VIVA Energy Australia

Attachment G

Construction Dust Assessment

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MELBOURNE AIRPORT JET PIPELINE PROJECT

CONSTRUCTION DUST ASSESSMENT

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PREPARED FOR

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1 INTRODUCTION

Viva Energy Australia (Viva Energy) is proposing to construct and operate a new jet fuel pipeline to support the growing fuel needs at Melbourne Airport.

As Australia's second largest airport, annual passenger numbers for Melbourne Airport are expected to almost double by 2042 – increasing from 37 million to more than 76 million per year[1]. In line with this projected increase in passenger numbers, the requirement for jet fuel is expected to increase significantly and is expected to exceed the capacity of the existing fuel supply infrastructure. Notwithstanding future growth, jet fuel supplied via the existing pipeline system is already being supplemented by trucking operations from Geelong and Melbourne's inner-city suburbs. The development of the new pipeline will provide faster replenishment of fuel stocks, provide an alternative to current and escalating dangerous goods vehicle movements and provide a more robust fuel supply chain.

The Project aims to:

- Help meet the increasing demand for jet fuel and support future growth at Melbourne Airport
- Increase the supply security of jet fuel which will contribute to the Victorian state economy
- Reduce the reliance on road transport for jet fuel supply with fewer trucks required to deliver fuel to the airport.

1.1 Purpose of this Report

This report has been prepared to assess potential air quality impacts associated with the proposed Melbourne Airport Jet Pipeline Project (the Project) and inform the preparation of the pipeline licence application. Dust emissions would occur during the construction of the Project and are the focus of this assessment. Emissions to air during the operation of the Project would be negligible and have not been assessed further.

[1] Melbourne Airport Preliminary Draft Master Plan 2022

2 PROJECT DESCRIPTION

2.1 Project Overview

The Project proposes the construction and operation of a new pipeline to form a direct connection between the jet fuel storage infrastructure at Melbourne Airport and the existing Altona to Somerton pipeline that follows the southern boundary of Tullamarine (located south of the Western Ring Road (M80)).

The pipeline would commence at a section of the Altona to Somerton pipeline located south of the Western Ring Road (M80) (near the Airport Drive exit) and link into the existing Melbourne Airport joint user hydrant installation (JUHI) facility (located at Marker Road, Tullamarine).

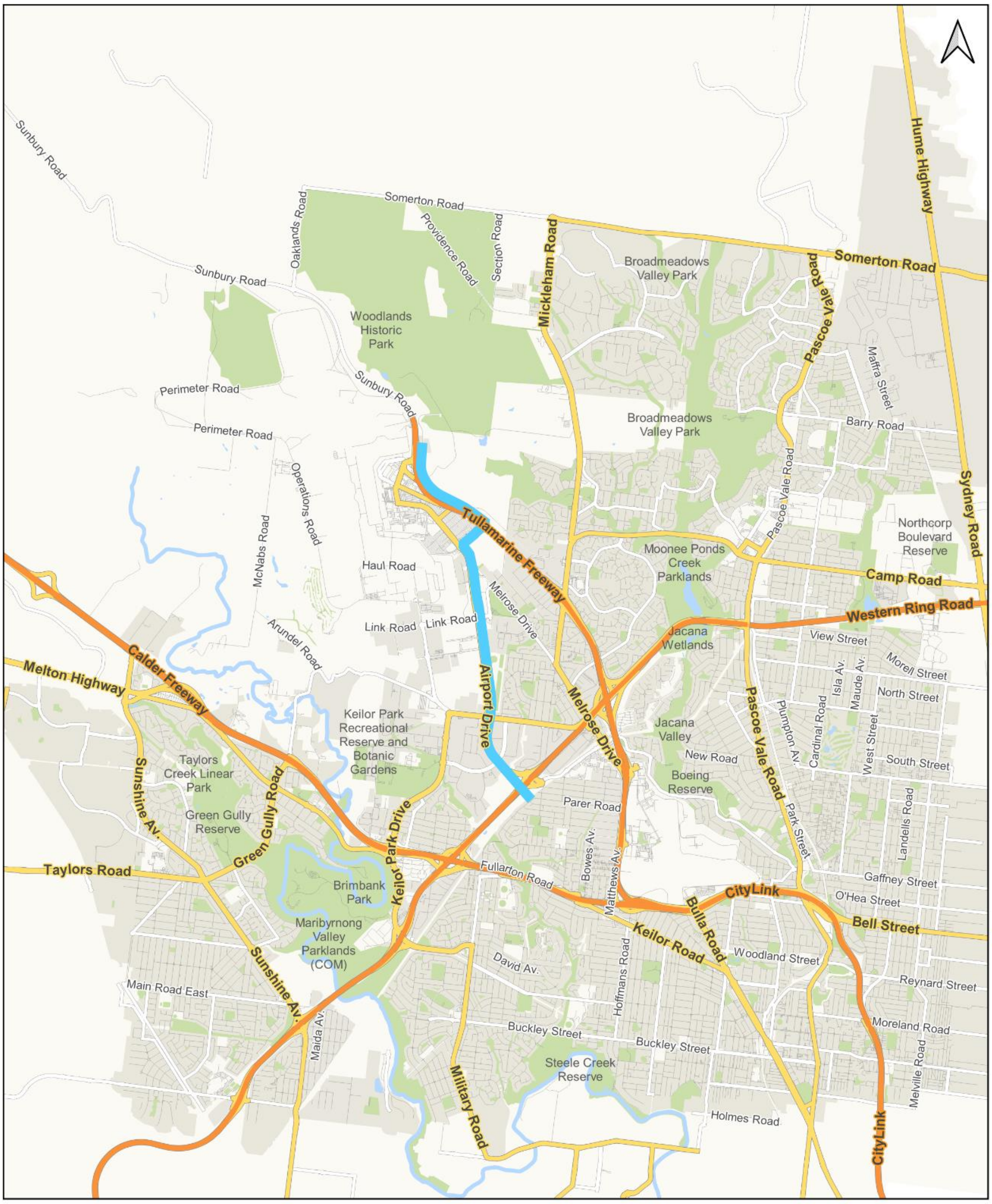
The locality of the Project is shown in **Figure 2-1**.

