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## 10. AIR QUALITY

### 10.1 INTRODUCTION

#### 10.1.1 Background & Objectives

This chapter of the remedial EIAR describes and assesses the residual direct and indirect air quality impacts of peat extraction and ancillary activities, at the Application Site.

The air quality impact assessment has been prepared for the Peat Extraction Phase (1988 – June 2020), the Current Phase (June 2020 – present day) and the Remedial Phase (activities intended to be carried out into the future) of the Project.

As discussed in Chapter 1, historical impacts associated with the Peat Extraction Phase have been assessed from 1988 (the latest date for the transposition of the EIA Directive into Irish law), to present day.

The baseline environment has been prepared with reference to published air quality data from the Environmental Protection Agency (EPA). For the purposes of this assessment, while the activities associated with the Project assessed have occurred over the past decades, beginning in 1988 and continuing to present day, impacts have been assessed against the most recently published air quality standards which are likely more stringent than historical standards from previous years. Therefore, if it can be determined that, based on the most recent standards, no significant effects occurred as a result of the Project, then it is unlikely that significant impacts occurred based on historical policy.

#### 10.1.2 Statement of Authority

This chapter of the remedial EIAR has been prepared by the following staff of AWN Consulting Ltd:

Ciara Nolan (Principal Air Quality Consultant) holds a BSc (Eng) in Energy Systems Engineering from University College Dublin and has also completed an MSc in Applied Environmental Science at UCD. She is a Member of the Institute of Air Quality Management (MIAQM) and the Institution of Environmental Sciences (MIEnvSc). Ciara has over 9 years of experience in the field of air quality consultancy. She has prepared the air quality and climate EIAR chapters for a range of developments including wind energy, industrial, pharmaceutical, data centre, residential and commercial. Ciara has completed air quality and climate assessments as part of several substitute consent applications for historic peat extraction activities on behalf of Bord na Móna as well as substitute consent applications for historic quarrying activities for a variety of clients.

This chapter was reviewed by Dr. Jovanna Arndt, a Principal Environmental Consultant in the Air Quality & Climate section of AWN Consulting. She has been specialising in the area of air quality and climate over 9 years and has prepared air quality and climate assessments for inclusion within EIARs for residential developments, commercial and industrial developments, as well as renewable energy developments. She also specialises in assessing air quality impacts using air dispersion modelling of transportation schemes such as, major Highways England Road schemes and major rail infrastructure in the form of High Speed 2 (HS2 in the UK). She has

prepared air dispersion modelling assessments of emissions from data centres, energy centres and the chemical industry as part of EPA Industrial Emissions Licences. She has also provided Air Quality Action Plan (AQAP) and Air Quality Management Area (AQMA) support to several UK councils and assessed the air quality impacts of potential Clean Air Zones in the UK.

### 10.1.3 Project Description

A full description of the Project is provided in Section 4.3 in Chapter 4.

A brief summary pertaining to Air Quality of the Project Phases, as detailed in Section 4.3.1 in Chapter 4, is provided in the following sections.

#### *10.1.3.1 Peat Extraction Phase (July 1988-June 2020)*

Site preparation works including the installation of drainage channels commenced at the Application Site in 1950. This was followed by the commencement of industrial peat extraction in 1958 which continued across the Application Site over the following decades. Drainage and site clearance works were complete at the Application Site by July 1988 and peat extraction was a well-established activity at the Application Site. Dust emissions and vehicle and machinery exhaust emissions were the primary impacts to air quality as a result of peat extraction and ancillary activities during the Peat Extraction Phase. The Peat Extraction Phase is described in detail in Section 4.7 of Chapter 4 Project Description.

#### *10.1.3.2 Current Phase (June 2020 to Present Day)*

Peat extraction ceased at the Application Site in June 2020. During the Current Phase, the activity on the Application Site is less than during the Peat Extraction Phase and included the removal and transportation off site of any remaining peat stockpiles, which occurred in 2021. Other activities ongoing during the Current Phase include environmental monitoring associated with the IPC Licence (IPC) P0501-01 requirements as well as Rehabilitation and Decommissioning activities. There are limited vehicle and machinery related exhaust emissions associated with the current works, primarily as a result of the removal of the peat stockpiles and ongoing monitoring and control measures. Exhaust emissions have the potential to impact air quality, however, to a lesser degree than during the Peat Extraction Phase due to the low number of vehicles required. In addition, there were likely some minor dust emissions associated with the removal of the peat stockpiles which would have an impact on air quality. However, these dust emissions would be significantly less than those which would have arisen during the Peat Extraction Phase. The Current Phase is described in detail in Section 4.8 of Chapter 4 Project Description.

#### *10.1.3.3 Remedial Phase*

It is a requirement of 'Condition 10 Cutaway Bog Rehabilitation' of the IPC Licence No. P0501-01 that following decommissioning of use of all or part of their bogs, Bord na Móna, prepares (to the satisfaction of the EPA) and implements a Cutaway Bog Decommissioning and Rehabilitation Plan – see Appendix 4-3 for details.

There will likely be minimal use of diggers to assist in drain blocking activities, however, due to the short-term duration of the drain blocking activities and the low volume of machinery involved (likely 1 no. digger and 1 no. tractor) impacts to air quality from exhaust emissions will

be imperceptible. Ecologists and site managers will visit the Application Site regularly for monitoring purposes which will also result in air emissions from vehicles, however these will be minimal due to the low number of vehicles required. The Remedial Phase is described in detail in Section 4.9 of Chapter 4 Project Description.

## 10.2 METHODOLOGY

### 10.2.1 EPA Description of Effects

The significance of effects of peat extraction and ancillary activities will be described in accordance with the EPA guidance document Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR), May 2022. Details of the methodology for describing the significance of the effects are provided in Chapter 2 – remedial EIAR Methodology.

The effects associated with peat extraction and ancillary activities are described with respect to the EPA guidance in the relevant sections of this chapter.

### 10.2.2 Assessment Criteria

#### 10.2.2.1 IPC Licence Criteria

There are no statutory limits on dust deposition, and the focus is on the prevention of nuisance and minimising air borne dust emissions where practicable. Although coarse dust is not regarded as a threat to health, it can create a nuisance by depositing on surfaces. Condition 5 of the Integrated Pollution Control Licence Reg. No. P0501-01 issued to Bord na Móna Energy Limited in April 2000 is specific to Emissions to Atmosphere, including dust emissions. The following conditions apply:

- 5.2 *The licensee shall ensure that all operations on-site shall be carried out in a manner such that air emissions and/or dust do not result in significant impairment of, or significant interference with amenities or the environment beyond the site boundary.*
- 5.3 *Within three months of the date of grant of the licence, the licensee shall submit to the Agency for agreement, a proposal for the identification and monitoring of Dust Sensitive Locations (DSL's) on and off site for dust deposition. A report on this monitoring shall be submitted annually as part of the AER.*
- 5.4 *Activities on-site shall not give rise to dust levels off site at any Dust Sensitive Location which exceed an emission limit of 350 mg/m<sup>2</sup>/day. [The sampling method to be in accordance with German TA Luft Emission Standards for Particle Deposition (IW1)].*

The dust emission limit value of 350 mg/m<sup>2</sup>/day is applicable to the Peat Extraction Phase, Current Phase, and Remedial Phase of this assessment.

#### 10.2.2.2 Air Quality Standards

In addition to the above licenced condition in relation to dust emissions and dust deposition, emissions of nitrogen dioxide (NO<sub>2</sub>), particulate matter less than 10 microns (PM<sub>10</sub>) and particulate matter less than 2.5 microns (PM<sub>2.5</sub>) also have the potential to impact air quality at

sensitive locations as a result of activities associated with the Peat Extraction Phase, the Current Phase and Remedial Phase.

In 1996, the Air Quality Framework Directive (96/62/EC) was published. This Directive was transposed into Irish law by the Environmental Protection Agency Act 1992 (Ambient Air Quality Assessment and Management) Regulations 1999. The Directive was followed by four Daughter Directives, which set out limit values for specific pollutants:

- First Daughter Directive (1999/30/EC) addresses sulphur dioxide (SO<sub>2</sub>), oxides of nitrogen (NO<sub>x</sub>), particulate matter (PM<sub>10</sub>) and lead (Pb);
- Second Daughter Directive (2000/69/EC) addresses carbon monoxide and benzene. The first two Daughter Directives were transposed into Irish law by the Air Quality Standards Regulations 2002 (SI No. 271 of 2002);
- Third Daughter Directive (2002/3/EC) relating to ozone was published in 2002 and was transposed into Irish law by the Ozone in Ambient Air Regulations 2004 (SI No. 53 of 2004); and,
- Fourth Daughter Directive (2004/107/EC), published in 2004, relates to polyaromatic hydrocarbons (PAHs), arsenic (As), nickel (Ni), cadmium (Cd) and mercury (Hg) in ambient air. This was transposed into Irish law by the Arsenic, Cadmium, Mercury, Nickel and Polycyclic Aromatic Hydrocarbons in Ambient Air Regulations, 2009 (S.I. No. 58 of 2009).

The Air Quality Framework Directive and the first three Daughter Directives were replaced by the Clean Air for Europe (CAFE) Directive (Directive 2008/50/EC on ambient air quality), which encompassed the following elements:

- The merging of most of the existing legislation into a single Directive (except for the Fourth Daughter Directive) with no change to existing air quality objectives;
- New air quality objectives for particulate matter less than 2.5 micrometres (µm) referred to as PM<sub>2.5</sub> including the limit value and exposure concentration reduction target;
- The possibility to discount natural sources of pollution when assessing compliance against limit values; and,
- The possibility for time extensions of three years for particulate matter less than 10µm (PM<sub>10</sub>) or up to five years (nitrogen dioxide, benzene) for complying with limit values, based on conditions and the assessment by the European Commission.

The CAFE Directive was transposed into Irish legislation by the Ambient Air Quality Standards Regulations 2022 (S.I. No. 739/2022). These regulations supersede the Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011), which previously superseded the Air Quality Standards Regulations 2002 (S.I. No. 271 of 2002), the Ozone in Ambient Air Regulations 2004 (S.I. No. 53 of 2004), and the Ambient Air Quality Assessment and Management Regulations 1999 (S.I. No. 33 of 1999).

The Air Quality Standards Regulations 2022, which incorporate EU Directive 2008/50/EC, set similar or more stringent limit values in relation to the air pollutants outlined in the previous directives and also set limit values in relation to PM<sub>2.5</sub>.

In October 2024 the EU formally adopted Directive (EU) 2024/2881 *of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for*

*Europe (recast)*. This Directive supersedes EU Directive 2008/50/EC and sets out air quality standards for pollutants to be reached by 2026 and 2030.

The ambient air quality limit values for pollutants are set out in Annex I of Directive (EU) 2024/2881. Table 1 of Annex I in Directive (EU) 2024/2881 sets out the updated air quality limit values for pollutants to be achieved by 1 January 2030, which are more closely aligned with the Interim Target 4 (IT4) of the 2021 WHO air quality guidelines. Table 2 of Annex I in Directive (EU) 2024/2881 sets out the limit values for air pollutants which are to be achieved by 11 December 2026 and are also applicable up to 2030. The limit values in Table 2 of Annex I are the same as the limits set under Directive 2008/50/EC and the Air Quality Standards Regulations 2022.

The Air Quality Standards Regulations 2022 (S.I. 739 of 2022) transposed EU Directive 2008/50/EC. With the adoption of Directive (EU) 2024/2881, Ireland must transpose this Directive into national law within the statutory two-year period, i.e. update the Air Quality Standards Regulations before December 2026.

The ambient air quality standards applicable for NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> outlined in Table 1 of Annex I in Directive (EU) 2024/2881 (see Table 10-1) have been used in this assessment to determine the impact of the Peat Extraction Phase, the Current Phase and the Remedial Phase on air quality, as these limits are more stringent than previous limits this ensures a conservative approach for the assessment. The use of the more stringent post-2030 limit values is recommended by Transport Infrastructure Ireland (TII) in their air quality guidance document *Air Quality Assessment of Specified Infrastructure Projects – PE-ENV-01106* (TII, 2025)

Air quality impacts are assessed at sensitive receptors off-site (see Section 10.2.4 in relation to assessment study area). Sensitive receptors for the purposes of this assessment are any occupied dwelling house, hostel, health building or place of worship and may include areas of particular scenic quality or special recreational amenity importance. Areas of ecological importance where designated species may be adversely impacted by dust soiling are also considered sensitive locations.

