust soiling impacts has been determined based on the number of high sensitivity receptors and the distance of the receptor from the source (**Table 2.14.A-3**).

2.14.A.2.14 To determine the sensitivity of the receiving environment for human health effects, the maximum 2025 $PM_{2.5}$ background concentration across the draft Order Limits was obtained from the Defra website (Ref 2.14.A.2) and identified as being 14.0 $\mu g/m^3$ (grid square: 554500, 377500). Therefore, in accordance with the IAQM construction dust guidance (Ref 2.14.A.1), health impacts should be determined based on the criteria within the less than 24 $\mu g/m^3$ category (refer to **Table 2.14.A-4**). As the human receptors include residential properties, the sensitivity of the receptor is considered to be high and therefore the sensitivity of the surrounding area for human health impacts has been determined based on the number of high sensitivity receptors within the less than 24 $\mu g/m^3$ background $PM_{10}$ category and the distance of the receptors from the source (refer to **Table 2.14.A-4**).

2.14.A.2.15 In accordance with the IAQM construction dust guidance (Ref 2.14.A.1), internationally and nationally designated sites such as SPAs, SSSIs and AWs are defined as high sensitivity and local designated sites such as LWSs and CWSs are defined as low sensitivity for ecological impacts. Within 200 m of the draft Order Limits there is a mixture of high and low sensitivity designated sites, as such following a worst case approach the sensitivity of the area to ecological impacts has been determined based on the high receptor sensitivity and the distance of the receptor from the source (**Table 2.14.A-5**).

2.14.A.2.16 The sensitivity of the receiving environment to specific dust impacts is summarised in **Table 2.14.A-13**.

**Table 2.14.A-13 – Summary of the sensitivity of the area**

| Potential Impact | Sensitivity of the surrounding area | | |
|---|---|---|---|
| | Earthworks | Construction | Trackout |
| Dust Soiling | High | High | High |
| Human Health | Medium | Medium | Medium |
| Ecology | High | High | Low |

## Step 2C

2.14.A.2.17 The risk of effects in the absence of environmental measures was then defined based upon the interaction between the magnitude of emission and the highest level of area sensitivity (determined in Steps 2A and 2B, respectively) for each dust generating activity. The risk of dust effects was determined, as presented in **Table 2.14.A-14**.

**Table 2.14.A-14 – Summary of the risk of dust effects**

| Potential Impact | Risk | | |
|---|---|---|---|
| | Earthworks | Construction | Trackout |
| Dust Soiling | High Risk | High Risk | High Risk |
| Human Health | Medium Risk | Medium Risk | Medium Risk |
| Ecology | High Risk | High Risk | Low Risk |

2.14.A.2.18 As indicated in **Table 2.14.A-14**, the potential risk for dust soiling is high risk for earthworks, construction and trackout. The potential risk of human health impacts is medium risk for earthworks, construction and trackout. The potential risk of dust impacts on designated ecological sites is high risk for earthworks and construction (as a worst case) and low risk for trackout. The assessment has indicated that the risk of dust effects is high as a worst case for the Projects.

2.14.A.2.19 It should be noted that the potential for impacts depends significantly on the distance between the dust generating activity and receptor location. Risk was predicted based on a worst-case scenario of works being undertaken at the edge of the draft Order Limits. Therefore, actual risk is likely to be lower than that predicted during the majority of the construction phase.

### Step 3

2.14.A.2.20 The IAQM construction dust guidance (Ref 2.14.A.1) provides potential mitigation measures to reduce impacts as a result of fugitive dust emissions during the construction phase. These have been adapted for the Projects based on the risk of dust effects (**Table 2.14.A-14**) and are summarised in **Table 2.14.A-15**.

2.14.A.2.21 It should be noted that where construction activities are undertaken within 200 m of local designated sites (LWSs and CWSs), the sensitivity of the area to ecological impacts is considered as low sensitivity and therefore less stringent mitigation measures to those summarised in **Table 2.14.A-15** would apply. The below mitigation measures would be reviewed as part of the Dust Management Plan (DMP).

**Table 2.14.A-15 – Proposed dust mitigation measures based on IAQM guidance**

| Mitigation Measure | High Risk Measures. H=Highly Recommended. D=Desirable | Environmental Measure ID (as per Volume 2, Part 1, Appendix 1.5.B Outline Code of Construction Practice (CoCP)) |
|---|---|---|
| **Communications** | | |
| Develop and implement a stakeholder communications plan that includes community engagement before work commences on site. | H | GG22 |

| Mitigation Measure | High Risk Measures. H=Highly Recommended. D=Desirable | Environmental Measure ID (as per Volume 2, Part 1, Appendix 1.5.B Outline Code of Construction Practice (CoCP)) |
|---|---|---|
| Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager. | H | GG02 |
| Display the head or regional office contact information. | H | GG02 |
| **Dust Management** | | |
| Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority. | H | AQ02 |
| **Site Management** | | |
| Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken. | H | GG22 |
| Make the complaints log available to the local authority when asked. | H | GG22 |
| Record any exceptional incidents that cause dust and/or air emissions, either on- or off-site, and the action taken to resolve the situation in the log book. | H | GG12, GG19 |
| Hold regular liaison meetings with other high risk construction sites within 500 m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. It is important to understand the interactions of the off-site transport/deliveries which might be using the same strategic road network routes. | H | GG24 |
| **Monitoring** | | |