2.2 Project Components

The project comprises the following key operational components:

- A new pipeline to transport jet fuel. The pipeline will be approximately 6.7 km in length and fully buried for its entire length to a minimum depth of 1200 mm below ground level (bgl) with a 7 to 10 m permanent final easement.
- Pig launcher and receiver sites located at each end of the pipeline. These are used to launch instruments during initial commissioning of the pipeline to clear any debris or water and during operation to record any defects in the pipe.
- An impressed current cathodic protection system (ICCP) to protect the pipe. The ICCP is a system which comprises anode beds and power supply.
- Inlet and outlet metering stations which provide flow analysis for the leak detection system.

Figure 2-1 Project Locality



PROJECT LOCALITY

LEGEND

Pipeline

0 2.5 5 km

Note: Locations of features are indicative only and are shown solely to demonstrate features pertinent to this assessment.

2.3 Pipeline Alignment

The new pipeline will tie in underground to the existing Altona to Somerton pipeline. Aboveground pigging facilities shall be installed near the tie-in. From the tie-in, the pipeline will run north-west towards the Western Ring Road (M80).

A horizontal directional drilling (HDD) crossing is required at the Western Ring Road (M80) and will also go under Steele Creek and Tullamarine Park Road (a total length of approximately 875 m). From this HDD, the pipeline alignment will continue north, first along the western boundary of a commercial property and then running in the eastern road easement of Airport Drive.

A HDD crossing will be required along Airport Drive for the Sharps Road crossing (a length of approximately 175 m). Further along Airport Drive, another HDD section is required for a length of approximately 1900 m. This HDD section will avoid the congested services in this area and pass underneath Link Road. The pipeline will continue from the HDD exit along Airport Drive up to Mercer Drive.