**Table 10-1: Ambient Air Quality Standards**

| Pollutant                           | (EU) 2024/2881 Annex I Table 2                                                           |                                                                | (EU) 2024/2881 Annex I Table 1                                                          |                                    |
|-------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------|
|                                     | Limit Type                                                                               | Limit Value (to be achieved by 2026 and applicable until 2030) | Limit Type                                                                              | Limit Value (applicable from 2030) |
| Nitrogen Dioxide (NO <sub>2</sub> ) | Hourly limit for protection of human health - not to be exceeded more than 18 times/year | 200 µg/m <sup>3</sup>                                          | Hourly limit for protection of human health - not to be exceeded more than 3 times/year | 200 µg/m <sup>3</sup>              |
|                                     | n/a                                                                                      | n/a                                                            | 24-hour limit for protection of human                                                   | 50 µg/m <sup>3</sup>               |

| Pollutant                                  | (EU) 2024/2881 Annex I Table 2                                                            |                                                                | (EU) 2024/2881 Annex I Table 1                                                            |                                    |
|--------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------|
|                                            | Limit Type                                                                                | Limit Value (to be achieved by 2026 and applicable until 2030) | Limit Type                                                                                | Limit Value (applicable from 2030) |
|                                            |                                                                                           |                                                                | health - not to be exceeded more than 18 times/year                                       |                                    |
|                                            | Annual limit for protection of human health                                               | 40 µg/m <sup>3</sup>                                           | Annual limit for protection of human health                                               | 20 µg/m <sup>3</sup>               |
| Particulate Matter (as PM <sub>10</sub> )  | 24-hour limit for protection of human health - not to be exceeded more than 35 times/year | 50 µg/m <sup>3</sup>                                           | 24-hour limit for protection of human health - not to be exceeded more than 18 times/year | 45 µg/m <sup>3</sup>               |
|                                            | Annual limit for protection of human health                                               | 40 µg/m <sup>3</sup>                                           | Annual limit for protection of human health                                               | 20 µg/m <sup>3</sup>               |
| Particulate Matter (as PM <sub>2.5</sub> ) | n/a                                                                                       | n/a                                                            | 24-hour limit for protection of human health - not to be exceeded more than 18 times/year | 25 µg/m <sup>3</sup>               |
|                                            | Annual limit for protection of human health                                               | 25 µg/m <sup>3</sup>                                           | Annual limit for protection of human health                                               | 10 µg/m <sup>3</sup>               |

### 10.2.3 Scoping and Consultation

The scope for this remedial EIAR has been informed by consultation with statutory consultees, bodies with environmental responsibility and other interested parties such as the Department of Housing, Local Government and Heritage, the Environmental Protection Agency, Transport Infrastructure Ireland, Department of Climate, Energy and the Environment (DCEE) Health & Safety Authority, and the National Transport Authority as outlined in Section 2.6 of Chapter 2 of the remedial EIAR.

The scope of this assessment has been defined with reference to relevant legislation, published guidance, the nature and scale of the Project and professional judgment. No specific consultation with regard to air quality was conducted.

### 10.2.4 Study Area

In relation to potential dust impacts, the Institute of Air Quality Management in the UK (IAQM) guidance document '*Guidance on the Assessment of Dust from Demolition and Construction*'

(IAQM, 2024) states that dust impacts to people and property can occur up to 250m from the source. In addition, the guidance states that dust impacts to vegetation can occur up to 50m from a site and 50m from site access roads, up to 250m for a site entrance (IAQM, 2024). As a result, the study area with respect to dust impacts extends to 250m from the Application Site boundary for the purposes of this assessment (hereafter referred to as the 'Study Area'). Figure 10.1 to Figure 10.5 show the sensitive human and ecological receptors within the Study Area.

In relation to air quality impacts from vehicle emissions, the TII PE-ENV-01106 guidance (TII, 2025) states that a detailed air quality assessment is required where there are sensitive receptors (human or ecological) within 200m of affected road links. However, as noted in Section 10.2.5.1 below, a detailed assessment of traffic related air emissions has been screened out of this assessment as the changes in traffic are below the threshold requiring a detailed assessment.

For the purposes of this assessment, high sensitivity receptors to dust soiling or dust-related human health effects are regarded as residential properties where people are likely to spend the majority of their time, schools, hospitals and residential care homes. Commercial properties and places of work are regarded as medium sensitivity while low sensitivity receptors are places where people are present for short periods or do not expect a high level of amenity.

In relation to potential dust related ecological impacts, high sensitivity receptors are designated areas of conservation (either Irish or European designation) and where dust sensitive species are present.

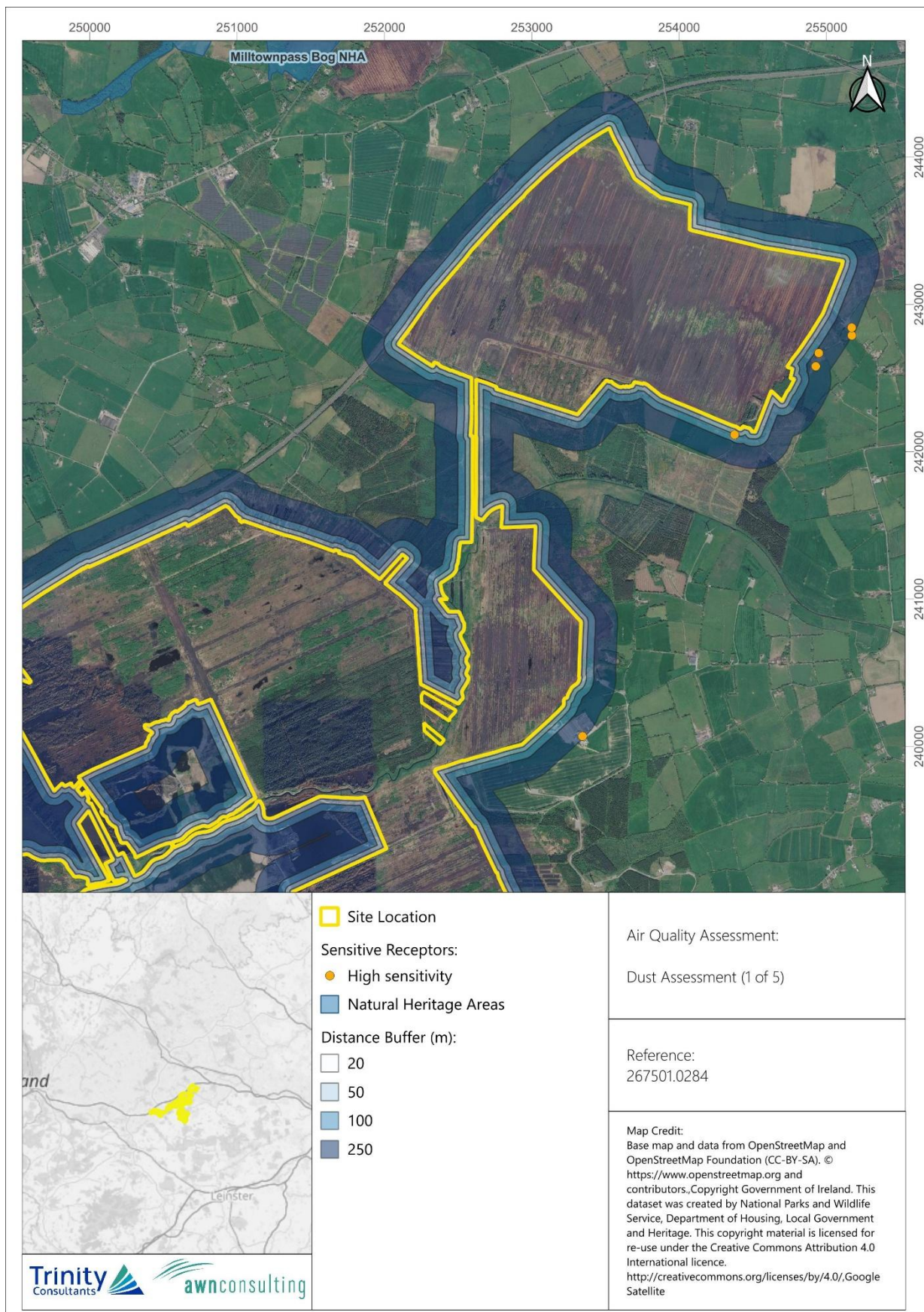


Figure 10.1: Sensitive Receptors within 250m of Application Site (1 of 5)

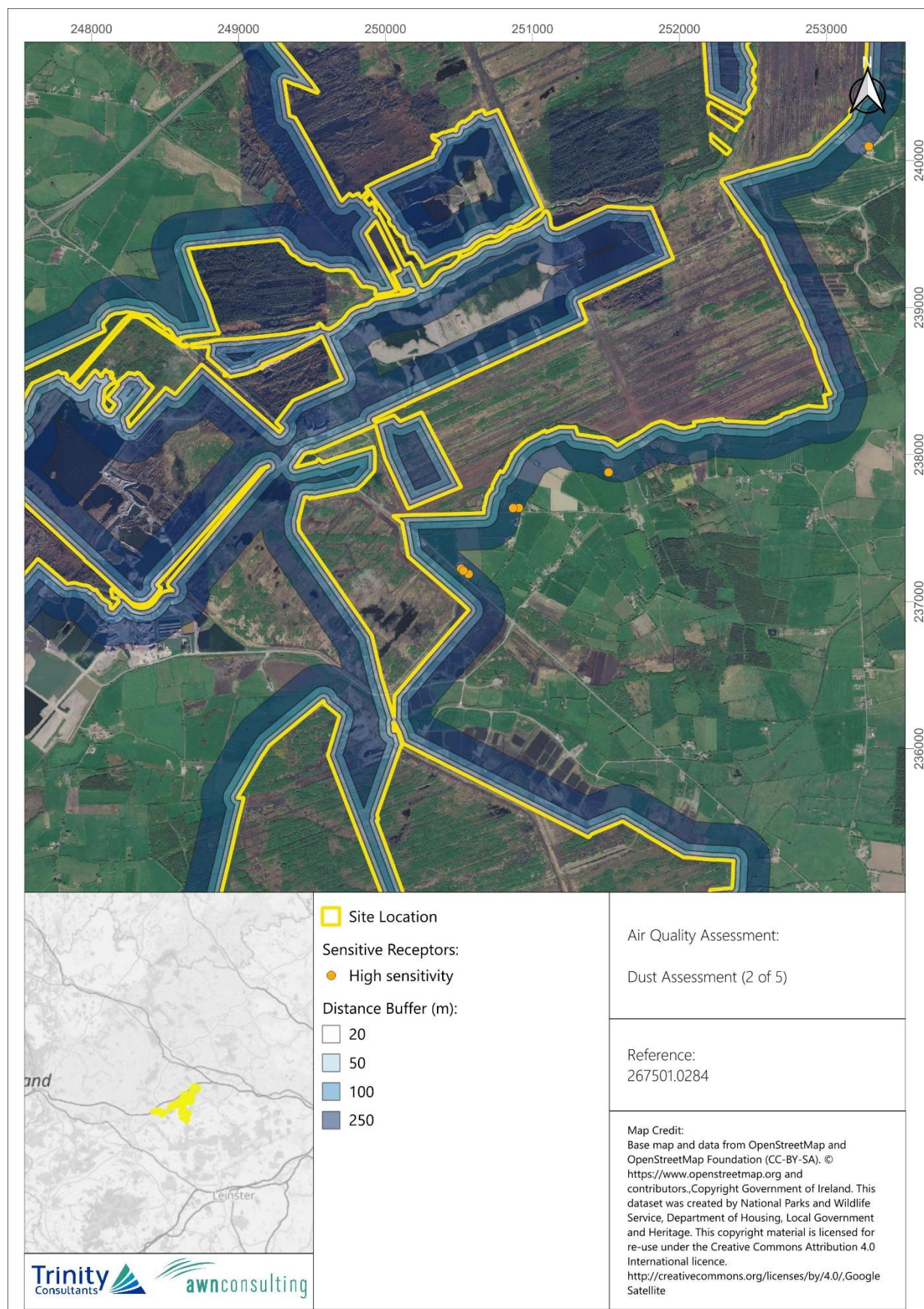


Figure 10.2: Sensitive Receptors within 250m of Application Site (2 of 5)