| Mitigation Measure | High Risk Measures. H=Highly Recommended. D=Desirable | Environmental Measure ID (as per Volume 2, Part 1, Appendix 1.5.B Outline Code of Construction Practice (CoCP)) |
|---|---|---|
| Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the Local Authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and window sills within 100 m of site boundary, with cleaning to be provided if necessary. | H | GG02, AQ06 |
| Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked. | H | AQ06 |
| Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions. | H | AQ06 |
| Agree proportionate dust deposition, dust flux, or real-time PM10 continuous monitoring locations with the Local Authority. Where possible, commence baseline monitoring at least three months before work commences on site or, if it a large site, before work on a phase commences. Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction. | H | AQ06 |
| **Preparing and maintaining the site** | | |
| Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible. | H | GG09 |

| Mitigation Measure | High Risk Measures. H=Highly Recommended. D=Desirable | Environmental Measure ID (as per Volume 2, Part 1, Appendix 1.5.B Outline Code of Construction Practice (CoCP)) |
|---|---|---|
| Erect solid screens or barriers around dusty activities or the site boundary so that are at least as high as any stockpiles on site. | H | AQ02 |
| Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period. | H | AQ02, GG08 |
| Avoid site runoff of water or mud. | H | MT01 |
| Keep site fencing, barriers and scaffolding clean using wet methods. | H | AQ02 |
| Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site, cover as described below. | H | AQ02 |
| Cover, seed or fence stockpiles to prevent wind whipping. | H | GG14 |
| **Operating vehicle/machinery and sustainable travel** | | |
| Ensure that NRMM meets Stage V type-approval | H | AQ07, GG10 |
| Ensure all vehicles switch off engines when stationary - no idling vehicles. | H | AQ07 |
| Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable. | H | AQ07 |
| Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas (if long haul routes are required, these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the | H | AQ07 |

| Mitigation Measure | High Risk Measures. H=Highly Recommended. D=Desirable | Environmental Measure ID (as per Volume 2, Part 1, Appendix 1.5.B Outline Code of Construction Practice (CoCP)) |
|---|---|---|
| agreement of the Local Authority, where appropriate). | | |
| Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials. | H | AQ07 |
| Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing). | H | AQ07 |
| **Operations** | | |
| Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems. | H | AQ04 |
| Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate. | H | GG23 |
| Use enclosed chutes and conveyors and covered skips. | H | AQ04 |
| Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate. | H | AQ04, GG11 |
| Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods. | H | GG12, GH05 |
| **Waste Management** | | |
| Avoid bonfires and burning of waste materials. | H | GG15 |
| **Earthworks** | | |

| Mitigation Measure | High Risk Measures. H=Highly Recommended. D=Desirable | Environmental Measure ID (as per Volume 2, Part 1, Appendix 1.5.B Outline Code of Construction Practice (CoCP)) |
|---|---|---|
| Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable. | H | AQ09, GG13 |
| Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable. | H | AQ09 |
| Only remove the cover in small areas during work and not all at once. | H | AQ09 |
| **Construction** | | |
| Avoid scabbling (roughening of concrete surfaces) if possible. | H | AQ10 |
| Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place. | H | AQ10 |
| Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery. | H | AQ10 |
| For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust. | D | AQ10 |
| **Trackout** | | |
| Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use. | H | GG13 |

| Mitigation Measure | High Risk Measures. H=Highly Recommended. D=Desirable | Environmental Measure ID (as per Volume 2, Part 1, Appendix 1.5.B Outline Code of Construction Practice (CoCP)) |
|---|---|---|
| Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable. | H | GG02, AQ02 |
| Record all inspections of haul routes and any subsequent action in a site log book. | H | GG02, AQ02 |
| Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned. | H | GG13 |
| Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable). | H | GG13 |
| Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits. | H | GG13 |

### Step 4

2.14.A.2.22 Assuming the relevant mitigation measures outlined in **Table 2.14.A-15** are implemented, the residual effect from all dust generating activities is predicted to be not significant. Compliance with these measures would be secured by the way of a requirement in the DCO/via DCO submission as outlined in **Volume 2, Part 1, Appendix 1.5.B: Outline CoCP.**

## Bibliography

Ref 2.14.A.1 Institute of Air Quality Management (IAQM) Guidance on the Assessment of Dust from Demolition and Construction Version 2.2 (2024).

Ref 2.14.A.2 Department of Agriculture and Rural Affairs UK Air (2024). [Online]. Available at: https://uk-air.defra.gov.uk [Accessed February 2025].

National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com