Chapter 13

Air quality

Acknowledgement of Country

Neoen Australia acknowledges the traditional custodians of the land in which we live, and pays its respects to their elders, past and present. The Gunditjmara are the original custodians of the Country on which the Project is located and we acknowledge them as the original custodians. We are committed to Aboriginal engagement and reconciliation and aim to bring Aboriginal and Torres Strait Islander people, local communities and the councils along for the journey to strengthen relationships and enhance local community outcomes.

Disclaimer

13 Air quality

This chapter describes the potential impacts on air quality associated with construction, operation, and decommissioning of the Project, as well as the mitigation measures proposed to avoid, minimise and manage potential adverse impacts.

This chapter summarises the outcomes of the **Air Quality Impact Assessment** (AQIA) **(Appendix N)**.

13.1 Overview

Air quality is characterised by the concentrations of substances in the ambient air, such as particles and gases. Air pollution can impact on human health and wellbeing, people's lifestyles, and the surrounding environment. Dust and air emissions produced during construction, operation and decommissioning of the Project have the potential to impact on nearby sensitive receptors.

Potential impacts on air quality from the Project would predominantly be associated with dust generating activities during construction and decommissioning of the Project. Air quality impacts are anticipated to occur from vehicular movements, earthworks, and construction/decommissioning activities associated with the turbine foundations, access tracks, quarry activities and underground powerlines. This has the potential to result in short-term amenity, human health, and ecological impacts on nearby sensitive receptors. These impacts would be managed through the implementation of industry best practice mitigation measures, including dust suppression, restricting vehicle movements, and scheduling works to avoid adverse weather conditions, resulting in negligible residual impacts. Air quality impacts during operation of the Project are expected to be negligible and primarily associated with the use of light vehicles on existing access roads for operation and maintenance activities.

Therefore, with the implementation of industry best practice mitigation measures, the Project is not anticipated to have any significant residual impacts on air quality in the Project Area and its surrounds.

13.2 EES evaluation objective

The specific environmental matters to be investigated and documented in the Project's EES are set out in the *Scoping Requirements for Kentbruck Green Power Hub Environment Effects Statement* (Scoping Requirements). The Scoping Requirements provide evaluation objectives that describe the desired outcomes to be achieved for each of the matters being addressed in this EES.

The following draft evaluation objective is relevant for the AQIA:

- ***Community amenity, safety, roads and transport –*** *To avoid and minimise adverse effects for community amenity and safety, with regard to construction noise, vibration, dust, traffic and transport, operational turbine noise and fire risk management.*

This chapter and the **AQIA** (**Appendix N**) address the Project's amenity matters relating to air quality, in response to the Scoping Requirements.

13.3 Assessment methodology

The following approach was undertaken for the AQIA:

- Established the study area and characterised the local meteorological conditions using data from the Bureau of Meteorology (BoM).
- Characterised existing ambient air quality indicators using data from Environment Protection Authority Victoria (EPA Victoria) monitoring stations.
- Desktop review of relevant baseline reports, publicly available information and databases including data from the EPA Victoria and BoM.
- Identification and assessment of potential impacts on air quality from construction and operation of the Project, using methods provided in the Institute of Air Quality Management (UK) (IAQM) documents:
  - Guidance on the Assessment of Dust from Demolition and Construction ***(IAQM, 2014)***.
  - Guidance on the Assessment of Mineral Dust Impacts for Planning ***(IAQM, 2016)***.
- Identification of measures to avoid, minimise and manage potential air quality impacts.
- Assessment of residual impacts on air quality with the implementation of mitigation measures.

The IAQM approach has been widely used in Australia to assess emissions from construction projects and has been accepted by many regulatory authorities as a suitable approach in the absence of any Australian-based guidance.

13.3.1 Impact assessment methodology

The IAQM (2014) method was used to assess potential construction impacts from the Project. It is a four-step process for assessing dust emissions associated with demolition, land clearing, earth moving, and construction activities:

1. Screening assessment: Identifying any sensitive receptors located near construction activities.
2. Dust impact assessment: Assessing impacts on sensitive receptors arising from unmitigated dust emissions.
3. Management strategies: Determining the need for and types of measures for managing dust impacts.
4. Reassessment: Assessing significant residual impacts that could occur after mitigation measures have been implemented.

1. Screening assessment

Step 1 of the IAQM assessment requires the determination of whether there are any sensitive receptors close enough to construction activities that have the potential to generate air quality impacts that warrant further assessment. The IAQM assessment methodology requires an assessment be carried out where there is a sensitive receptor within:

- 350 m from the boundary of a site, or
- 50 m from the route used by construction vehicles on public roads up to 500 m from a site entrance.