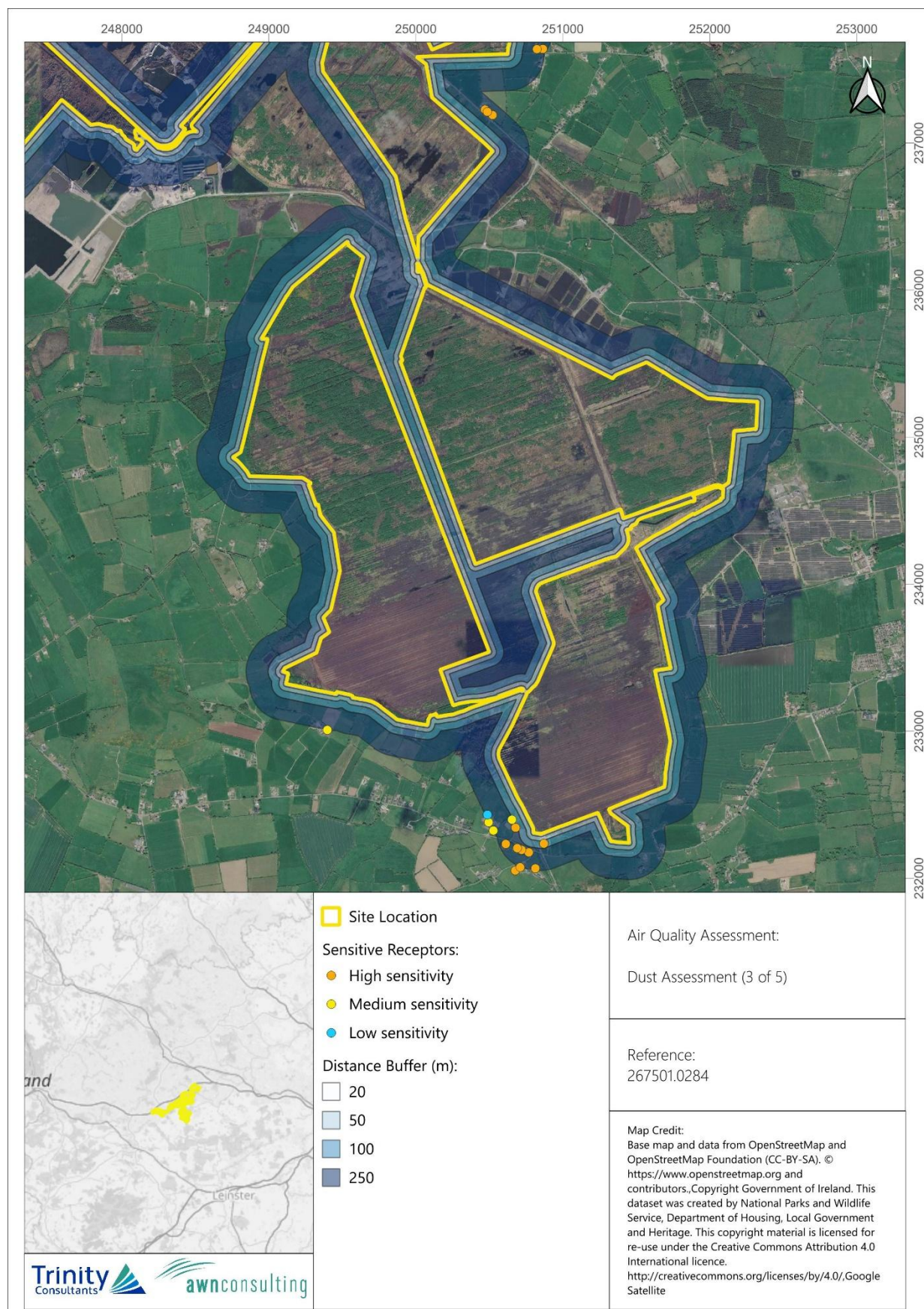


Figure 10.3: Sensitive Receptors within 250m of Application Site (3 of 5)

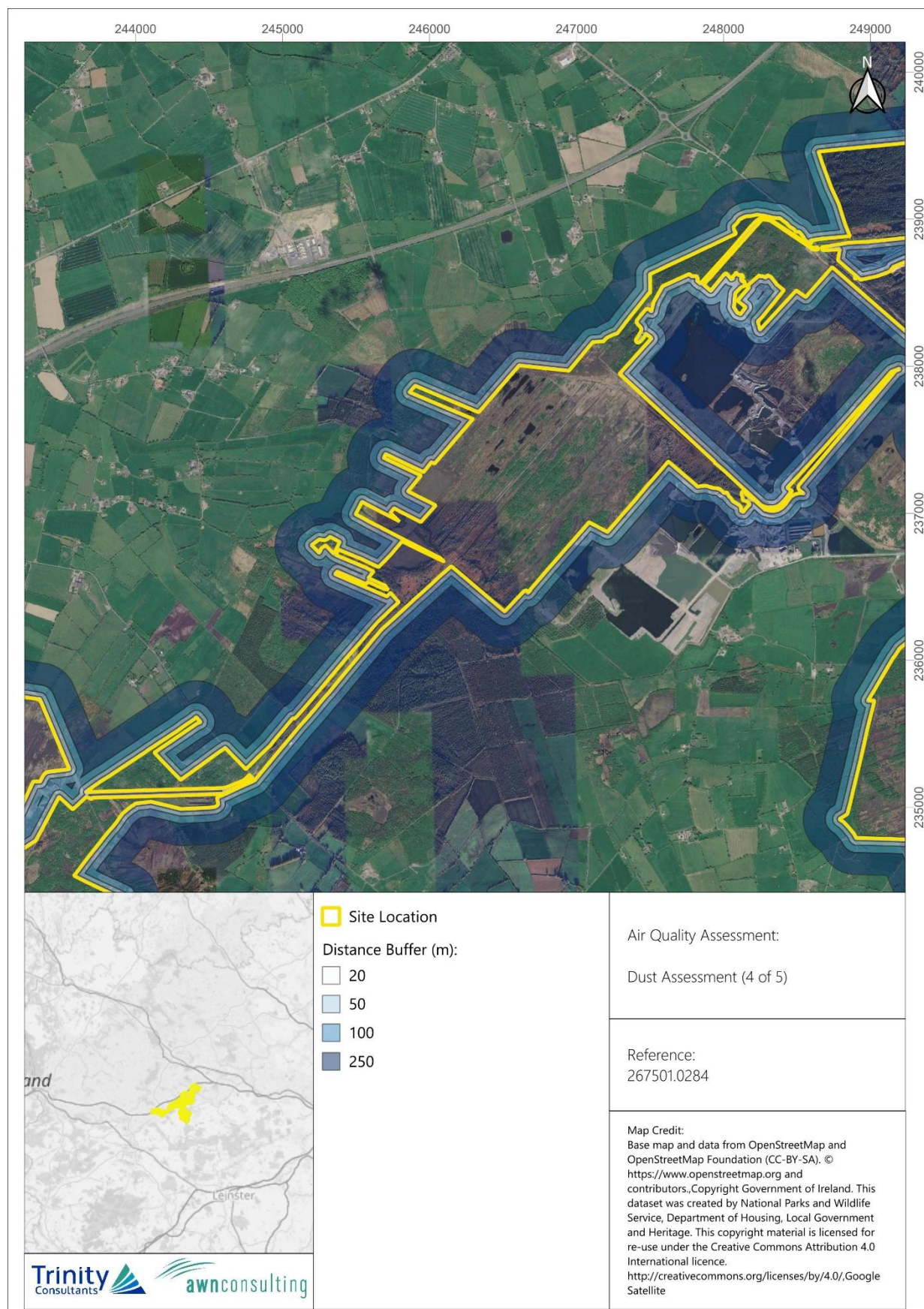


Figure 10.4: Sensitive Receptors within 250m of Application Site (4 of 5)

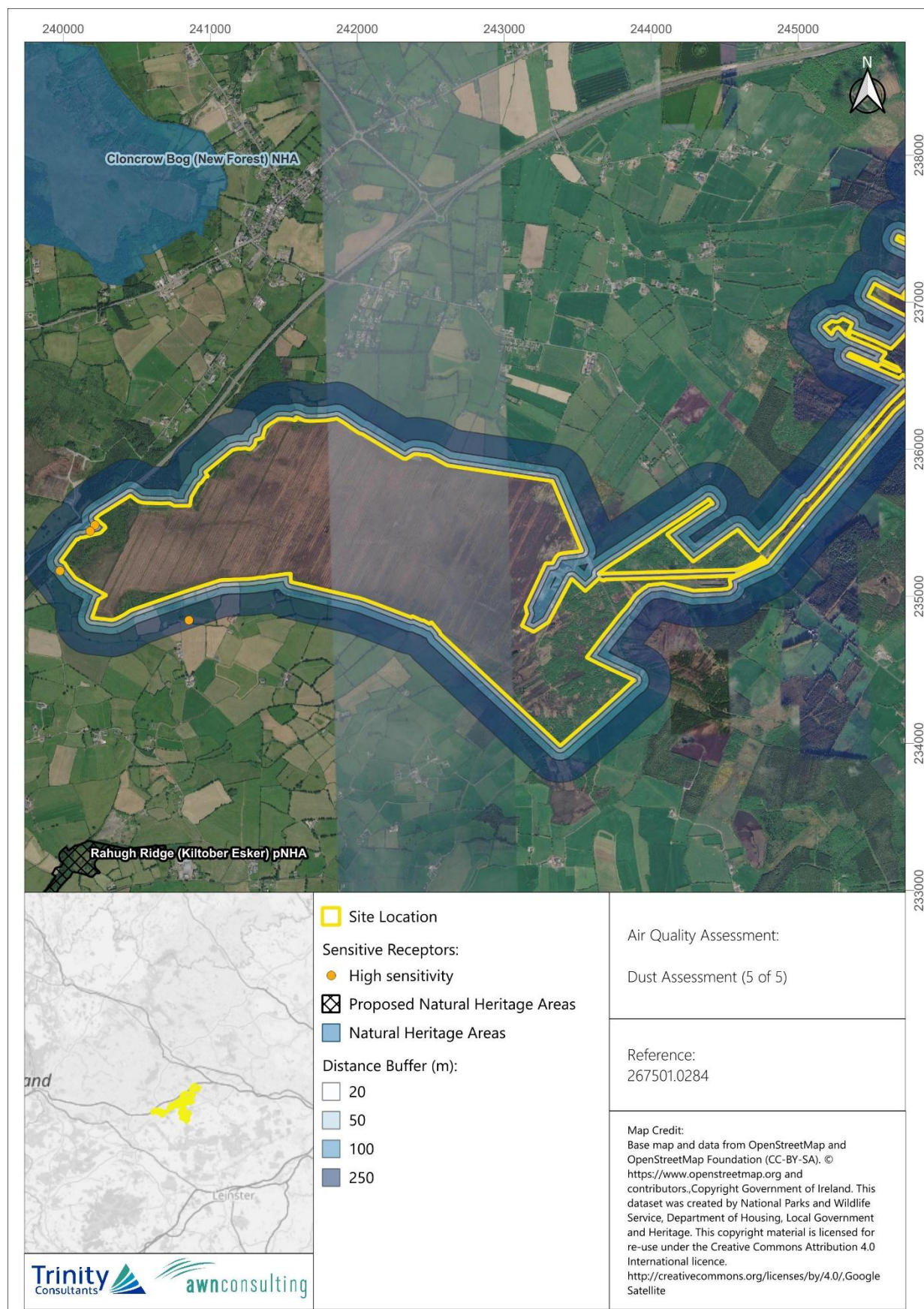


Figure 10.5: Sensitive Receptors within 250m of Application Site (5 of 5)

## 10.2.5 Assessment Methodology

With respect to air quality, dust deposition impacts affecting nearby human or ecological receptors as a result of the extraction, movement and transport of peat, is the most significant impact identified as part of this assessment. In addition, a high-level review was conducted of the potential impact due to traffic emissions of the transportation of peat from the Application Site via rail link and public roads.