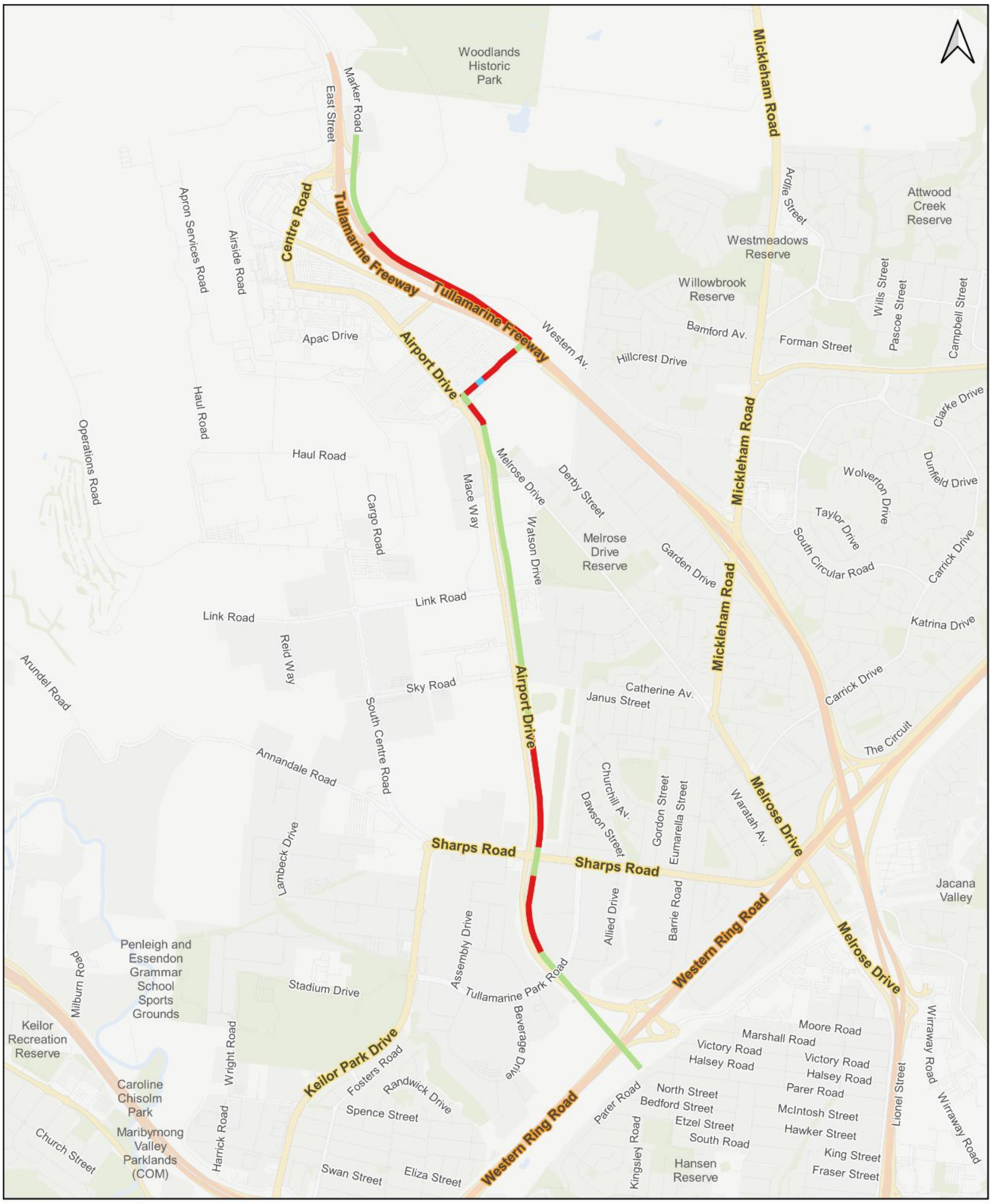
A HDD crossing will be required at Mercer Drive (a length of approximately 50 m). Following this, the alignment will continue north-east along Mercer Drive where a thrust bored crossing will be required at the southern Value Carpark entrance (a length of approximately 50m), before continuing for approximately 300 m up to the Tullamarine Freeway (M2). A HDD crossing will be required to cross the Tullamarine Freeway (M2) (a length of approximately 125 m).

The alignment will continue north from the Tullamarine Freeway (M2) crossing along Western Avenue with a further HDD section required to avoid an area of stockpiled fill material, under Quarry Road and into the JUHI facility (a length of approximately 600 m).

Sections of the alignment that aren’t installed using HDD or thrust boring will be installed by trenching techniques.

The pipeline alignment, including the installation methods for particular sections are shown in **Figure 2-2**.

Figure 2-2 Pipeline Alignment and Installation Techniques



ALIGNMENT AND INSTALLATION TECHNIQUE

0 500 1,000 m

LEGEND

- Thrust boring
- HDD
- Trenching

Note: Locations of features are indicative only and are shown solely to demonstrate features pertinent to this assessment.

2.4 Construction

2.4.1 Indicative Construction Activities and Duration

Pipeline construction is proposed to commence in Q3 of 2024 and the pipeline is proposed to be operational by Q3 of 2025. This is subject to Viva Energy Board approvals, land access, finalisation of design, award of Contracts and procurement timeframes and is subject to the grant of project approvals within certain timeframes. Indicative construction activities for the Project are shown in **Table 2-1**.