2. Dust impact assessment

Step 2 in the IAQM is designed to assess the potential for dust impacts due to unmitigated dust emissions. The magnitude of dust emissions combined with the sensitivity of the surrounding area, determine the potential for unmitigated dust impacts. **Table 13.1** provides the IAQM (2014) matrix to assess dust impacts from construction activities.

Table 13.1 Potential unmitigated dust impacts

Activity	Sensitivity of area	Dust emission magnitude		
		Large	Medium	Small
Demolition	High	High	Medium	Medium
	Medium	High	Medium	Low
	Low	Medium	Low	Negligible
Earthworks	High	High	Medium	Low
	Medium	Medium	Medium	Low
	Low	Low	Low	Negligible
Construction	High	High	Medium	Low
	Medium	Medium	Medium	Low
	Low	Low	Low	Negligible
Track out	High	High	Medium	Low
	Medium	Medium	Low	Negligible
	Low	Low	Low	Negligible

3. Management strategies

The outcome of Step 2 is used to determine the level of management required to ensure that dust impacts on surrounding sensitive receptors are maintained at an acceptable level. A potential impact of ‘high’ or ‘medium’ means that suitable management measures must be implemented during the Project.

4. Reassessment

The final step of the IAQM method is to determine whether there are significant residual impacts, post mitigation, arising from a proposed development. The method states that:

Legend

- Wind Farm Site
- Air Quality Impact Assessment Study Area
- Underground Transmission Line
- Parks and Reserves
- Roads
- Watercourses

FIGURE 13.1

Air Quality Impact Assessment Study Area

Image Source: ESRI Basemap (2021) Data source: Geoscience Australia; DELWP (2021)

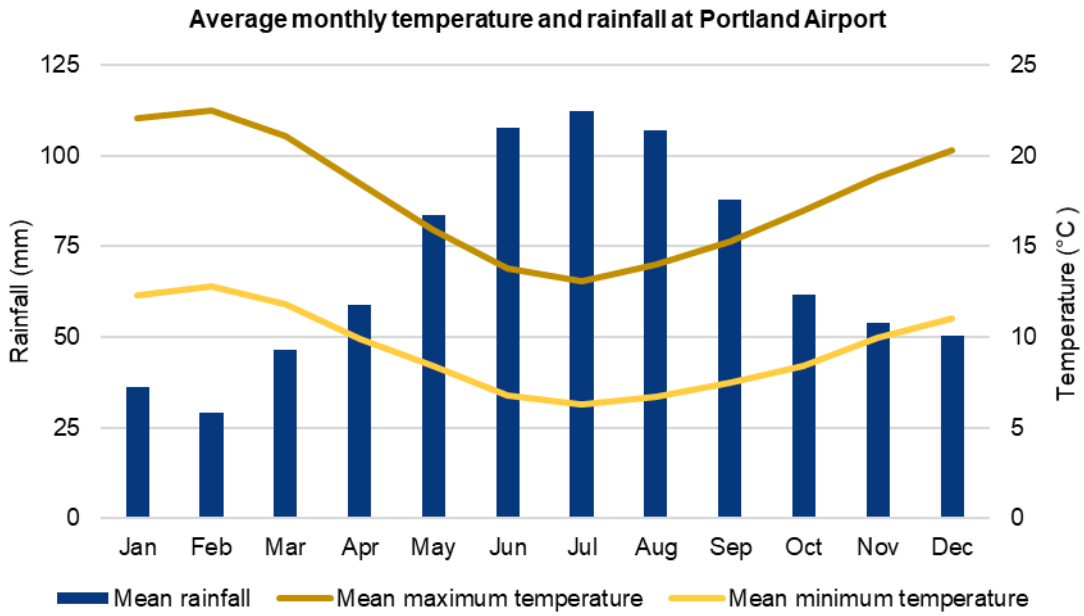


Figure 13.2: Average monthly temperature and rainfall at Portland Airport (BoM, 2021)

Morning (9 am) and afternoon (3 pm) relative humidity and wind speeds at Portland Airport are shown in **Figure 13.3**. Humidity is highest during winter when temperatures drop and rainfall increases. Average monthly wind speeds range from around 15 km/h on autumn mornings to 25 km/h on late winter/early spring afternoons.