### 10.2.5.1 Vehicle Emissions

Emissions from cars, Heavy Goods Vehicles (HGVs) (including tractors and excavators) and railway movements associated with all phases have the potential to impact local air quality. The TII scoping criteria outlined in their guidance document *Air Quality Assessment of Specified Infrastructure Projects – PE-ENV-01106* (TII, 2025) can be used to determine the need or otherwise for a detailed air quality assessment. The TII guidance is specific to TII road and infrastructure projects, however the criteria can be applied to any development that causes a change in traffic and is considered best practice guidance.

The TII guidance (2025) states that a detailed air quality assessment is required where there are sensitive receptors within 200 m of impacted road links. The guidance states that road links at a distance of greater than 200 m from a sensitive receptor will not influence pollutant concentrations at the receptor. The TII PE-ENV-01106 guidance (2025), states that road links meeting one or more of the following criteria can be defined as being ‘affected’ by a proposed development and should be included in the local air quality assessment:

- Annual average daily traffic (AADT) changes by 1,000 or more;
- Heavy duty vehicle (HDV) AADT changes by 200 or more;
- Daily average speed change by 10 kph or more;
- Peak hour speed change by 20 kph or more;
- A change in road alignment by 5 m or greater.

Chapter 14 - Material Assets has been reviewed in order to inform this assessment. As discussed in Chapter 14, during the Peat Extraction Phase, peat extracted from the Application Site between 1988 and June 2020 was delivered to end users via Bord na Móna’s internal private rail network and by HGV on the public road network. Full details of the methodology and assumptions required for the traffic assessment are detailed in Chapter 14.

In relation to rail emissions, these are unlikely to have had a significant impact on the local air quality at sensitive receptors in the vicinity of the Application Site. The rail network is primarily internal to the site and there are limited sensitive receptors in close proximity to the network.

During the Peat Extraction Phase, there were HGV movements associated with transport of peat from the Application Site and other ancillary activities as well as vehicle movements from site staff. Chapter 14 states that there were on average 4 HGVs per day associated with the Peat Extraction Phase and 150 LGV/passenger car movements per day from site staff associated with the Peat Extraction Phase (based on 75 staff).

The Current Phase is assessed as having less vehicle movements than during the Peat Extraction Phase. Chapter 14 states that on average there were a maximum of 2 HGV movements per day and a daily average of 40 LGVs/passenger car movements during the Current Phase. This

reduces again once stockpiled peat removal from the site ceased. The Remedial Phase is assessed as having on average 12 LGV/passenger car movements per day during year 1 – 2 of the Remedial Phase, however, from year 3 onwards, traffic movements will reduce substantially to approximately 1-2 LGV visits per month associated with ecological monitoring visits.

The traffic figures for the Peat Extraction Phase, Current Phase and Remedial Phase are significantly less than the TII criteria listed above and therefore, a detailed air quality assessment of traffic emissions can be scoped out and it can be concluded that there were no significant air quality impacts from vehicle emissions in the Peat Extraction Phase, Current Phase and Remedial Phase.

#### 10.2.5.2 Dust Emissions

The greatest potential impact on air quality associated with the Peat Extraction Phase, Current Phase and Remedial Phase of the Project is as a result of dust emissions, PM<sub>10</sub>/PM<sub>2.5</sub> emissions and the potential for nuisance dust. Large particle sizes (greater than 75 µm) fall rapidly out of atmospheric suspension and are subsequently deposited in close proximity to the source. Particle sizes of less than 75 µm are of interest as they can remain airborne for greater distances and can give rise to the potential dust nuisance at the sensitive receptors. This size range can broadly be described as silt.

The IAQM guidance document '*Guidance on the Assessment of Dust from Demolition and Construction*' (2024) outlines an assessment method for predicting the impact of dust emissions from construction activities based on the scale and nature of the works and the sensitivity of the area to dust impacts (hereafter referred to as the 'IAQM Guidance'). The IAQM Guidance methodology has been applied to the Peat Extraction Phase, the Current Phase and the Remedial Phase of the Project. This methodology has been used to predict the likely risk of dust impacts as a result of the Project. The use of the IAQM Guidance is recommended by TII in their air quality guidance PE-ENV-01106 (TII, 2025) and is considered best practice.

The IAQM Guidance identifies four principal dust-generating activity types for construction-related impact assessments, reflecting their differing potential impacts:

- Demolition
- Earthworks
- Construction
- Trackout (the transport of dust and dirt from a construction or demolition sites onto the public road network.).

The magnitude of each of the four categories is divided into Large, Medium or Small scale depending on the nature of the activities involved. The magnitude of each activity is combined with the overall sensitivity of the area to determine the risk of dust impacts from site activities.

Of the four activity types identified in the IAQM Guidance, only the earthworks category is applicable to the Project. The category of trackout is relevant to locations where there are sensitive receptors within 50 m of the route used by site vehicles, up to 250 m from the site entrance. There are no sensitive receptors within these distances in relation to the Application Site and therefore the trackout category is not relevant. The categories of demolition, and construction are not applicable to the Application Site as these types of activities were not undertaken. The earthworks category can be applied to the peat extraction and ancillary

activities as the activities involved would be similar to those required for excavation and earth moving works on construction projects.

#### ***10.2.5.3 Difficulties Encountered***

Data pertaining to the baseline year of 1988 were not available in relation to air quality. Published air quality monitoring data from the EPA is available online as far back as 2006. Data for the period 2006 – 2024 was used in the assessment in order to estimate the background air quality in the vicinity of the Application Site.

In relation to the traffic movements which would have generated pollutant emissions over the Project Phases, please see Chapter 14 – Material Assets for the assumptions and limitations for the traffic and transport assessment in this remedial EIAR.

### **10.3 ESTABLISHMENT OF BASELINE (JULY 1988)**

The baseline environment has been established as July 1988 for the purpose of this assessment. Historical data for air quality from this time period was investigated in order to establish the relevant baseline. However, published data for this exact time period were not available for every source and therefore, data from as far back as possible has been used in establishing the baseline.

#### **10.3.1 Review of EPA Air Quality Monitoring Data**

Air quality monitoring programs have been undertaken in the past by the EPA and Local Authorities. The EPA website details the range and scope of monitoring undertaken throughout Ireland and provides both monitoring data and the results of previous air quality assessments (EPA, 2026). Monitoring data for the period 2006 – 2024 is available on the EPA website. The results of previous air quality monitoring are published in annual reports by the EPA (EPA, 2025).

As part of the implementation of the Framework Directive on Air Quality (1996/62/EC), four air quality zones have been defined in Ireland for air quality management and assessment purposes. Dublin is defined as Zone A and Cork as Zone B. Zone C is composed of 23 no. towns with a population of greater than 15,000. The remainder of the country, which represents rural Ireland but also includes all towns with a population of less than 15,000 is defined as Zone D. In terms of air monitoring the Application Site is within the area categorised as Zone D (EPA, 2026). The long-term air monitoring data has been reviewed and used to determine background concentrations for the key pollutants of NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> in the region of the Application Site. The background concentrations account for all non-traffic derived emissions (e.g. natural sources, industry, home heating etc.). Representative rural Zone D sites have been reviewed as these are deemed the most appropriate in relation to the location of the Application Site which is in a predominantly rural area. There are monitoring stations in closer proximity to the Application Site however, these were not considered representative sites for background air quality purposes. The closer sites are not within the Zone D category, are suburban monitoring stations and background traffic monitoring stations which are not within a rural setting and therefore, do not represent the background air quality environment in proximity to the Application Site.

Long-term NO<sub>2</sub> monitoring has been carried out at the rural Zone D locations of Kilkitt Co. Monaghan and Emo, Co. Laois with data available for the period 2006 – 2024. Data from 2006 – 2024 has been reviewed in the absence of older historic data. Over the period 2006 – 2024 annual mean concentrations of NO<sub>2</sub> at the rural background stations of Kilkitt and Emo ranged from a maximum of 6 µg/m<sup>3</sup> to a low of 2 µg/m<sup>3</sup> (see Table 10-2) (EPA, 2025). The average annual mean concentration for the 2006 – 2024 period is 3.1 µg/m<sup>3</sup> which is significantly below the current annual limit value of 40 µg/m<sup>3</sup> and the post-2030 limit of 20 µg/m<sup>3</sup>. In addition, there were no exceedances of the 1-hour limit value of 200 µg/m<sup>3</sup> (18 exceedances are allowed per year). Based on the above information a conservative annual mean baseline concentration of 6 µg/m<sup>3</sup> has been used in this assessment.

Long-term PM<sub>10</sub> monitoring has been carried out at the rural Zone D location of Kilkitt Co. Monaghan with data available for the period 2006 – 2024. Annual mean concentrations of PM<sub>10</sub> ranged from a maximum of 11 µg/m<sup>3</sup> in 2013 to a low of 7 µg/m<sup>3</sup> in 2023 and 2024 (see Table 10-3) (EPA, 2025). The average annual mean concentration for the monitoring period was 8.7 µg/m<sup>3</sup>, which is significantly below the current annual limit value of 40 µg/m<sup>3</sup> and the post-2030 limit value of 20 µg/m<sup>3</sup>. In addition, no more than three exceedances of the daily limit value of 50 µg/m<sup>3</sup> were recorded in any year, well below the permitted 35 exceedances per annum. Accordingly, a conservative annual mean baseline PM<sub>10</sub> concentration of 11 µg/m<sup>3</sup> has been used in this assessment.

Monitoring of PM<sub>2.5</sub> is undertaken at the rural Zone D location of Claremorris Co. Mayo. Data are available for the period 2011 – 2024 on the EPA website (EPA, 2025). Annual mean concentrations of PM<sub>2.5</sub> ranged from 4 - 8 µg/m<sup>3</sup> during the monitoring period (see Table 10.4). These concentrations are substantially below the current annual limit value of 25 µg/m<sup>3</sup> and the future limit value of 10 µg/m<sup>3</sup> applicable from 2030. Based on this information, a conservative annual mean baseline PM<sub>2.5</sub> concentration of 8 µg/m<sup>3</sup> was used in this assessment.

While specific pollutant concentrations prior to 2006 are not available it can generally be assumed that historical air quality dating back to 1988 was of a lesser quality than in more recent years. The EPA state that air quality is improving over time (EPA, 2025) as a result of the introduction of various policies and measures particularly in relation to road transport emissions and the use of cleaner fuels and the gradual introduction of hybrid and electric vehicles.