Table 2-1 Indicative construction activities

Construction activity	Detail of activity	Plant
Setting up work areas	Before construction can commence, work areas must be set up appropriately. These include lay down areas for equipment, construction material stockpiles and setup areas.	35 tonne excavator x 2 14G grader x 1 D7 dozer x 1
Clear and grade	Clear and grade involves preparing the pipeline easement and extra work spaces for construction.	
Excavation	A specialised rotary trenching machine or excavator is used to dig the trenches along the pipeline route. Any material removed is placed on the side of the trench (stockpiled), within the construction set up area. Trenchless construction is used in more complex or environmentally sensitive areas. Trenchless construction methods used for this Project include: • HDD • Thrust boring	**Trenching:** 45 tonne excavator with hammer x 2 Rock chain trencher **HDD:** HDD rig x 1 35 tonne excavator x 1 Mud tanks Generator (self bunded or within container) Vacuum truck x 2 **Thrust boring:** Rotary auger x 1 35 tonne excavator x 1 Mud tanks Generator (self bunded or

Construction activity	Detail of activity	Plant
		within container) Vacuum truck x 2
Pipe stringing and welding	Once the pipe lengths have been laid out or 'strung' along the construction set up area, qualified welders join the lengths of pipes together. Welds are inspected using x-ray or ultrasonic equipment to ensure their quality and are then coated, to reduce the likelihood of corrosion.	35 tonne excavator with vac lift x 1 572 side boom x 1 Bending machine Prime movers (stringing trucks) x 1 Skid truck x 2Light truck with welding machines x 2 Tack rig x 1
Lowering in	After final quality assurance checks, each completed pipe section is lowered into the trench using specialist side boom tractors and excavators.	35 tonne excavator x 2 572 side booms x 2 Loader x 2 350 padding machine x 1 Trucks to haul in bedding material x 3 Flowcon truck x 1 Grader x 1 D7 dozer x 1
Backfill	When the pipe is in place, it is backfilled with suitable fill material (padding) to protect the pipeline coating from stones or other sharp objects. The topsoil is then re-instated over the disturbed trench area to the contour of the land so that groundcover can be rehabilitated.	
Quality assurance	Rigorous quality assurance, inspection and testing occurs during and after installation to confirm that the pipeline integrity meets or exceeds the design criteria. Using water, the pipe is pressure tested (hydrotested) to ensure it is fit for operational service.	Fill pump High pressure squeeze pump 750cfm compressor 1200cfm compressor for drying Vacuum drying unit
Demobilisation and initial rehabilitation	Disturbed areas will be reinstated and may include re-contouring to match existing landforms. Topsoil conserved during the construction process is re-spread over areas used for construction. Rehabilitation is undertaken in	35 tonne excavator x 2 16G grader x 1 Grader 14G x 1 D7 dozer

Construction activity	Detail of activity	Plant
	accordance with approval requirements and landowner considerations.	Tractor - reseeding

2.4.2 Construction Hours and Work Numbers

Works are proposed to be undertaken between 7am to 6pm Monday to Friday and between 9am and 1pm on Saturdays. When constructing using HDD, it is proposed that horizontal boring will occur for 24 hours a day for the duration of the HDD works. Once these activities are complete works will revert back to normal hours.

Approximately 85 construction workers and onsite personnel will be required during the peak construction periods of the Project. Some of the construction activities will occur simultaneously and the number of personnel required on site will vary depending on the construction phases and activities being undertaken.

2.4.3 Primary Pipeline Construction Methodologies

The Project will use a combination of HDD, thrust boring and open cut trenching as the primary construction methods used to install the pipeline. Information on these methods is presented in the following sections.

The locations where the various methods will be utilised are shown in **Figure 2-2**.

Open Cut Trenching

Trenching is anticipated to be required for approximately 2.825 km of the alignment. It will be completed using specialised rotary trenching machines and/or excavators to dig a 1 m wide trench to a minimum depth of 1.2 m. If rock is encountered during trenching, a rock breaking process such as the use of rock saws/hammers and/or blasting may be required to excavate the trench.

Horizontal Directional Drilling (HDD)

HDD is a trenchless construction method used in more complex or environmentally sensitive areas. Specialist operators drill a hole beneath the surface at a shallow angle, and then pull a welded length of pipe through the hole without disturbing the surface. These operations are carefully planned, are highly engineered and undertaken to minimise disturbance to properties and roads, in environmentally sensitive areas or to address construction issues.

Approximately 3.725 km of HDD is required for the Project. HDD will be undertaken at the following locations:

- Under the Western Ring Road (M80), Steele Creek and Tullamarine Park Road (a total length of approximately 875 m).
- Under Sharps Road (a total length of approximately 175 m).
- Section along Airport Drive and underneath Link Road (a total length of approximately 1900 m).
- Under Mercer Drive (a total length of approximately 50 m).
- Under the Tullamarine Freeway (M2) (a total length of approximately 125 m).
- Under an area of stockpiled fill material at the northern section of the pipeline alignment (a total length of approximately 600 m).