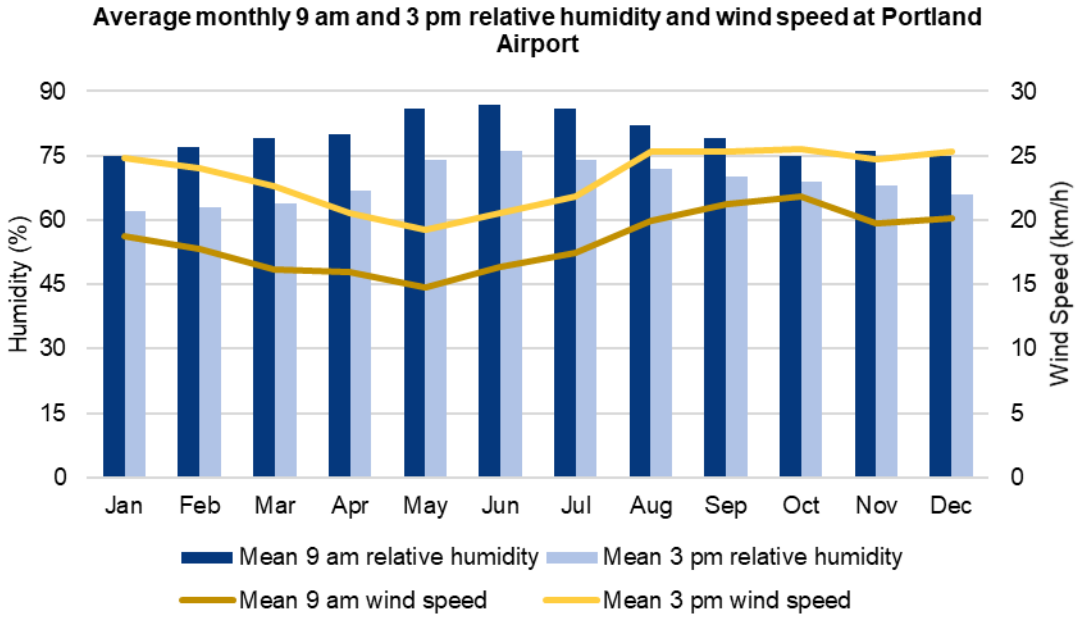


Figure 13.3: Average monthly 9 am and 3 pm relative humidity and wind speed at Portland Airport (BoM, 2021)

Seasonal wind roses for Portland Airport are shown in **Figure 13.4**. Winds at the Portland Airport can be characterised as follows:

- Spring is dominated by strong south-westerly to north-westerly winds with a smaller and slightly lighter northerly component.
- Summer sees a mix of wind directions with south-easterly winds blowing most frequently. Winds from the west are also common and are generally stronger than the south-easterly winds.
- Autumn winds blow from all directions, with northerly winds most frequent. Winds from the west are strongest.
- Northerly and north-westerly winds dominate winter, however the less frequent westerly winds are stronger.

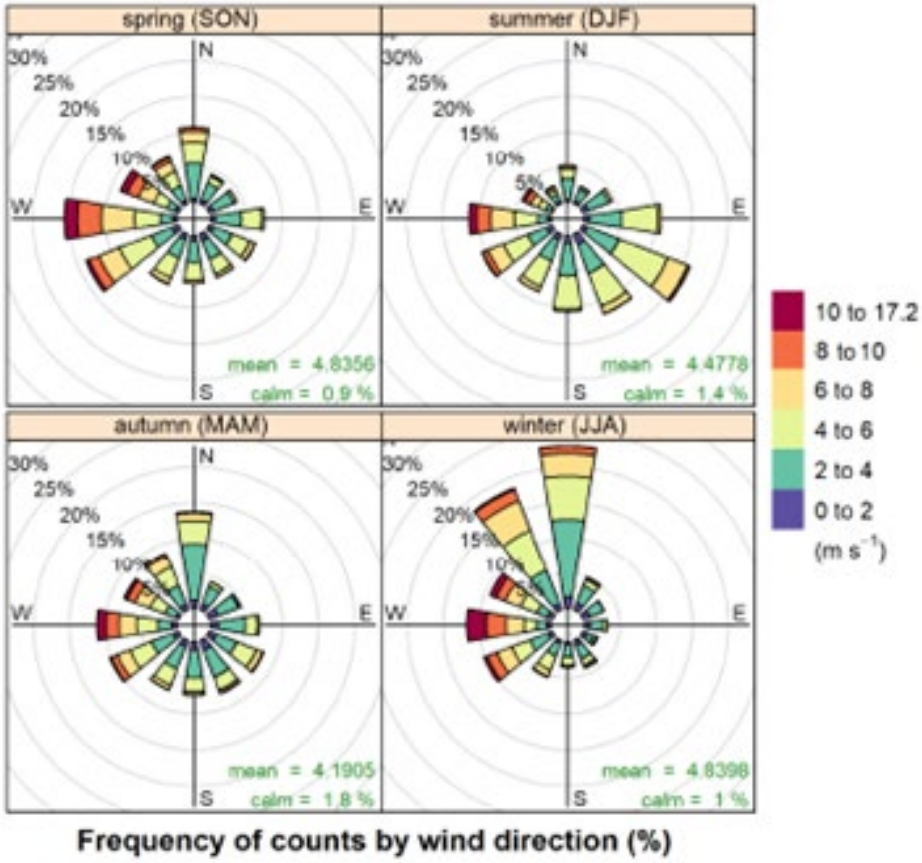


Figure 13.4: Seasonal wind roses for Portland Airport (adapted from the AQIA (Appendix N))

13.4.3 Background air quality

The Project Area is located in a rural setting with no major sources of air pollution. The primary source of dust and particulate matter in the Project Area would be wind driven dust, disturbance of material due to farming and plantation activities, wheel-generated dust from vehicles moving along unsealed roads, occasional bushfire smoke, and sea salt blown inland by strong sea breezes. The only major source of air pollution is the Portland aluminium smelter, which is located approximately 32 km south-east of the wind farm site (see **Figure 13.5**). Due to the distance of this source, concentrations of air pollutants in the Project Area are not expected to be affected substantially by the smelter.