Table 10-2: Baseline Air Quality – NO<sub>2</sub> (µg/m<sup>3</sup>)

| Station                      | Averagin<br>g Period                                                   | Year     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |  |
|------------------------------|------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|
|                              |                                                                        | 200<br>6 | 200<br>7 | 200<br>8 | 200<br>9 | 201<br>0 | 201<br>1 | 201<br>2 | 201<br>3 | 201<br>4 | 201<br>5 | 201<br>6 | 201<br>7 | 201<br>8 | 201<br>9 | 202<br>0 | 202<br>1 | 202<br>2 | 202<br>3 | 202<br>4 |  |
| Kilkitt,<br>Co. Monagha<br>n | Annual<br>Mean<br>NO <sub>2</sub><br>(µg/m <sup>3</sup> )              | 6        | 2        | 4        | 3        | 3        | 3        | 4        | 4        | 3        | 2        | 3        | 2        | 3        | 5        | 2        | 2        | 2        | 2        | 2        |  |
|                              | 1-hr<br>Mean<br>NO <sub>2</sub><br>values<br>>200<br>µg/m <sup>3</sup> | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |  |
| Emo, Co.<br>Laois            | Annual<br>Mean<br>NO <sub>2</sub><br>(µg/m <sup>3</sup> )              | -        | -        | -        | -        | -        | -        | -        | 4        | 3        | 3        | 4        | 3        | 3        | 4        | 3        | 4        | 3        | 2        | 3        |  |
|                              | 1-hr<br>Mean<br>NO <sub>2</sub><br>values<br>>200<br>µg/m <sup>3</sup> | -        | -        | -        | -        | -        | -        | -        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |  |



Table 10-3: Baseline Air Quality – PM<sub>10</sub> (µg/m<sup>3</sup>)

| Station               | Averaging Period                                  | Year |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|---------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                       |                                                   | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| Kilkitt, Co. Monaghan | Annual Mean PM <sub>10</sub> (µg/m <sup>3</sup> ) | 10   | 10   | 10   | 8    | 10   | 9    | 9    | 11   | 9    | 9    | 8    | 8    | 9    | 7    | 8    | 8    | 9    | 7    | 7    |
|                       | 24-hr Mean > 50 µg/m <sup>3</sup>                 | 0    | 2    | 1    | 1    | 0    | 1    | 1    | 3    | 2    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

Table 10-4: Baseline Air Quality – PM<sub>2.5</sub> (µg/m<sup>3</sup>)

| Station               | Averaging Period                                   | Year |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                       |                                                    | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| Claremorris, Co. Mayo | Annual Mean PM <sub>2.5</sub> (µg/m <sup>3</sup> ) | 6    | 6    | 8    | 5    | 6    | 6    | 6    | 6    | 4    | 5    | 8    | 6    | 5    | 5    |



### 10.3.2 Dust Deposition Monitoring

Monitoring for dust deposition has been undertaken in the Derrygreenagh Bog Group (in which the Application Site is located) in the past as a requirement of the IPC licence. The monitoring results are reported in the Annual Environmental Report (AER) each year, which are included as Appendix 4.4 of this remedial EIAR. Monitoring typically takes place between April to September of each year to correspond to the peat extraction season. Monitoring was conducted at 4 no. locations in the Derrygreenagh Bog Group: DM01 Toar Bog (within the Application Site, to the west), DM02 Derryhinch Bog (within the Application Site, to the north), DM03 Ballivor Bog (15 km north-east of Derryhinch Bog), and DM04 Ballybeg Bog (within the Application Site, to the south). Monitoring locations can be seen in Figure 10.6 below. While monitoring was not specifically conducted at all locations within the Application Site, three of the four monitoring locations within the Derrygreenagh Bog Group (within which the Application Site is located) are within the Application Site and can be considered representative of the Application Site. It is likely that dust emissions were similar at the majority of locations across the Application Site due to the similar nature of activities. Therefore, the dust deposition monitoring results from Toar, Derryhinch, Ballivor and Ballybeg have been utilised in this assessment to indicate the baseline dust deposition conditions for the Application Site.

Monitoring results for location DM01, DM02, DM03, and DM04 are available in the AERs for 2001 – 2020 inclusive. No dust monitoring was carried out in the Derrygreenagh Bog Group in 2000 as the dust monitoring locations did not receive approval in time, monitoring commenced for the 2001 peat extraction season. No dust monitoring was carried out from 2021 – 2025 due to the cessation of peat extraction in June 2020, and resultingly it was deemed unnecessary to continue monitoring for dust. Table 10-5 details the maximum annual result recorded at the monitoring locations as reported in the previous AERs for the Derrygreenagh Bog Group.

There have been a small number of exceedances of the limit value of 350 mg/m<sup>2</sup>/day over the period 2001 – 2020 inclusive. There were 2 no. exceedances at DM02, 3 no. exceedances at DM03 and 3 no. exceedances at DM04 over the 2001 – 2019 period. There are no dust monitoring results presented in the AER for 2020, but it is noted that there were no exceedances of the limit value of 350 mg/m<sup>2</sup>/day. As no extraction was carried out in 2021 – 2024, no dust monitoring took place, however it is assumed no exceedances occurred due to the lack of activity on the Derrygreenagh Bog Group (within which the Application Site is located).

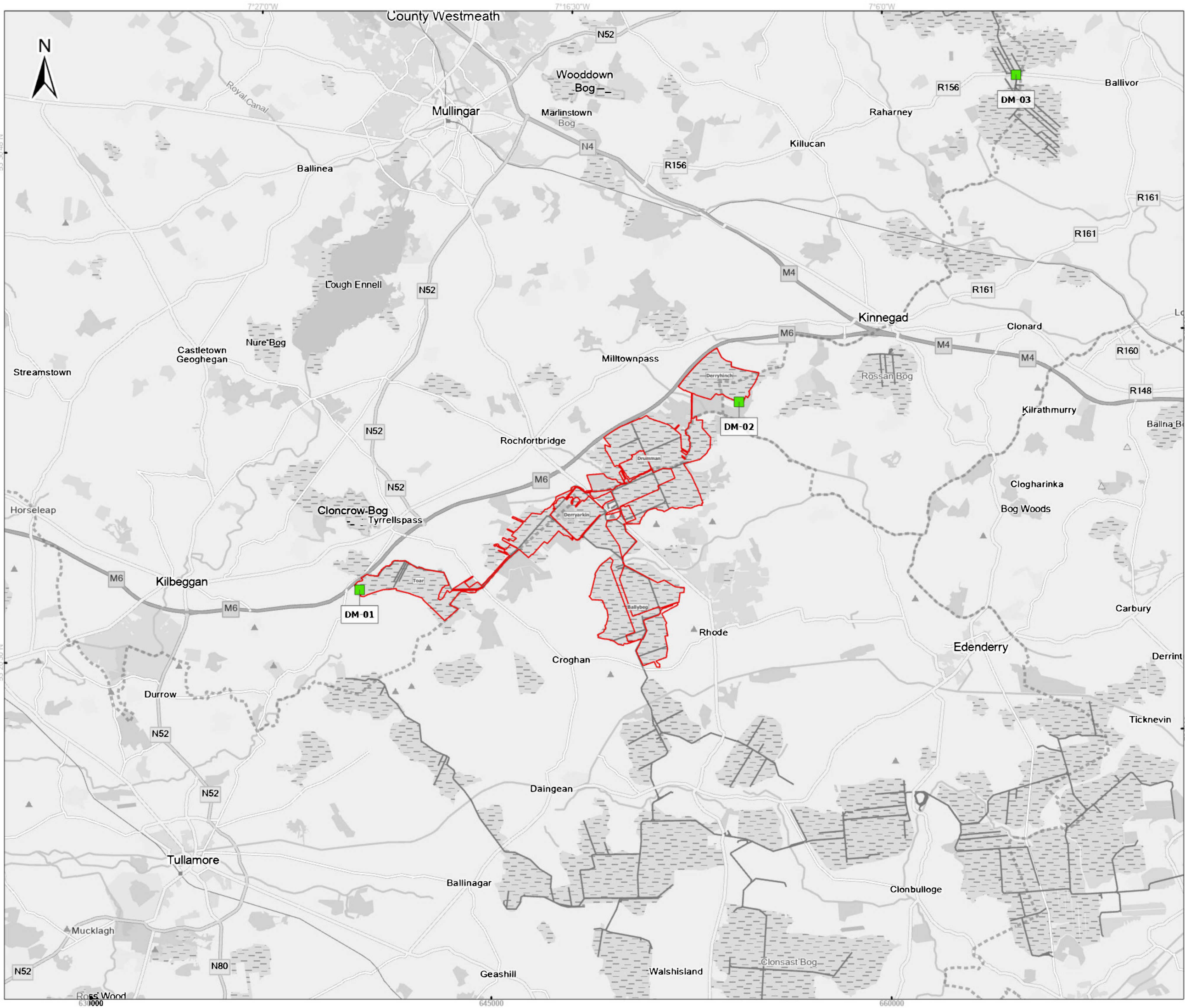
There have been a small number of dust-related complaints reported in the AERs for the Derrygreenagh Bog Group over the 2000 – 2024 period which indicates that at times there have been issues with dust emissions from the Derrygreenagh Bog Group impacting local residences. The dust issues were related to either fires on site or peat extraction activities. Remedial measures were put in place to rectify any dust nuisance issues. The AERs note that training programmes with staff were implemented to raise awareness regarding dust emissions from site activities. Based on the average monitoring results within the Derrygreenagh Bog Group (in which the Application Site is located) a baseline concentration of 155 mg/m<sup>2</sup>/day for dust deposition at the Application Site has been established.

Table 10-5: Maximum Annual Dust Deposition Monitoring Results (Source: Bord na Móna Annual Environmental Reports 2000 – 2024)

| Year | DM01 Toar Bog | DM02 Derryhinch Bog | DM03 Ballivor Bog | DM04 Ballybeg | No. of dust complaints |
|------|---------------|---------------------|-------------------|---------------|------------------------|
| 2000 | -             | -                   | -                 | -             | 0                      |
| 2001 | 77            | 184                 | 202               | 0             | 0                      |
| 2002 | 49            | 31                  | 37                | 0             | 0                      |
| 2003 | 128           | 89                  | 139               | 0             | 0                      |
| 2004 | 18            | 358                 | 3319              | 0             | 0                      |
| 2005 | 72            | 78                  | 466               | 0             | 0                      |
| 2006 | 69            | 115                 | 201               | 0             | 2                      |
| 2007 | 0             | 200                 | 1205              | 0             | 2                      |
| 2008 | 57            | 123                 | 98                | 0             | 0                      |
| 2009 | 46            | 172                 | 94                | 0             | 0                      |
| 2010 | 133           | 172                 | 202               | 0             | 0                      |
| 2011 | 125           | 406                 | 309               | 0             | 1                      |
| 2012 | 142           | 234                 | 211               | -             | 0                      |
| 2013 | 80            | 155                 | 131               | 184           | 3                      |
| 2014 | 46            | 258                 | 205               | 150           | 0                      |
| 2015 | 67            | 356                 | 305               | 505           | 1                      |
| 2016 | 49            | 209                 | 252               | 252           | 1                      |
| 2017 | 113           | 214                 | 350               | 605           | 1                      |
| 2018 | 71            | 178                 | 305               | 178           | 3                      |
| 2019 | 83            | 178                 | 166               | 261           | 1                      |
| 2020 | -             | -                   | -                 | -             | 0                      |
| 2021 | -             | -                   | -                 | -             | 0                      |
| 2022 | -             | -                   | -                 | -             | 0                      |



| Year               | DM01 Toar Bog | DM02 Derryhinch Bog | DM03 Ballivor Bog | DM04 Ballybeg | No. of dust complaints |
|--------------------|---------------|---------------------|-------------------|---------------|------------------------|
| 2023               | -             | -                   | -                 | -             | 0                      |
| 2024               | -             | -                   | -                 | -             | 0                      |
| <b>Average</b>     | <b>75.0</b>   | <b>195.3</b>        | <b>431.4</b>      | <b>118.6</b>  | -                      |
| No. of Exceedances | 0             | 3                   | 3                 | 2             | -                      |



**Legend**

- Application Site Boundary
- Dust Monitoring Locations

0 1.5 3  
Kilometers

|                                                           |            |                                                                                                                                         |           |
|-----------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>Spatial Reference</b><br>Datum: IRENET95<br>EPSG: 2157 |            | <b>Copyrights:</b><br>Sources: Map data © OpenStreetMap contributors, Microsoft, Esri Community Maps contributors, Map layer by Esri, © |           |
|                                                           |            |                                                                                                                                         |           |
|                                                           |            |                                                                                                                                         |           |
| A                                                         | 02/09/2026 | First issue                                                                                                                             | K.K. B.K. |
| Rev                                                       | Date       | Description                                                                                                                             | By Chd    |

Client:

Project:

Derrygreenagh Substitute Consent

Title:

Figure 10-6:  
Dust monitoring locations

Scale @ A3: 1:130,000

Prepared by: K.Kale      Checked by: B.Kasonde      Date: September 2026

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Map Ref: 12334-025-D.MON-S.BO-TOB-A

Draft: A

### 10.3.3 Sensitive Receptors

In addition to determining the baseline air quality in the vicinity of the Application Site, it is also necessary to determine the sensitivity of the surrounding Study Area (see Section 10.2.4) to dust impacts as per the IAQM Guidance. The IAQM Guidance and the below text refer to 'area' when considering sensitivities. In this context, when 'area' is referred to below it is in reference to the Study Area. Both receptor sensitivity and proximity to works areas are taken into consideration. As per Section 10.2.4, for the purposes of this assessment, high sensitivity receptors are regarded as residential properties where people are likely to spend the majority of their time. Commercial properties and places of work are regarded as medium sensitivity while low sensitivity receptors are places where people are present for short periods or do not expect a high level of amenity. Dust deposition impacts can occur for a distance of 250m from works areas (i.e. areas when potential dust generating activities are taking place) but the majority of deposition occurs within the first 50 m (IAQM, 2024). The number of receptors with 250m of the Application Site was established using aerial mapping. It is possible that in the 1988 baseline there were fewer properties present than there currently are, however, by basing the assessment on the current property numbers this provides a conservative assessment.