HDD requires the excavation of an exit pit, approximately 3m x 3m x 3m, on the opposite side to where the drilling rig is set up to contain drilling fluids used in the drilling process. A smaller entry pit approximately half the size of the exit pit is excavated on the drilling rig side.

Thrust Boring

Thrust boring is another trenchless construction method which involves simultaneously jacking a pipe horizontally through the ground while removing the soil by rotating auger. Thrust boring is ideal for developed areas, protected areas, and other crossings where excavations are either undesirable or unfeasible, such as underneath main roads.

Approximately 50 m of thrust boring will be required for the Project. Thrust boring will be undertaken under the southern entrance to the Value Car Park.

3 ASSESSMENT METHODOLOGY

3.1 Assessment Level

The methodology adopted for this assessment involves a “Level 1” (i.e. qualitative) assessment in accordance with the Victoria EPA’s *Guideline for Assessing and Minimising Air Pollution in Victoria* (EPA, 2022).

In accordance with EPA (2022), Level 1 assessments are appropriate, subject to the application of three guiding principles:

- Routine activities that have controls that are known to be effective
- Mass emission rates that are so low they can be considered negligible
- Fugitive emissions that are difficult to assess accurately.

The construction of the Project, particularly the open trenching phases which have the highest potential to generate dust, are considered routine construction activities, with well know control techniques to effectively manage dust. Additionally, much of the dust emissions from construction activities are fugitive in nature and are therefore difficult to assess accurately. For these reasons, a Level 1 assessment is considered appropriate.

3.2 IAQM Risk Assessment

One of the aims of this assessment is to determine the degree of dust mitigation that should reasonably applied to the works. To this end, the risk assessment methodology described in *Guidance on the assessment of dust from demolition and construction* (IAQM, 2014) prepared by the UK Institute of Air Quality Management (IAQM) has been applied to the construction of Project.

As described in Section 2.4.3, much of the pipeline installation will be carried out using “trenchless” techniques such as HDD and thrust boring. These are not considered to be dusty construction activities. Accordingly, the risk assessment will focus on sections of the pipeline alignment where open cut trenching will occur.

4 CONSTRUCTION RISK ASSESSMENT

4.1 IAQM Methodology

This section presents a qualitative assessment of potential air quality impacts associated with the proposed works and has been conducted in general accordance with the methodology described in *Guidance on the assessment of dust from demolition and construction* (IAQM, 2014). This approach presents the risk of dust soiling and human health impacts associated with construction and demolition works and involves the following steps:

- Step 1: Screen the need for a detailed assessment
- Step 2: Assess the risk of dust impacts arising, based on:
  - The potential magnitude of dust emissions from the works
  - The sensitivity of the surrounding area
- Step 3: Identify site-specific mitigation
- Step 4: Consider the significance of residual impacts, after the implementation of mitigation measures.

4.2 Risk Assessment of Dust from Proposed Bulk Earthworks

The following qualitative risk assessment of potential dust impacts has been conducted for the proposed construction works.

4.2.1 Step 1 – Screen the Need for a Detailed Assessment

IAQM (2014) recommends that a risk assessment of potential dust impacts from construction activities be undertaken when sensitive receptors are located within:

- 350 metres of the boundary of the site; or,
- 50 metres of the route(s) used by construction vehicles on public roads up to 500 metres from the site entrance(s).

As shown in **Figure 4-1**, a number of sensitive receptors are located within 350 m of the trenching works. Therefore, an assessment of dust impacts is considered necessary under the guideline.

4.2.2 Step 2A – Potential Dust Emission Magnitude

The following section evaluates the potential dust emission magnitude for earthworks activities, which are the most likely activities associated with the works which would generate dust. These emission magnitudes have been classified based on the examples provided in IAQM (2014) (Section 7, Step 2: Assess the Risk of Dust Impacts).

The dust emission magnitude associated with earthworks activities may be classified as:

- **Large**: total site area >10,000 m^2, potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size), >10 heavy earth moving vehicles active at any one time, formation of bunds >8 m in height, total material moved >100,000 tonnes;
- **Medium**: total site area 2,500 m^2 – 10,000 m^2, moderately dusty soil type (e.g. silt), 5-10 heavy earth moving vehicles active at any one time, formation of bunds 4 m – 8 m in height, total material moved 20,000 tonnes – 100,000 tonnes; and,
- **Small**: total site area <2,500 m^2, soil type with large grain (e.g. sand), <5 heavy earth moving vehicles active at any one time, formation of bunds <4 m in height, total material moved <20,000 tonnes, earthworks during wetter months.