There are no known air quality monitoring stations that could be used to determine existing air quality in the Project Area. The nearest EPA Victoria monitoring station is in Geelong, 250 km east of the Project Area. This station is located in an urban area with significant air pollution sources such as traffic and heavy industry. Due to the differences in land use, PM_{10} and $PM_{2.5}$ concentrations measured at this station are expected to be significantly higher than those that would occur in the Project Area.

The IAQM methods adopted for the Project's AQIA require that annual average PM_{10} concentrations be used to determine the sensitivity of the surrounding environment. An annual average PM_{10} concentration in the range of 15-17 micrograms (µg) per m^3 was selected for the Project Area, based on data from EPA Victoria monitoring stations at Alphington (Melbourne) and Geelong South (see **Figure 13.5**). This is a conservative estimate given that the PM_{10} concentrations at Alphington and Geelong South are likely higher than the Project Area due to their urban environments.

"For almost all construction activity, the aim should be to prevent significant effects on receptors through the use of effective mitigation. Experience shows that this is normally possible. Hence the residual effect will normally be "not significant".

13.3.2 Assessment of the onsite quarry

The IAQM (2016) method was used to assess potential operation impacts from the Project's onsite quarry and is designed for use in the planning process to assess quarry operations for various mineral types including limestone. It uses a distance-based screening approach to identify sites where dust impacts are unlikely to be significant and therefore require no further assessment. The predicted scale of dust effects is classified as either significant or negligible. Where impacts are predicted to be significant, further mitigation is needed.

The IAQM (2016) method does not require that a detailed dust assessment be undertaken if there are no sensitive receptors within 1 km of a quarry. In this instance, the risk of an impact is likely to be negligible, regardless of the nature, size and operation of the quarry. In cases where sensitive receptors are located within 1 km of the quarry, IAQM (2016) recommends that further assessment is undertaken. As the nearest human sensitive receptor to the Project's onsite quarry is more than 6 km from the quarry, no further assessment was undertaken in relation to the onsite quarry.

13.4 Existing conditions

Existing air quality conditions in the Project Area are characterised by the meteorology, background air quality, and location of sensitive receptors such as residences, schools and hospitals. These attributes are described below.

13.4.1 Study area

The study area for the AQIA covered areas where Project construction activities are expected to occur. The assessment focused on the potential impact of dust generating activities on nearby sensitive receptors.

Sensitive human receptors typically considered in an air quality impact assessment include locations where people may live or work and where they may be affected by air pollutants emitted from a particular activity.

Sensitive ecological receptors are sensitive habitats that may be susceptible to impacts from air pollutants. This includes direct impacts of dust deposition on vegetation or aquatic ecosystems, and indirect impacts on fauna (e.g. via impacts on habitat). Sensitive receptors to the Project were defined in line with IAQM (2014) as follows:

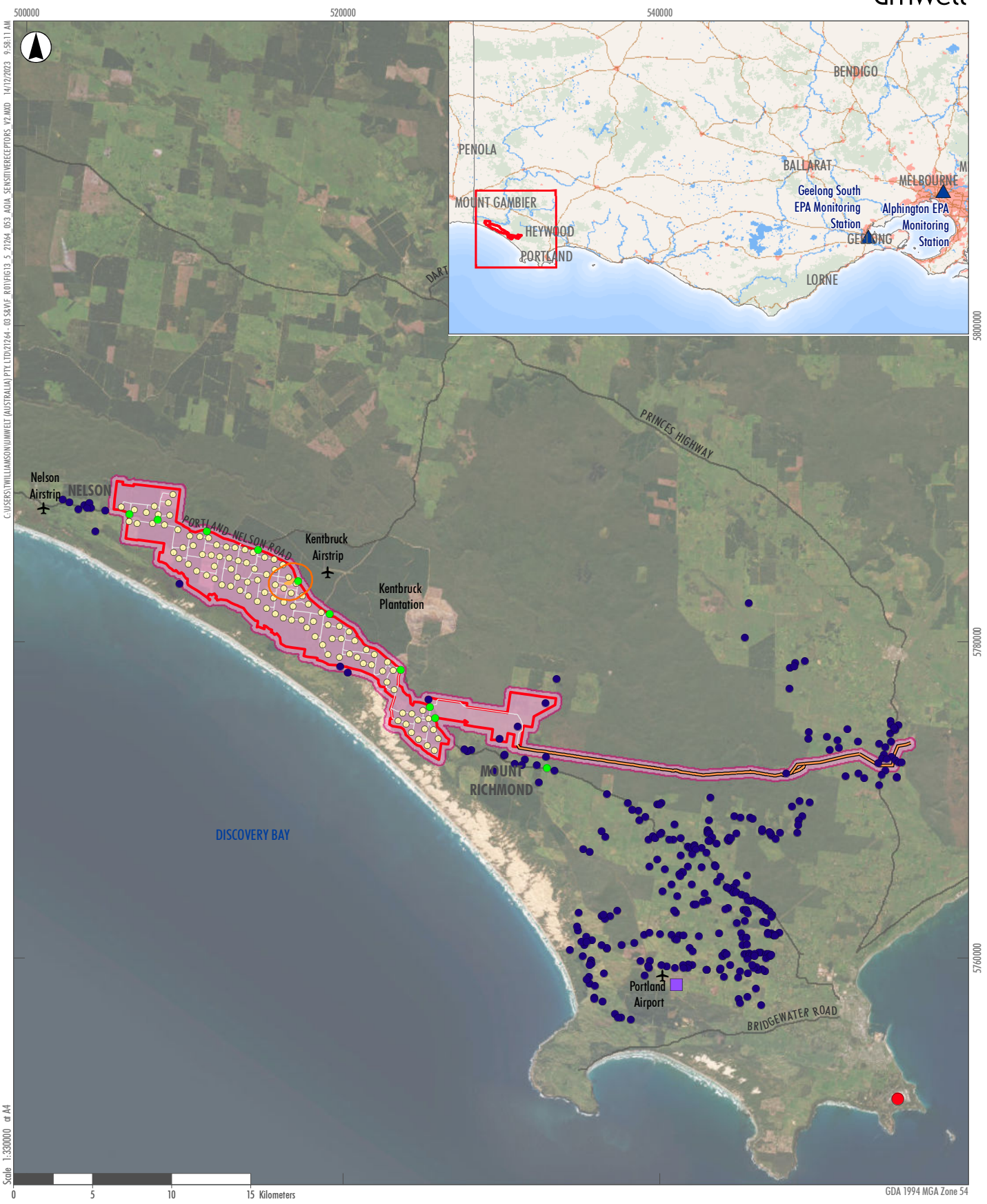
- A sensitive human receptor is within:
  - 350 m of the Project Area, or
  - 50 m of a route used by construction vehicles on public roads, up to 500 m from a wind farm site entrance.
- A sensitive ecological receptor is within:
  - 50 m of the Project Area, or
  - 50 m of a route used by construction vehicles on public roads, up to 500 m from a wind farm site entrance.

In accordance with these definitions, the AQIA study area was defined as land within 350 m of the Project Area boundary. The study area is shown in **Figure 13.1**.

13.4.2 Meteorology

Local meteorological conditions were used to inform the AQIA's assessment of potential dust impacts during construction of the Project. Rainfall acts as a natural dust suppressant, with construction dust impacts more likely to occur during drier periods. Local wind speed and direction influences the dispersion of dust and pollutants.

The BoM Portland Airport weather station provides the best representation of meteorology for the Project Area, as both are located within approximately 5 km of the ocean. Average monthly maximum and minimum temperature and rainfall at Portland Airport are shown in **Figure 13.2**. Monthly maximum temperatures range from about 13ºC in winter to 23ºC in summer, while minimum temperature ranges from approximately 6ºC in winter to 13ºC in summer. Rainfall is most common in winter, with up to about 110 mm falling in July, and summers are typically dry with monthly rainfall down to about 30 mm in February.



Legend

- Wind Farm Site
- Air Quality Impact Assessment Study Area
- Underground Transmission Line
- Onsite Quarry
- Proposed Quarry 1km Buffer
- Roads
- Internal Access Roads
- Sensitive Human Receptors - Dwellings
- Proposed Turbine Location
- Portland Airport BoM Weather Station
- Portland Aluminium Smelter
- EPA Monitoring Stations
- Site Access Points

FIGURE 13.5

Point Sources of Air Pollution and Sensitive Receptors near the Project Area

Image Source: ESRI Basemap (2021) Data source: Geoscience Australia; DELWP (2021)

13.4.4 Sensitive receptors

A total of 12 residential dwellings were identified within the study area. As shown in **Figure 13.5**, these are primarily located in the east of the wind farm site near the transmission line corridor east of Cobboboonee Forest Park. The Lake Mombeong campsite is located on the southern boundary of the study area so has also conservatively been included within the study area. A summary of the human receptors located within the study area is provided in **Table 13.2**.