In terms of sensitive receptors there are zero residential properties within 20 m of the Application Site boundary; 4 no. residential properties within 21 – 50 m of the Application Site boundary; 5 no. residential properties within 51 – 100 m of the Application Site boundary and 16 no. residential properties within 101 – 250 m of the Application Site boundary (see Figure 10.1). As per the criteria in Table 10-6 the overall sensitivity of the Study Area to dust soiling impacts is Low.

**Table 10-6: Sensitivity of the Study Area to Dust Soiling Effects on People and Property**

| Receptor Sensitivity | Number Of Receptors | Distance from source (m) |        |        |      |
|----------------------|---------------------|--------------------------|--------|--------|------|
|                      |                     | <20                      | <50    | <100   | <250 |
| High                 | >100                | High                     | High   | Medium | Low  |
|                      | 10-100              | High                     | Medium | Low    | Low  |
|                      | 1-10                | Medium                   | Low    | Low    | Low  |
| Medium               | >1                  | Medium                   | Low    | Low    | Low  |
| Low                  | >1                  | Low                      | Low    | Low    | Low  |

*Source: Guidance on the Assessment of Dust from Demolition and Construction (IAQM, 2024)*

In addition to sensitivity to dust soiling, the IAQM Guidance also outlines the assessment criteria for determining the sensitivity of the Study Area to human health impacts. The criteria that are taken into consideration are, the current annual mean PM<sub>10</sub> concentration, receptor sensitivity and the number of receptors affected within various distance bands from any works. For the Project, a conservative estimate of the historical annual mean PM<sub>10</sub> concentration is



estimated to be significantly lower than the  $24 \mu\text{g}/\text{m}^3$  threshold for annual mean concentrations (Table 10-3). There are 24 no. high sensitivity residential properties within 250m of the Application Site boundary, 4 no. of these are within 50m of the boundary. Therefore, the sensitivity of the Study Area to dust-related human health impacts is considered **Low** as per Table 10-7.

**Table 10-7: Sensitivity of the Study Area to Dust-Related Human Health Effects**

| Receptor Sensitivity | Annual Mean $\text{PM}_{10}$ Background Concentration | Number Of Receptors | Distance from source (m) |     |      |      |
|----------------------|-------------------------------------------------------|---------------------|--------------------------|-----|------|------|
|                      |                                                       |                     | <20                      | <50 | <100 | <250 |
| High                 | < $24 \mu\text{g}/\text{m}^3$                         | >100                | Medium                   | Low | Low  | Low  |
|                      |                                                       | 10-100              | Low                      | Low | Low  | Low  |
|                      |                                                       | 1-10                | Low                      | Low | Low  | Low  |
| Medium               | < $24 \mu\text{g}/\text{m}^3$                         | >10                 | Low                      | Low | Low  | Low  |
|                      |                                                       | 1-10                | Low                      | Low | Low  | Low  |
| Low                  | < $24 \mu\text{g}/\text{m}^3$                         | >1                  | Low                      | Low | Low  | Low  |

*Source: Guidance on the Assessment of Dust from Demolition and Construction (IAQM, 2024)*

The IAQM Guidance also outlines the assessment criteria for determining the sensitivity of the area to ecological impacts from dust. The criteria take into consideration whether the receiving environment is classified as a Special Area of Conservation (SAC), a Special Protected Area (SPA), a Natural Heritage Area (NHA) or a proposed Natural Heritage Area (pNHA) as dictated by the EU Habitats Directive or whether the ecological site is a local nature reserve or home to a sensitive plant or animal species. Dust impacts to ecology can occur up to 50m from the Study Area. There are no designated ecological sites within 50 m of the Application Site boundary and therefore ecological impacts will not be considered further in the dust assessment.

## 10.4 LIKELY SIGNIFICANT EFFECTS AND ASSOCIATED MITIGATION MEASURES

### 10.4.1 'Do-Nothing' Option

As outlined in the EPA Guidelines (May 2022), the description of 'Do-Nothing Effects' relates to the environment as it would be in the future should the project not be carried out. Peat extraction was underway at the Application Site prior to the required date for the transposition of the EIA Directive in 1988. If peat extraction and ancillary activities had ceased from 1988 onwards, then consequently there would have been no further peat extraction from the site and therefore no impact on air quality.

For those lands which as of 1988 had been subject to the installation of drainage in preparation for peat extraction but not peat extraction itself, it is assumed in the 'do-nothing' scenario that drainage would have remained in situ. Maintenance works to keep established drainage channels clear would have ceased as of 1988 in the 'do-nothing' scenario. It is likely that these areas would have been subject to natural recolonisation of the bog surface.

However, consideration must be given to the following:

- The legislative mandate given to Bord na Móna in the form of the Turf Development Act 1946, as amended) to acquire and develop peatlands; and
- The uncertainty with respect to the planning status of the activity did not arise until 2019 and was not evident in 1988.

Therefore, this 'Do-Nothing' option was not the chosen option. Peat extraction and ancillary activities have occurred at the Application Site from July 1988 onwards. A decision to cease peat extraction at the Application Site was taken in 2020 and the Application Site needs to be considered in the context of regularising (without prejudice) the planning status of the lands to facilitate future development (subject to planning consent as required). The Application Site has and will continue to revegetate, and there will be a change from areas of cutover peatland to revegetated peatland. These are described in the individual chapters of the remedial EIAR.

As part of Bord na Móna's statutory obligations under IPC licence requirements, a Cutaway Bog Decommissioning and Rehabilitation Plan will continue to be implemented for the Application Site separate to, and independent of, the Substitute Consent application. The implementation of the plans is included in the impact assessment below.

## 10.4.2 Peat Extraction Phase (July 1988 - June 2020)

### 10.4.2.1 Dust Emissions

Peat extraction and ancillary activities during the Peat Extraction Phase would have generated dust impacts at nearby properties within the Study Area (see Section 10.2.4 and Section 10.3.3). The milling, harrowing, ridging and harvesting processes would have generated some dust emissions. Dust impacts would have typically occurred within 250 m of the Application Site with the majority of deposition occurring within the first 50 m. However, it is noted that the stockpiled peat was typically covered once extracted in order to keep the peat dry until required for use, the covering of the peat would have greatly reduced the potential for dust emissions from stockpiled peat. Dust deposition monitoring carried out on the Application Site and reported within the AERs (see Section 10.3.2) indicated that there has been a total of 8 no. exceedances of the dust deposition limit value of 350 mg/m<sup>2</sup>/day across the monitoring sites. Dust emissions reported within the AER are likely somewhat lower than emissions would have been during the initial site preparation works and peat extraction works prior to 1988 but give a good indication as to general dust deposition trends over the past number of years (2000 – 2020).

As per Section 10.3.3, the Study Area is of low sensitivity to dust soiling and of low sensitivity to dust-related human health impacts. Peat extraction can be considered under the heading of 'Earthworks' within the IAQM Guidance as the activities involved would be similar to those required for excavation and earth moving works on construction projects. Peat extraction and ancillary activities during the Peat Extraction Phase can be classified as 'large' under the IAQM Guidance due to the overall area of the Application Site being greater than the maximum IAQM criteria of 110,000m<sup>2</sup>. Therefore, combining the large dust magnitude with the sensitivity of the Study Area as per Section 10.3.3 results in an overall low risk of dust soiling and a low risk of dust-related human health impacts associated with the peat extraction and ancillary activities during the Peat Extraction Phase as per the criteria in Table 10-8.

In relation to bog fires during the Peat Extraction Phase, these would have generated air quality impacts from ash. Based on the data in the AERs there is record of a bog fire at the Application Site in 2013.

Air quality impacts from the bog fires would have been short-term in nature and localised to the area in the immediate vicinity of the fire. Impacts would have occurred until the fire was brought under control and ceased burning. Due to the short-term and infrequent nature of the bog fires, air quality impacts are not predicted to have been significant.

Dust emissions during the Peat Extraction Phase had a long-term, localised, negative and slight impact on air quality which is overall Not Significant.

**Table 10-8: Criteria to Determine Risk of Dust Impacts – Peat extraction and ancillary activities**

| Sensitivity of Area | Dust Emission Magnitude |             |          |
|---------------------|-------------------------|-------------|----------|
|                     | Large                   | Medium      | Small    |
| High                | High Risk               | Medium Risk | Low Risk |

| Sensitivity of Area | Dust Emission Magnitude |             |            |
|---------------------|-------------------------|-------------|------------|
|                     | Large                   | Medium      | Small      |
| Medium              | Medium Risk             | Medium Risk | Low Risk   |
| Low                 | Low Risk                | Low Risk    | Negligible |

Source: *Guidance on the Assessment of Dust from Demolition and Construction (IAQM, 2024)*

#### 10.4.2.2 Vehicle Emissions

As per Chapter 14 during the Peat Extraction Phase, it is noted that all peat removed from the bogs within the Application Site was transported via private, internal rail as well as via HGV using the public road network. The average vehicle movements during the Peat Extraction Phase are low and thus a detailed assessment of potential air quality impacts is not required in line with the TII guidance (2025), see Section 10.2.5.1. As per Section 10.2.5.1 and Chapter 14, the Peat Extraction Phase generated 4 daily HGV movements on average and 150 daily LGV movements on average. This additional traffic due to the Peat Extraction Phase is below the TII PE-ENV-01106 screening criteria outlined in Section 10.5.2.1. According to the TII significance criteria for assessing air quality impacts from traffic emissions, 'neutral' or 'slight' effects are those where there is a change in concentration at a receptor of 5% or less and the background annual mean concentration is 94% or less of the ambient air quality standard. Negative effects are those where there is an increase in annual mean concentration at a receptor that does not constitute a neutral effect. The TII criteria state that 'neutral' or 'slight' increases in pollutant concentrations are considered 'not significant'.

Therefore, in order for a potentially 'significant' impact to occur an increase of more than 5% for annual mean NO<sub>2</sub>, PM<sub>10</sub> or PM<sub>2.5</sub> concentrations would need to occur at a sensitive receptor. In addition, the background pollutant concentrations would need to be over 94% of the ambient air quality standard. Using the more stringent post-2030 ambient air quality standards outlined in Table 10-1, as per the TII PE-ENV-01106 guidance and ensuring a conservative approach, this would mean an annual mean concentration greater than 18.8 µg/m<sup>3</sup> for NO<sub>2</sub> and PM<sub>10</sub> and a concentration greater than 9.4 µg/m<sup>3</sup> for PM<sub>2.5</sub>. As per Section 10.3.1, historical background pollutant concentrations for representative locations are significantly below these levels.

Due to the low level changes in traffic associated with the Peat Extraction Phase and the low background concentrations of pollutants, it can be concluded that the impact to air quality from traffic emissions in the Peat Extraction Phase was direct, long-term, negative and not significant.

### 10.4.3 Current Phase (June 2020 – Present Day)

#### 10.4.3.1 Dust Emissions

During the Current Phase (June 2020 to present day), the activity on the Application Site is much reduced due to the cessation of peat extraction. The activity included the removal and transportation off site of any remaining peat stockpiles which was completed in 2021. There was the potential for dust emissions associated with the removal of stockpiled peat. The dust control measures stipulated within the IPC licence for the Application Site are required to be in

place to avoid potential dust issues. As mentioned, dust emissions typically occur within 250 m of works areas with the majority of deposition occurring within the first 50 m.