Approximately 2.825 kilometres of pipeline would be installed via trenching. This would occur over six discrete trenches, each between approximately 125 m and 1,175 m in length. The trenches would be excavated sequentially, with minimal overlap. The total amount of material moved during the trenching is estimated to be approximately 25,000 tonnes and would involve approximately 5-10 heavy earth moving vehicles at any one time. Accordingly, the dust emission magnitude associated with the works is **medium**.

4.2.3 Step 2B – Sensitivity of Surrounding Area

The sensitivity of the surrounding area to dust impacts considers a number of factors, including:

- Specific receptor sensitivities;
- The number of receptors and their proximity to the works;
- Existing background dust concentrations; and,
- Site-specific factors that may reduce impacts, such as trees that may reduce wind-blown dust.

Specific sensitivities for dust soiling and human health impacts at receptors relevant to this study are summarised in **Table 4-1**.

Table 4-1 Receptor Sensitivities

Sensitivity	Example land uses	
	Dust soiling	**Human health**
High	Dwellings, museums and culturally important collections, medium-long term carparks and car showrooms	Residential properties, hospitals, schools and residential care homes
Medium	Parks and places of work	Offices and shops
Low	Playing fields, footpaths, short term carparks and roads	Footpaths, playing fields and parks.

The following sensitive receptors are identified near the trenching works:

- Residents in Tullamarine and Westmeadows
- Creative Garden Childcare Centre
- Airport parking facilities
- Various commercial receptors (i.e. shops, places of work, etc.)

These receptors are shown in **Figure 4-1**.

The decision matrices shown in **Table 4-2** and **Table 4-3** (Table 2 and Table 3 in IAQM (2014)) are used to determine the sensitivity of the surrounding area to dust soiling and human health impacts, respectively.

Table 4-2 Area Sensitivity Decision Matrix – Dust Soiling

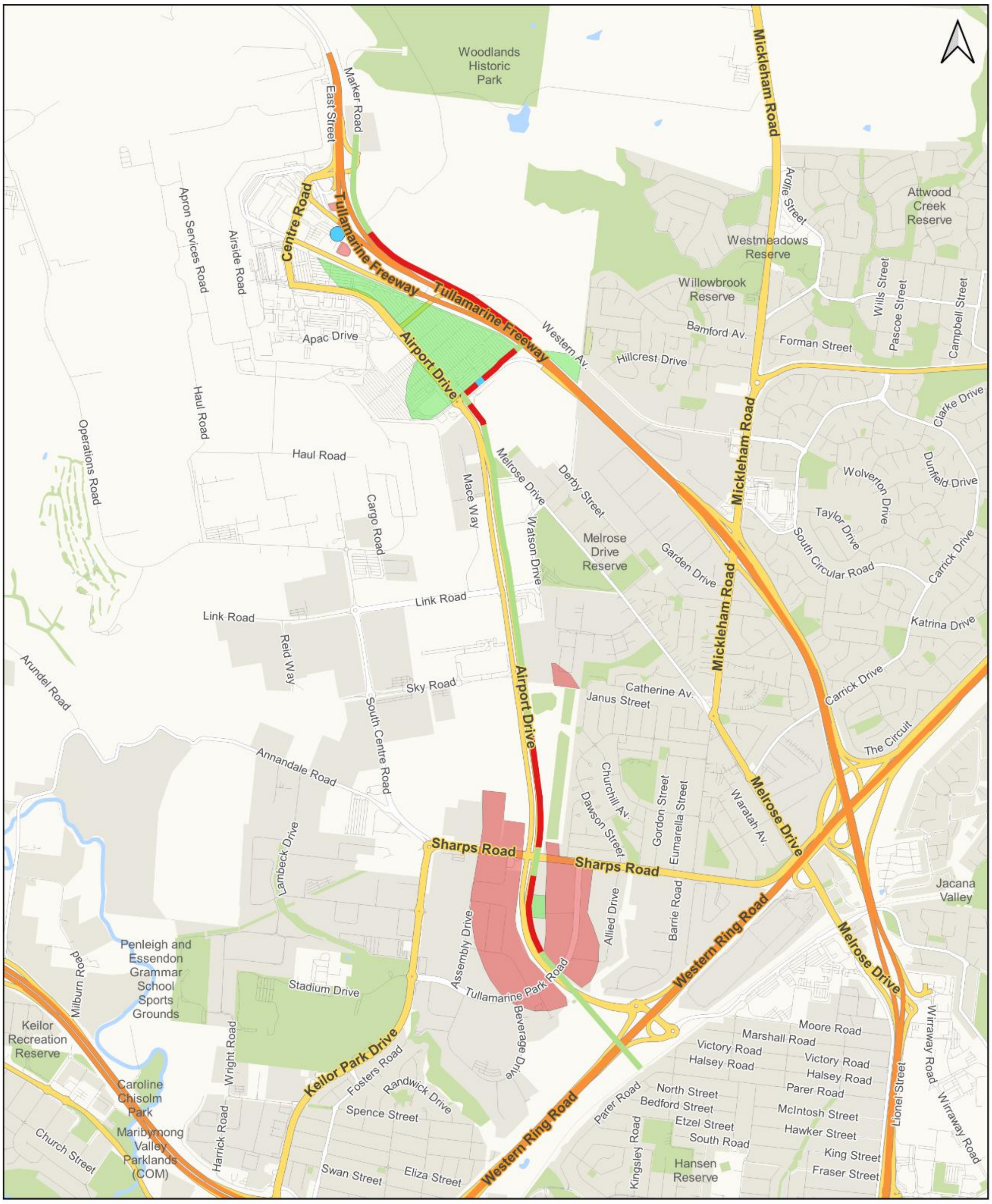
Receptor sensitivity	Number of receptors	Distance from the source (m)			
		<20	<50	<100	<350
High	>100	High	High	Medium	Low
	10-100	High	Medium	Low	Low
	1-10	Medium	Low	Low	Low
Medium	>1	Medium	Low	Low	Low
Low	>1	Low	Low	Low	Low