Table 13.2: Sensitive human receptors in the AQIA study area

Distance from Project Area boundary (m)	Wind farm site	Underground transmission line	Overhead transmission line	Total
<20	3	1	0	4
21–49	0	0	0	0
50–99	0	0	0	0
100–350	2	1	6	9
Total	**5**	**2**	**6**	**13**

Native vegetation within the Glenelg Estuary and Discovery Bay Ramsar site (the Ramsar site) may contain sensitive ecological receptors of international significance which, as defined in **Section 13.4.1**, are sensitive habitats that may be susceptible to impacts from air pollutants. The Ramsar site is located adjacent to the southern and north-western site boundaries of the Project Area (see **Figure 13.1**). Specific threatened species and ecological communities that may occur within the Ramsar site are discussed in the **Flora and Fauna Existing Conditions and Impact Assessment (Appendix C).**

13.5 Construction impacts

Potential impacts on air quality from the Project would predominantly be associated with construction of the Project.

Construction activities that have potential to impact on local air quality include excavation and construction of the wind turbine foundations, use of the construction compounds, access road network, concrete batching plants and quarry, and construction of the powerlines and transmission line.

Potential dust impacts from these activities were assessed in accordance with IAQM (2014) as follows:

- dust soiling – off-site dust levels resulting in perceived loss of amenity
- human health – off-site dust levels above regulatory limits causing potential health impacts
- ecological – off-site dust soiling impacts on ecological receptors.

Other potential impacts on air quality associated with construction include:

- Combustion emissions from construction equipment resulting in deterioration of the existing air quality environment.
- Odour from contaminated soils, including acid sulfate soils (ASS), resulting in amenity impacts.

13.5.1 Dust impacts

The potential for unmitigated dust impacts is determined based on the dust emission magnitude and sensitivity of the surrounding area. The IAQM assessment methodology requires that key construction activities for the Project are separated into four types to reflect their different potential impacts:

- demolition – the removal of an existing structure(s)
- earthworks – operations involved in loosening, excavating, shaping, and compacting soil or rock
- construction – activities associated with the provision of the new structure(s)
- track out – transport of dust and dirt from the construction site onto the public road network, where it may be deposited and then re-suspended by vehicles using the network.

The potential for unmitigated dust impacts (dust soiling, human health and ecological impacts) to occur from each of these four activities was assessed in accordance with the IAQM (2014) method, with the results shown in **Table 13.3**.

These results are also applicable to the decommissioning phase of the Project (see **Section 13.7**). Demolition works are not proposed as part of the Project's construction, however, would be required during decommissioning.

Unmitigated dust impacts from earthworks, construction and track out were assessed as having the potential for a medium impact on sensitive human receptors (from dust soiling or human health impacts). The sensitivity of the area to dust soiling and human health impacts is rated medium, as four sensitive human receptors are located within 20 m of the Project Area. The sensitivity of ecological receptors has been rated high, due to the proximity of the Ramsar site.

Due to the distance between the Project Area and sensitive ecological receptors, unmitigated dust impacts from earthworks, construction and track out were considered to have the potential for a medium impact on these receptors. Dust impacts are expected to be within the range of natural variability and construction work near (<50 m) the Ramsar site (cable trenching) is expected to be short term (1–2 months). Turbine construction footprints would be located at least 300 m from the Ramsar site. The magnitude of potential dust emissions from earthworks, construction and track out within 50 m of highly sensitive ecological receptors was conservatively classified as 'medium'.

Table 13.3: Summary of potential unmitigated dust impacts of Project construction activities

Activity	Dust emission magnitude	Sensitivity of area			Potential of unmitigated dust impacts		
		Dust soiling	Human health (PM_{10})	Ecological	Dust soiling	Human health (PM_{10})	Ecological
Demolition	Small	Medium	Medium	High	Low	Low	Medium
Earthworks	Large	Medium	Medium	-	Medium	Medium	Medium
	Medium	-	-	High			
Construction	Large	Medium	Medium	-	Medium	Medium	Medium
	Medium	-	-	High			
Track out	Large	Medium	Medium	-	Medium	Medium	Medium
	Medium	-	-	High			

The nearest human sensitive receptor to the quarry is more than 6 km from the quarry site. As discussed in **Section 13.3**, the IAQM (2016) method does not require that a detailed dust assessment be undertaken if there are no sensitive receptors within 1 km of the quarry. Potential air quality impacts occurring as a result of quarry operations are therefore considered to be negligible as per the definitions in IAQM (2016).

The IAQM (2014) method involves assessing dust emissions for construction of the entire Project. Potential dust magnitudes for dust soiling and human health provided in **Table 13.3** should therefore be considered conservative as they represent the entire Project. Dust emission magnitudes for a particular section of the Project Area are expected to be much less ('medium' or 'small') for earthworks, construction, and track out due to the progressive construction methodology and distance between turbines.