There are a total of 24 no. sensitive residential receptors within 250 m of the Application Site, of which 4 no. are within 50 m of the Application Site boundary (see Figure 10.1). The dust emission magnitude from the removal of stockpiled peat can be considered limited due to the areas of stockpiled peat involved. Combining this with the sensitivity of the area from Section 10.3.3 results in a negligible risk of dust soiling and dust-related human health impacts (as per criteria in Table 10-8). Due to the negligible risk of dust impacts from the removal of the stockpiled peat from the Application Site, dust emissions are predicted to have had a short-term, negative and imperceptible impact on air quality which is overall not significant.

In relation to bog fires during the Current Phase, these would have generated air quality impacts from ash. The most recent incident occurred at Drumman Bog in July 2026 and was reported to the Environmental Protection Agency (EPA) under Incident No. INCI033357 on the 15 July 2026 and updates to the EPA were provided on 14 August 2026. The fire followed a period of exceptionally high temperatures. Corrective measures implemented to prevent the spread of the fire both within and beyond Bord na Móna lands included the establishment of fire breaks. The fire was subsequently brought under control later in July 2026.

Air quality impacts from bog fires would have been short-term in nature and localised to the area in the immediate vicinity of the fire. Impacts would have occurred until the fire was brought under control and ceased burning. Due to the short-term and infrequent nature of the bog fires, air quality impacts are not predicted to have been significant.

Decommissioning works involving the removal of buildings and compounds and removal of internal railway tracks may also result in some dust emissions. However, any dust emissions are likely to be minor in nature and would have a short-term, negative and imperceptible impact on the low number of nearby sensitive receptors which is overall not significant.

#### ***10.4.3.2 Vehicle Emissions***

Traffic emissions from vehicles accessing the site during the Current Phase are not predicted to significantly impact air quality due to the low number of vehicles. The predicted number of vehicles is less than the TII PE-ENV-01106 scoping criteria set out in Section 10.2.5.1 requiring a detailed air quality assessment of traffic emissions.

Other elements of the Current Phase include environmental monitoring which does not generate significant air emissions.

### **10.4.4 Remedial Phase**

#### ***10.4.4.1 Dust Emissions***

There are minimal works involved in the Remedial Phase that have the potential to impact air quality. The primary activities will involve targeted drain blocking. Ongoing monitoring of the Application Site will continue to ensure that the measures outlined in the Draft Cutaway Bog Decommissioning and Rehabilitation Plan are successful.

As per Section 10.3.3 the Study Area is of low sensitivity to dust soiling and of low sensitivity to dust-related human health impacts. These sensitivities are also applicable to the Remedial

Phase. There is a worst-case low risk of dust soiling and dust-related human health impacts as a result of dust emissions during the Remedial Phase based on the minimal activities involved. The impact to air quality from dust emissions will be short-term, negative and imperceptible which is overall not significant.

#### ***10.4.4.2 Vehicle Emissions***

There will also be a low number of vehicles and machinery required for drain blocking activities and for ongoing monitoring of the site. Emissions from site machinery and vehicles accessing the site during the Remedial Phase will result in a long-term, neutral and imperceptible impact to air quality due to the low volume of vehicles involved (see Chapter 14 - Material Assets), which is overall not significant.

## **10.5 MITIGATION, MONITORING AND CONTROL MEASURES**

### **10.5.1 Peat Extraction Phase (July 1988 – June 2020)**

#### ***10.5.1.1 Dust Emissions***

Dust emissions are dramatically reduced where rainfall has occurred due to the cohesion created between dust particles and water and the removal of suspended dust from the air. High levels of moisture either retained in soil or as a result of rainfall help suppress the generation of dust due to the cohesive nature of water between dust particles. Rain also assists in removing dust from the atmosphere through washout. It is typical to assume no dust is generated under 'wet day' conditions where rainfall greater than 0.2 mm has fallen (USEPA, 2006).

Meteorological data from Mullingar weather station, which is located approximately 15 km south of the Application Site, indicates that there were 209 days (57% of the year) with greater than 0.2 mm rainfall annually over a 30-year averaging period (1978 – 2008) (Met Eireann, 2026). Therefore, the majority of the time dust emissions were reduced naturally due to meteorological conditions. Data for Mullingar meteorological station has been reviewed as it includes historic data for the period 1978 – 2008 and can be considered representative of the Peat Extraction Phase.

The following control measures were undertaken as part of general site management and daily operation procedures at the Application Site from the onset of extraction in the 1950s to the cessation in 2020.

- Stockpiles were compacted on either side by large rollers drawn by tractors;
- Stockpiles were covered with polythene film gauge sheets and secured in position by spreading an even layer of high moisture content milled peat;
- Extraction was avoided during windy weather;
- Headlands were kept clean and loose peat removed;
- Slow driving speeds were used along dusty headlands; and,
- Road crossings were kept clean.

From July 1988 to June 2020, it is considered that the majority of the time, dust emissions were reduced naturally due to meteorological conditions. Condition 5.5 of the IPC licence which came into effect in May 2000 for the Application Site specifies the following dust control measures were to be implemented on the Application Site within 6 months of granting of the licence.



**Condition 5 Emissions to Air:**

5.5 In relation to Dust Control the licensee shall, within six months of date of grant of this licence, develop and implement procedures to ensure that:

- shelter belts are planted in sensitive areas,
- harvesting in sensitive areas is avoided during windy weather,
- where possible machinery use grassed pathways,
- headlands are kept clean and free of excessive loose peat,
- stockpiles are sheeted where possible,
- moving machinery maintains slow speeds when travelling along dusty headlands,
- when harvesting, the jib is maintained low to the stockpile,
- shelter belts are planted around outloading facilities,
- road transported peat is adequately covered (sheeted or similar),
- wind breaks are planted where-ever possible.

**10.5.1.2 Vehicle Emissions**

As outlined in Chapter 4 Project Description, a range of environmental management measures were implemented at the Application Site throughout the Peat Extraction Phase, including controls relating to vehicle and machinery emissions.

Control measures were in place on site prior to 2000 with the implementation of the IPC licence and the measures imposed with the granting of the IPC licence for the site.

These measures included routine inspection, servicing and maintenance of site vehicles and plant to ensure equipment remained in good working order and operated efficiently. Regular maintenance reduced the potential for excessive exhaust emissions arising from poorly maintained engines.

**10.5.2 Current Phase (June 2020 – Present Day)**

The dust control measures outlined under Condition 5.5 of the IPC licence for the Application Site (see Section 10.5.1) are required to be implemented throughout the Application Site until the licence is surrendered.

**10.5.3 Remedial Phase**

The dust control measures outlined under Condition 5.5 of the IPC licence for the Application Site (see Section 10.5.1) should be implemented throughout the Remedial Phase of the Application Site to ensure dust emissions are minimised until the licence is surrendered.

## 10.6 RESIDUAL EFFECTS

### 10.6.1 Peat Extraction Phase (July 1988 - June 2020)

#### 10.6.1.1 Dust Emissions

Peat extraction and ancillary activities undertaken during the Peat Extraction Phase would have led to some dust emissions with the potential to cause soiling and human health impacts at nearby sensitive receptors.

It has been established that the peat extraction and ancillary activities during the Peat Extraction Phase had an overall **Low Risk** of dust soiling impacts and a **Low Risk** of dust-related human health impacts. As part of the IPC licence for the Application Site a number of dust control measures were required to be implemented. In addition, dust monitoring was required to ensure dust emissions were not causing issue at nearby sensitive receptors.

As outlined in Section 10.3.2 dust monitoring results available for the period 2001 – 2020 indicated there were very few exceedances of the emission limit value of 350 mg/m<sup>2</sup>/day at the representative monitoring locations at the Application Site. There have been a very small number (maximum of 3 in 2013) of historic dust complaint issues from nearby sensitive properties in the area indicating that very infrequently there have been dust issues from site activities. Additionally, a bog fire also occurred at the Application Site which would have impacted air quality, however, due to its short-term nature impacts to air quality are not predicted to have been significant. It can be concluded that the activities on site had a long-term, localised, direct, negative and slight impact on air quality which is overall not significant.

#### 10.6.1.2 Vehicle Emissions

Emissions from vehicles during the Peat Extraction Phase would have impacted air quality. The impact of additional vehicles on the local road network was considered with reference to the TII screening criteria outlined in their PE-ENV-01106 guidance document (TII, 2025). It was concluded that the worst-case impact of traffic emissions associated with peat extraction and ancillary activities during the Peat Extraction Phase was long-term, localised, negative and not significant.

### 10.6.2 Current Phase (June 2020 – Present Day)

There is a total of 24 no. sensitive residential receptors within 250 m of the Application Site. With the implementation of the dust control measures stipulated within the IPC licence for the Application Site, dust emissions associated with the activities in the Current Phase will be short-term, negative and imperceptible which is overall not significant.

Due to the low volume of vehicles and machinery involved in the Current Phase (less than 2 HGV per day and less than 40 LGV per day), exhaust emissions are predicted to have a direct, short-term, neutral and not significant impact on air quality.

### 10.6.3 Remedial Phase

The impact to air quality from dust emissions during the Remedial Phase will be direct, long-term, localised, negative, and imperceptible which is overall not significant. Impacts from vehicle

emissions will be long-term, neutral and imperceptible due to the low number of vehicles required for the works, which is overall not significant.

## 10.7 SIGNIFICANCE OF EFFECTS

### 10.7.1 Peat Extraction Phase (July 1988 - June 2020)

#### 10.7.1.1 Dust Emissions

Impacts to air quality were long-term, localised, negative and slight with respect to dust emissions, this is considered Not Significant in EIA terms.

#### 10.7.1.2 Vehicle Emissions

The impact of traffic emissions associated with peat extraction and ancillary activities during the Peat Extraction Phase is considered Not Significant in EIA terms.

### 10.7.2 Current Phase (June 2020 – Present Day)

No significant impacts to air quality are predicted during the Current Phase. Impacts are short-term, negative and not significant with respect to air quality, which is overall Not Significant in EIA terms.

### 10.7.3 Remedial Phase

No significant impacts to air quality are predicted for the Remedial Phase. Impacts from dust emissions will be direct, long-term, localised, negative, and imperceptible. Impacts from vehicle emissions will be neutral and imperceptible. The impact to air quality from the Remedial Phase is Not Significant in EIA terms.

### 10.7.4 Summary

Table 10-9 details a summary of all identified impacts for the Proposed Project relating to air quality.

Table 10-9: Assessment Classification Summary

| Topic                        | Pre-Mitigation Effect                                   | Mitigation Section Reference | Residual Effect                                         | Significance    |
|------------------------------|---------------------------------------------------------|------------------------------|---------------------------------------------------------|-----------------|
| <b>Peat Extraction Phase</b> |                                                         |                              |                                                         |                 |
| <b>Dust emissions</b>        | Long-term, localised, negative, slight, not significant | Section 10.5.1               | Long-term, localised, negative, slight, not significant | Not Significant |
| <b>Vehicle emissions</b>     | Long-term, localised, negative, not significant         | None                         | Long-term, localised, negative, not significant         | Not Significant |
| <b>Current Phase</b>         |                                                         |                              |                                                         |                 |

| Topic                    | Pre-Mitigation Effect                                 | Mitigation Section Reference | Residual Effect                                       | Significance    |
|--------------------------|-------------------------------------------------------|------------------------------|-------------------------------------------------------|-----------------|
| <b>Dust emissions</b>    | Short-term, negative, not significant                 | Section 10.5.2               | Short-term, negative, not significant                 | Not Significant |
| <b>Vehicle emissions</b> | Short-term, neutral not significant                   | None                         | Short-term, neutral not significant                   | Not Significant |
| <b>Remedial Phase</b>    |                                                       |                              |                                                       |                 |
| <b>Dust emissions</b>    | Long-term, direct, localised, negative, imperceptible | Section 10.5.3               | Long-term, direct, localised, negative, imperceptible | Not Significant |
| <b>Vehicle emissions</b> | Long-term, neutral, imperceptible                     | None                         | Long-term, neutral, imperceptible                     | Not Significant |

## 10.8 CUMULATIVE AND IN-COMBINATION EFFECTS

According to the IAQM Guidance (2024), cumulative dust impacts are generally considered where other relevant developments are located within 500 m of the Application Site. Accordingly, developments within 500 m of the Application Site that have occurred since 1988, are currently operational, or have been granted planning permission but are yet to be constructed, have been reviewed as part of the cumulative assessment where they have generated, or have the potential to generate, dust and other air emissions. These developments have been included in the assessment to determine whether cumulative air quality effects may have occurred during the historical Peat Extraction Phase and whether there is potential for cumulative effects to arise during the Current and Remedial Phase.