Table 4-3 Area Sensitivity Decision Matrix – Human Health

Receptor Sensitivity	Annual mean PM_{10} concentration [a]	Number of receptors	Distance from the source (m)				
			<20	<50	<100	<200	<350
High	>20 µg/m³	>100	High	High	High	Medium	Low
		10-100	High	High	Medium	Low	Low
		1-10	High	Medium	Low	Low	Low
	17.5-20 µg/m³	>100	High	High	Medium	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	High	Medium	Low	Low	Low
	15-17.5 µg/m³	>100	High	Medium	Low	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	<15 µg/m³	>100	Medium	Low	Low	Low	Low
		10-100	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Medium	>20 µg/m³	>10	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	17.5-20 µg/m³	>10	Medium	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	15-17.5 µg/m³	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	<15 µg/m³	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Low	-	≥1	Low	Low	Low	Low	Low

a. Annual PM_{10} ranges adjusted (pro-rata) down to reflect the NEPM goal of 25 µg/m³ compared to 40 µg/m³ in the United Kingdom.

Figure 4-1 Sensitive Receptors



SENSITIVE RECEPTORS

0 0.5 1 km

LEGEND

Works
- Bore
- HDD
- Trench

Receptors
- Airport Parking
- Commercial
- Westmeadows
- Childcare

Note: Locations of features are indicative only and are shown solely to demonstrate features pertinent to this assessment.

Victoria EPA operates a network of air quality monitoring stations (AQMS) under their obligations with the *National Environmental Protection (Ambient Air Quality) Measure*. The nearest AQMS to the Project is located at Footscray, approximately 12 kilometres south of the Project.

Review of the *Air monitoring report 2020: Compliance with the National Environment Protection (Ambient Air Quality) Measure* (EPA, 2020) indicates that the annual average PM_{10} concentration at the Footscray air quality monitoring station, was 16.8 µg/m^3.

Taking account of the proximity of sensitive receptors to the works and the above decision matrices, the sensitivity of the area to dust soiling and human health impacts due to trenching works in the northern and southern parts of the Project are presented in **Table 4-4**.

Table 4-4 Area Sensitivities to Dust Impacts

Area	Area sensitivity	
	Dust soiling	Human health
North of Mercer Drive	High ~100 long-term parking spaces within 20 metres of works	Low >100 people within 200 metres of works Annual mean PM_{10} concentration = 16.8 µg/m^3
South of Mercer Drive	High >100 long-term parking spaces within 50 metres of works	Low 10-100 people within 100 metres of works Annual mean PM_{10} concentration = 16.8 µg/m^3

4.2.4 Step 2C – Define the Risk of Impacts

To define the risk of impacts, the dust emission magnitude for the works (medium) is combined with the area sensitivities as per **Table 4-5**.

Table 4-5 Risk of dust impacts from earthworks

Area sensitivity	Dust emission magnitude		
	Large	Medium	Small
High	High risk	Medium risk	Low risk
Medium	Medium risk	Medium risk	Low risk
Low	Low risk	Low risk	Negligible

Based on the impact risk classifications in **Table 4-5**, the identified risks of dust soiling and human health impacts from the proposed works, in the absence of specific mitigation measures, is summarised in **Table 4-6**.