Measures to minimise potential ecological impacts, human health impacts and dust soiling nuisance to receptors during construction of the Project will be implemented in accordance with the EPA Victoria Publication 1834 *Civil Construction, Building and Demolition Guide* (EPA Victoria, 2020). Implementing dust management measures such as suppression with water sprays and water carts, restricted vehicle movements, and monitoring and scheduling works to avoid adverse weather conditions, will minimise air quality impacts on nearby human and ecological receptors (see mitigation measures MM-AQ01, MM-AQ02 and MM-AQ06).

On unsealed access tracks, vehicle speed limits will be restricted to 40 km/hr on unsealed access tracks and 20 km/hr within 50 m of the Ramsar site (see MM-AQ04) and crushed rock will be used where required to prevent disturbance of exposed soil surfaces by moving vehicles and operating plant (see mitigation measures MM-AQ03 and MM-AQ05). Dust emissions from construction vehicles will be observationally monitored along unsealed access tracks, and if dust is observed to leave the construction footprint, works will be modified or stopped until the dust hazard is reduced to a manageable level (see mitigation measure MM-AQ07).

With the implementation of mitigation measures, residual dust impacts from construction of the Project are not anticipated to be significant.

13.5.2 Other air quality impacts

Vehicle exhaust emissions such as nitrogen dioxide, sulfur dioxide and polycyclic aromatic hydrocarbon (PHA) would be a minor contributor to the environment and would be controlled through standard construction mitigation measures identified within the EPA Victoria Publication 1834. Mitigation measures will include ensuring vehicles are fitted with appropriate emission control equipment, maintained frequently, and serviced in accordance with manufacturer specifications (see mitigation measure MM-AQ08).

Odour could be released during any excavation works that encounter naturally occurring ASS in soils and sediments that contain iron sulfides. ASS has been identified in the farmland in the north-eastern corner of the wind farm site, east of Portland-Nelson Road and would require management if disturbed (see **Chapter 10** ***Soil contamination and acid sulfate soils*** for more information). In the event that odorous soils are uncovered during construction, ground disturbance works will cease at the relevant location and within the immediate vicinity (see mitigation measure MM- AQ09).

13.6 Operation impacts

Air emissions during operation of the Project are expected to be negligible and primarily associated with the use of light vehicles on existing access roads for operation and maintenance activities.

The operational life of the Project is expected to be 25 to 30 years, and activities associated with operation, maintenance and monitoring of the wind farm would include the following:

- operation of the quarry
- service of the wind turbines and associated infrastructure
- maintenance of internal access tracks and electrical infrastructure
- use and maintenance of buildings and infrastructure
- ongoing environmental monitoring, in accordance with relevant approval conditions and industry best practice.

13.7 Decommissioning impacts

Impacts associated with the decommissioning phase of the Project would be the same as those anticipated for the construction phase and are discussed in **Section 13.5.**

Demolition of buildings and turbine structures during decommissioning would result in a total volume of material less than 20,000 m^3. In accordance with the IAQM (2014) method, the dust emission magnitude was considered small for demolition activities. Unmitigated dust impacts on dust soiling, human health and ecological receptors from demolition activities are therefore considered to be low for decommissioning, as shown in **Table 13.3**.

13.8 Mitigation measures

Table 13.4 outlines the mitigation measures developed to avoid, minimise and manage impacts on air quality from construction, operation and decommissioning of the Project.

Table 13.4: Mitigation measures for air quality

ID	Mitigation measure	Relevant work area	Project phase
MM-AQ01	**Dust suppression** A site-specific dust management plan (sub-plan of the Construction Environmental Management Plan) will identify potential and existing dust sources and outline best practice design controls and management practices to minimise dust. These measures will include, but not be limited to: • Watering of unsealed roads to reduce wheel generated dust. • Use of water sprays to reduce wind erosion from material stockpiles and exposed areas. • Restricting vehicle speeds to 20 kilometres per hours near sensitive areas such as dwellings. • Use of water sprays as required for material transfer operations and quarry activities (e.g., drilling rock, crushing and screening). • Site-specific dust control measures for dust producing activities. • Monitoring of forecast and real time local wind parameters (e.g., wind speed, wind direction) and adjustment of dust generating activities, as required, to reduce impact to sensitive receptors. • Sequencing of vegetation removal within the quarry work authority area where feasible to minimise the amount of disturbed land exposed to wind erosion. • Rehabilitation and revegetation of inactive stockpiles and disturbed areas to reduce wind erosion. • Implementation of a complaint investigation and response plan. • Contingency measures where dust plumes are identified during visual monitoring and/or the project receives dust related complaints. • Dust management training would be undertaken for construction workforce as part of the site-specific induction, outlining controls to be implemented during construction to manage potential air quality impacts. • Regular visual monitoring of dust, with results recorded in a dust management database. • Regular monitoring of the effectiveness of dust control measures. If dust controls are found to be ineffective, these would be reviewed (internally and / or by an external dust specialist, if required) and amended as necessary. Dust suppression will be used where construction or decommissioning activities occur in unpaved work areas, where there are spoil and aggregate stockpiles, and during the loading and unloading of dust generating materials, as required. Dust suppression methods may include water sprays, water carts or other devices and will be implemented in accordance with the applicable practices and systems identified in EPA Victoria Publication 1823: *Mining and quarrying – Guide to preventing harm to people and the environment.*	All areas	Construction and Decommissioning
MM-AQ02	**Vehicle movements** Vehicular movement will be restricted by keeping vehicles, plant and equipment within the construction footprint and on designated roads and tracks and in accordance with the applicable practices and systems identified in Environment Protection Authority Victoria Publication 1834: *Civil construction, building and demolition guide.*	All areas	Construction, Operation and Decommissioning
MM-AQ03	**Vehicle movements on unsealed tracks** Crushed rock will be placed on unsealed access tracks where required and as agreed with relevant stakeholders, to prevent disturbance of exposed soil surfaces by moving vehicles and operating plant.	All areas	Construction and Decommissioning