There is no potential for cumulative impacts to air quality as a result of the development which took place on the Application Site before 1988. Similar impacts to those described for the Peat Extraction Phase July 1988 – June 2020, would have occurred in the period before 1988, however, these impacts did not coincide and therefore, cumulative impacts to air quality did not occur.

### 10.8.1 Peat Extraction Phase (July 1988 - June 2020)

The full list of cumulative developments detailed in Chapter 2 has been reviewed in order to identify developments within 500m of the Application Site that may have had the potential for cumulative dust emissions during the Peat Extraction Phase. The following developments were identified as being within 500m of the Application Site boundary and required activities with the potential for cumulative dust impacts:

- Offaly County Council Planning Reference 18324
- Offaly County Council Planning Reference 1925

- Offaly County Council Planning Reference 18209
- Offaly County Council Planning Reference 1849
- Offaly County Council Planning Reference 178
- Offaly County Council Planning Reference 15141
- ACP Planning Reference PA0032
- Offaly County Council Planning Reference 12207
- Westmeath County Council Planning Reference 124018
- Westmeath County Council Planning Reference 104078
- Offaly County Council Planning Reference 10391
- Offaly County Council Planning Reference 051028
- Offaly County Council Planning Reference 051113
- Westmeath County Council Planning Reference 064016
- Offaly County Council Planning Reference 011163
- Offaly County Council Planning Reference 02/172
- Offaly County Council Planning Reference 051113
- Offaly County Council Planning Reference 01/1297
- Westmeath County Council Planning Reference 01/444
- Offaly County Council Planning Reference 01/365

The above listed projects had the potential to emit dust emissions either during their construction or operation, thereby resulting in potential cumulative dust impacts to nearby sensitive receptors.

Given that the surrounding area is categorised as low sensitivity to both dust soiling and dust-related human health effects and significant dust emissions from the Application Site were not identified as per Section 10.4.2 it is unlikely that cumulative dust emissions were significant. Cumulative air quality impacts are predicted to have been long-term, localised, direct, negative and slight, which is overall not significant.

## 10.8.2 Current Phase (June 2020 – Present day)

In relation to the Current Phase, the full list of cumulative developments detailed in Chapter 2 has been reviewed in order to identify developments within 500m of the Application Site that have the potential for cumulative dust emissions. In addition to the developments listed in Section 10.8.1 above, the following developments were identified as being within 500m of the Application Site boundary and require activities with the potential for cumulative dust impacts:

- ACP Planning Reference 319023
- Offaly County Council Planning Reference 2560511
- Offaly County Council Planning Reference 2560345
- Offaly County Council Planning Reference 2460289
- Offaly County Council Planning Reference 2560104
- Offaly County Council Planning Reference 22664
- Offaly County Council Planning Reference 21247
- Offaly County Council Planning Reference 21364
- Offaly County Council Planning Reference 20238
- Offaly County Council Planning Reference 20237



- Offaly County Council Planning Reference 20/329
- Offaly County Council Planning Reference 501316
- Offaly County Council Planning Reference 2560404
- Offaly County Council Planning Reference 1476

The above listed projects have the potential to emit dust emissions either during their construction or operation, thereby resulting in potential cumulative dust impacts to nearby sensitive receptors.

Given that the surrounding area is categorised as low sensitivity to both dust soiling and dust-related human health effects and significant dust emissions from the Application Site during the Current Phase were not identified as per Section 10.4.3 it is unlikely that cumulative dust emissions were or will be significant. Cumulative air quality impacts associated with the Current Phase are predicted to be short-term, negative and imperceptible which is overall not significant.

### 10.8.3 Remedial Phase (Present Day onwards)

Bord na Móna intends to develop a wind and solar energy project across Derryarkin, Drumman, Derryhinch and Ballybeg Bog, currently known as Derrygreenagh Wind and Solar project. The proposed development is currently at the design phase and is likely to consist of wind turbines, solar photovoltaics and a battery energy storage system. The design of the development will align and integrate with the peatland rehabilitation measures as required under the IPC Licence P0501-01.

A third party intends to develop infrastructure at lands within the Application Site, consistent with the Government's Large Energy User Action Plan (LEAP), and which will be subject to separate planning and regulatory consent as appropriate.

Any future development within the Application Site, will be the subject of separate planning applications. Where required, such applications will be accompanied by an Environmental Impact Assessment Report (EIAR), which will assess the likely significant environmental effects associated with the construction, operation and decommissioning of the respective developments, including consideration of the rehabilitation measures being implemented at the Application Site. At the time of writing, planning applications for these developments had not yet been submitted to the relevant planning authority, therefore a decision had not yet been made.

There is the potential for cumulative impacts to air quality as a result of the proposed Derrygreenagh Wind and Solar project and the rehabilitation plans for the Application Site. Dust emissions associated with the construction phase of the Derrygreenagh Wind and Solar project and the third-party project may occur in combination with dust emissions associated with the drain blocking activities as part of the rehabilitation plans for the Application Site should these activities occur at the same time. These cumulative emissions have the potential to impact nearby residential receptors. However, dust control measures will be in place during the Remedial Phase and dust mitigation measures will be implemented throughout the construction phase of the Derrygreenagh Wind and Solar project and the third party project. Therefore, significant cumulative dust impacts to nearby receptors are not predicted. Cumulative dust emissions will be short-term, negative and slight which is overall Not Significant in EIA terms.



Due to the low volume of vehicles and machinery involved in the Remedial Phase cumulative air quality impacts associated with vehicle emissions from the construction or operation of the Derrygreenagh Wind and Solar project and the third-party project are not predicted.

## 10.9 RISK OF MAJOR ACCIDENTS AND DISASTERS

In relation to air quality, the day-to-day activities during the Peat Extraction Phase, Current Phase and Remedial Phase are unlikely to result in a risk of major accidents or disasters.

There have been a number of bog fires reported on site during the Peat Extraction Phase and Current Phase as discussed in Section 10.4.2 and Section 10.4.3. Bog fires would have generated air quality impacts from ash.

Based on the data in the AERs there is record of a bog fire at the Application Site in 2013, during the Peat Extraction Phase. In relation to the Current Phase there was a bog fire incident at Drumman Bog in July 2026 following a period of exceptionally high temperatures. Corrective measures were implemented to prevent the spread of the fires both within and beyond Bord na Móna lands including the establishment of fire breaks.

Air quality impacts from bog fires would have been short-term in nature and localised to the area in the immediate vicinity of the fire. Impacts would have occurred until the fire was brought under control and ceased burning. Due to the short-term and infrequent nature of the bog fires, air quality impacts are not predicted to have been significant and bog fire events were not recorded to have been a major accident.

## 10.10 CONCLUSION

This chapter of the remedial EIAR describes and assesses the residual air quality effects of the Project at the Application Site. The air quality impact assessments have been prepared for the Peat Extraction Phase, the Current Phase and the Remedial Phase.

For the purposes of this assessment, while the activities associated with the Project assessed have occurred over the past decades, and continuing to present day, impacts have been assessed against the most recently published air quality standards which are more stringent than historical standards from previous years. Therefore, if it can be determined that, based on the most recent standards, no significant effects occurred as a result of the Project, then it is unlikely that significant impacts occurred based on historical standards.

The baseline environment has been established with reference to published air quality data from the Environmental Protection Agency (EPA). Historic air quality monitoring data from the EPA for the pollutants nitrogen dioxide (NO<sub>2</sub>), particulate matter less than 10 microns (PM<sub>10</sub>) and particulate matter less than 2.5 microns (PM<sub>2.5</sub>) for representative rural locations was reviewed. The air quality in the region of the Application Site is of generally good quality with concentrations of pollutants below the ambient air quality standards. Historic dust deposition monitoring results for the Derrygreenagh Bog Group (in which the Application Site is located) indicate that in general dust emissions were not an issue at the Application Site however, at times high concentrations of dust deposition were observed and there were a limited number of dust-related complaints from neighbouring properties over the years as reported in the AERs for the site from 2000 - 2024 (maximum of 3 no. complaints in 2013).

Additionally, there were a limited number of historical bog fire events at the Application Site which would have resulted in air quality impacts localised to the vicinity of the fires. Air quality has continued to improve in recent years as a result of the implementation of EU Directives (e.g. 96/62/EC, 2008/50/EC) and the Ambient Air Quality Standards Regulations, as amended.

#### **Peat Extraction Phase (July 1988 – June 2020)**

Dust emissions during the Peat Extraction Phase had the potential to impact nearby human receptors. The Study Area was deemed of low sensitivity in relation to dust soiling and dust-related human health impacts. It was determined that there was an overall low risk of dust soiling and dust-related human health impacts. As part of the IPC licence for the Application Site a number of dust control measures were required to be implemented. In addition, dust monitoring was required to ensure dust emissions were not causing issue at nearby sensitive receptors, the results of which indicated that dust emissions from site works were elevated on occasion but the majority of the time were insignificant.

In relation to bog fires, these would have generated air quality impacts from ash. There is record of bog fires at the Application Site during the Peat Extraction Phase in 2013. Impacts to air quality would have occurred until the fire was brought under control and ceased burning. Due to the short-term and infrequent nature of the bog fires, air quality impacts are not predicted to have been significant.

Vehicle exhaust emissions from vehicles accessing the Application Site had the potential to impact air quality. The historical traffic figures were reviewed, and it was determined that the traffic generated during the Peat Extraction Phase had a not significant impact on the local traffic flows in the context of the air quality assessment.

The impact to air quality as a result of the Peat Extraction Phase was assessed to have a long-term, negative, localised and slight residual effect, which is overall Not Significant in EIA terms.

#### **Current Phase (June 2020 – Present Day)**

During the Current Phase (June 2020 to Present Day), activities included the removal and transportation off site of any remaining peat stockpiles which was completed in 2021. There was the potential for dust emissions associated with the removal of stockpiled peat. The dust control measures stipulated within the IPC licence for the Application Site are required to be in place to avoid potential dust issues. Due to the low number of sensitive receptors and the minimal works involved in removing the stockpiled peat from the Application Site, dust emissions are predicted to have been imperceptible.

There was one fire incident during the Current Phase which occurred at Drumman Bog in July 2026 and was reported to the EPA in July and August 2026 (incident number INCI033357). Due to the short-term and infrequent nature of the bog fires, air quality impacts are not predicted to have been significant.

Due to the low volume of vehicles and machinery involved in the Current Phase, exhaust emissions are predicted to have an imperceptible impact on air quality.

The impact to air quality as a result of the Current Phase was assessed to have a short-term, negative and imperceptible residual effect, which is overall Not Significant in EIA terms.

**Remedial Phase**

There are minimal works involved in the Remedial Phase that have the potential to impact air quality. The primary activities will involve re-vegetation of the Application Site, drain blocking and re-wetting of the bogs where possible. There is a worst-case low risk of dust soiling and dust-related human health impacts as a result of dust emissions during the Remedial Phase. The impact to air quality from dust emissions will be short-term, negative and imperceptible.

Emissions from site machinery and vehicles accessing the Application Site during the Remedial Phase will result in a neutral impact to air quality due to the low volume of vehicles involved.

The impact to air quality as a result of the Remedial Phase was assessed to have a long-term, negative and imperceptible residual effect, which is overall Not Significant in EIA terms.

## 10.11 REFERENCES

Environmental Protection Agency (EPA) (2022) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports

Environmental Protection Agency (EPA) (2025) Annual air quality monitoring reports, 2006 – 2024 (<https://eparesearch.epa.ie/safer/>, Accessed April 2026)

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Met Eireann (2026) Historical 30-Year Average Meteorological Data for Mullingar Station (1978 – 2008) (<https://www.met.ie/climate-ireland/1981-2010/mullingar.html>, Accessed April 2026)

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