Table 4-6 Summary of Risks (Unmitigated)

Area	Risk	
	Dust soiling	Human health
North of Mercer Drive	Medium risk	Low risk
South of Mercer Drive	Medium risk	Low risk

4.2.5 Step 3 – Site Specific Mitigation

IAQM (2014) identifies a range of appropriate dust mitigation measures that should be implemented as a function of the risk of impacts. These measures are presented in Section 5.

4.2.6 Step 4 – Significance of Residual Impacts

In accordance with IAQM (2014), the final step in the assessment is to determine the significance of any residual impacts, following the implementation of mitigation measures. To this end, the guidance states:

> *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".*

Based on the proposed construction works, and the advice in IAQM (2014), it is considered unlikely that these works would result in unacceptable air quality impacts, subject to the implementation of the mitigation measures outlined in Section 5.

5 MITIGATION AND MANAGEMENT

The preceding assessment of potential dust impacts from the proposed works indicates that, in the absence of specific mitigation measures, the works pose a medium risk of dust soiling impacts and a low risk of health impacts. Accordingly, the following mitigation measures are deemed “highly recommended” in accordance with IAQM (2014):

- **Communications**
  - Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.
  - Display the name and contact details of the Responsible Person accountable for air quality and dust issues on the site boundary.
  - Display the head or regional office contact information.
  - Develop and implement a Dust Management Plan (DMP) that considers, as a minimum, the measures identified herein.
- **Site management**
  - Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.
  - Make the complaints log available to relevant authorities (e.g. Council, EPA/DELWP, APAM)
  - Record any exceptional incidents that cause dust and/or air emissions, either on or off site, and the action taken to resolve the situation in the log book
- **Monitoring**
  - Carry out regular onsite and off-site inspections to monitor compliance with the DMP, record inspection results, and make inspection log available to relevant authorities.
  - Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during any periods of prolonged dry or windy conditions
  - Agree any dust monitoring locations with the relevant authority. Where possible, commence baseline monitoring before work commences on site
- **Preparing and maintaining the site**
  - Plan site layout so that machining and dust generating activities are located away from receptors, as far as possible.
  - Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.

  - Fully enclose site or specific operations with fencing and dust protection (e.g. shadecloth) where there is a high potential for dust production and the site is active for an extensive period
  - Avoid site runoff of water or mud
  - Keep site fencing, barriers and scaffolding clean using wet methods
  - Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. Materials being re-used that are stockpiled for an extended period should be seeded or covered.
  - Cover, seed, or fence long-term stockpiles to prevent wind erosion.
- **Construction vehicles and sustainable travel**
  - Ensure all vehicles switch off engines when stationary - no idling vehicles.
  - Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable.
  - Produce a Construction Logistics Plan to manage to sustainable delivery of goods and materials.
- **Construction operations**
  - Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.
  - Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
  - Use enclosed chutes and conveyors and covered skips.
  - Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
  - Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.

Prior to the commencement of the works, the dust mitigation/management measures recommended herein should be considered and, where practicable, included in a Dust Management Plan (DMP) for the works. Additionally, the *Civil construction, building and demolition guide* (EPA, 2020) provides further guidance on managing dust from construction and should be considered in the development of the DMP.

6 CONCLUSION

Viva Energy is proposing to construct and operate a new jet fuel pipeline to support the growing fuel needs at Melbourne Airport.

The Project aims to:

- Help meet the increasing demand for jet fuel and support future growth at Melbourne Airport
- Increase the supply security of jet fuel which will contribute to the Victorian state economy
- Reduce the reliance on road transport for jet fuel supply with fewer trucks required to deliver fuel to the airport.

This report has been prepared to assess potential dust impacts associated with the construction of the Project.

A Level 1 (qualitative) assessment of potential air quality impacts associated with the proposed works has been conducted in general accordance with the *Guideline for Assessing and Minimising Air Pollution in Victoria* and includes a risk assessment of potential impacts based on the methodology described in *Guidance on the assessment of dust from demolition and construction* (IAQM, 2014).

In accordance with the IAQM assessment methodology, in the absence of specific mitigation measures, the works have a medium risk of dust soiling impacts and a low risk of health impacts.

Accordingly, it is recommended that a DMP is developed for the works. A range of management and mitigation measures have been identified and should be considered for inclusion in the DMP.

Subject to the implementation of mitigation measures, the residual effects of dust from the project are expected to be not significant and to have a low risk of generating unacceptable air quality impacts.

7 REFERENCES

EPA (2020), *Civil construction, building and demolition guide*, EPA Publication 1834, November 2020.

EPA (2022), *Guideline for Assessing and Minimising Air Pollution in Victoria*, EPA Publication 1961, February 2022.

IAQM (2014), *Guidance on the assessment of dust from demolition and construction*, Institute of Air Quality Management, February 2014.