ID	Mitigation measure	Relevant work area	Project phase
MM-AQ04	**Vehicle speed limits** Vehicle speed limit will be restricted to 40 km/hr on unsealed access tracks and 20 km/hr within 50 metres of the Glenelg Estuary and Discovery Bay Ramsar site	All areas	Construction and Decommissioning
MM-AQ05	**Transport of loads** Vehicles used for construction and decommissioning activities with the potential for loss of loads (such as dust or litter), will be covered when not being loaded or unloaded.	All areas	Construction and Decommissioning
MM-AQ06	**Weather monitoring** Weather conditions will be monitored for extreme heat and wind events (e.g. using systems such as BoM forecasts), with construction and decommissioning works modified if conditions are likely to result in air quality impacts on sensitive receptors.	All areas	Construction and Decommissioning
MM-AQ07	**Dust monitoring** Dust emissions from vehicles will be observationally monitored along unsealed access tracks. If dust is observed to leave the construction footprint, works will be modified or stopped until the dust hazard is reduced to a manageable level.	All areas	Construction and Decommissioning
MM-AQ08	**Vehicle emissions and equipment maintenance** Vehicles will be fitted with appropriate emission control equipment, maintained frequently, and serviced in accordance with manufacturer specifications, to minimise vehicle exhaust emissions. Idling will be avoided where possible. Plant and equipment will be maintained in good condition to minimise spills and air emissions that may cause nuisance.	All areas	Construction and Decommissioning
MM-AQ09	**Odorous soils** In the event that odorous soils are uncovered during construction, the following measures will be implemented: • Cessation of ground disturbance works at the location and within the immediate vicinity. • Assessment of site contamination and determination of appropriate management actions in consultation with suitably qualified personnel. • EPA Victoria will be notified as soon as reasonably possible if odorous material is found to be contaminated. Refer to the mitigation measures for managing contaminated soils (mitigation measures MM-CA).	All areas	Construction

A Construction Environmental Management Plan (CEMP) will be developed and implemented based on the best practice controls, mitigation and practices listed in this chapter. The CEMP will also detail the process and protocols that will be used during the Project to ensure that the control measures are being undertaken appropriately and when required.

Earthworks may be required during operation of the Project for activities such as corrective maintenance, construction of additional facilities, maintenance of tracks or drainage controls, or to stabilise areas of erosion. The mitigation measures listed in **Table 13.4** will be implemented as part of an Environmental Management Plan (EMP) should any earthworks be required during operation.

13.9 Conclusion

Potential air quality impacts from the Project are expected to be limited to construction and decommissioning activities when there is potential for dust to be generated, such as vehicular movements, earthworks, and activities associated with the quarry and construction of turbine foundations, access tracks and underground powerlines. A total of 13 sensitive human receptors were identified within 350 m of the Project Area, comprising 12 residential dwellings and one campsite. Sensitive ecological receptors, including the Glenelg Estuary and Discovery Bay Ramsar site, were identified within 50 m of the Project Area boundary.

Unmitigated dust impacts on sensitive human and ecological receptors from construction activities are considered to be medium to low based on the IAQM assessment methodology. However, with the implementation of industry standard mitigation measures, the residual impact would not be significant. In addition, the progressive manner in which the construction works would be carried out and the distances between construction activities and sensitive receptors, would further minimise potential dust impacts. Air quality impacts during operation of the Project are also expected not to be significant and primarily associated with the use of light vehicles on existing access roads for operation and maintenance activities.

It is therefore considered that the Project satisfies the relevant air quality evaluation objective specified in the EES Scoping Requirements, to avoid and minimise adverse effects for community amenity.

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