



ASPHALTECH

LICENCE APPLICATION

Part Lot 55 Sutherland Way, Picton, WA, 6229 Dec 2024



ATTACHMENT 6A

EMISSIONS AND DISCHARGES



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6A.1 Emission Type: Air

- The main sources of airborne dust during the operation of the asphalt plant include:
- Delivery and storage of raw materials.
- Delivery and storage of filler materials.
- Traffic movement on premises.
- Dust from the pugmill and loading bay

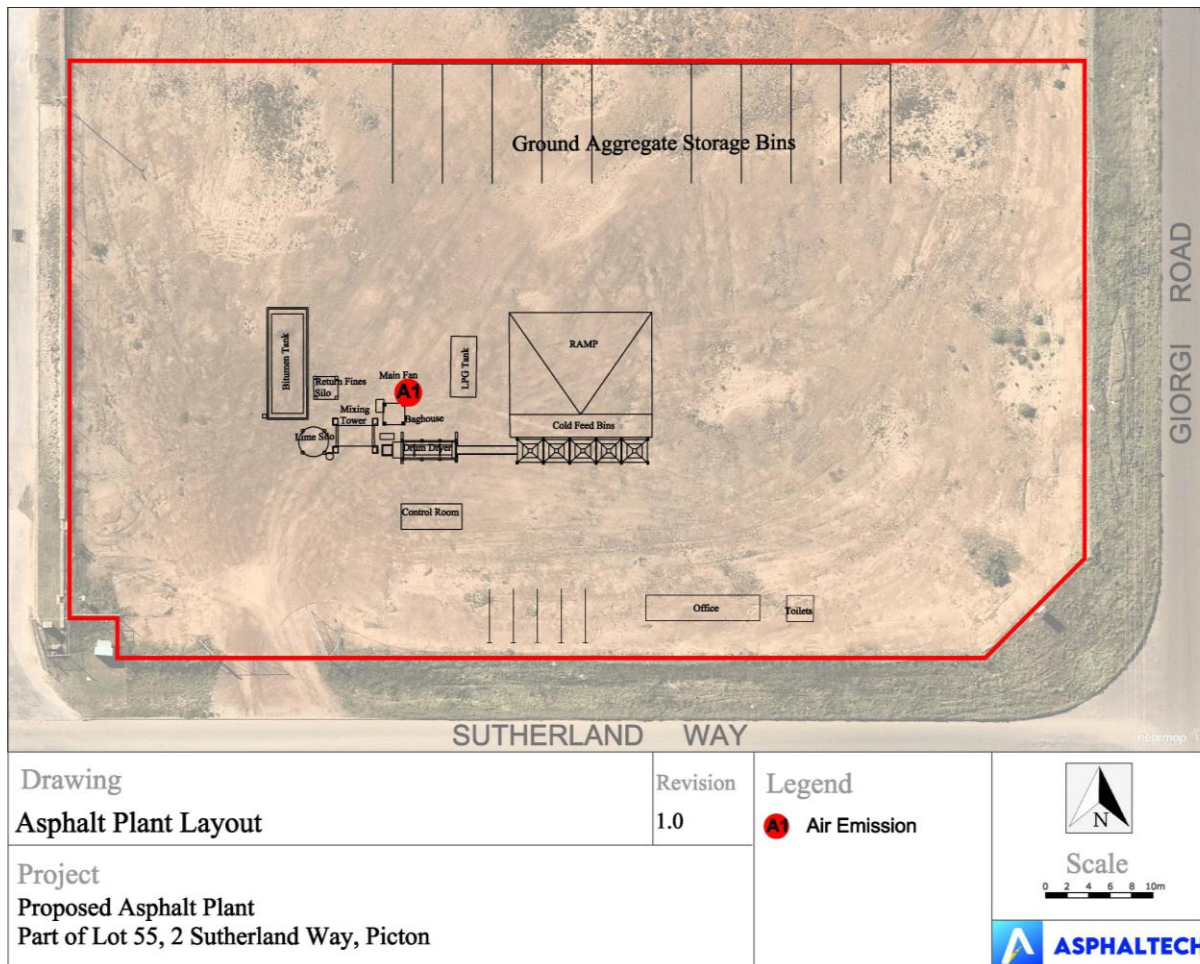


Figure 1 Air Emission Points

Specified emissions: particulate matter from the bag filter
 Not more than 40 mg/m³ at any time.

Exit velocity of exhaust gases >12 m/s

Filtered air from the baghouse is to be released to the atmosphere through a 13.4m stack (includes cone).

Daily visual monitoring maintained as per Environmental Log. Annual testing of the stack emissions is conducted, with levels reported to DWER annually.



Aspect	Impact	Control Methods
Stack emissions from the plant	Dust may be discharged into the air	<ul style="list-style-type: none"> ➤ The plant is serviced by a baghouse which minimizes dust emission via the stack. ➤ The gases from the mixing tower that are mainly hot air with particulates from aggregates and gases from the dryer plant contain fines which are fed to the pre-separator for reprocessing. ➤ Gases from the pre-separator enter the baghouse which consists of a series of filters that capture any particulates (fines) which drop to the base and from there are recovered and sent to the imported filler silo and used in the asphalt. ➤ The particulates stick to the bag filters, increasing the pressure which triggers automated cleaning procedures. ➤ All recovered fines are used on site. ➤ The baghouse is inspected and maintained regularly. ➤ Annual stack emission testing conducted to conform to licence requirements. ➤ Daily visual monitoring maintained as per Environmental Log. ➤ Annual testing of the stack emissions are required through the DWER Licence, with those levels to be reported to the DWER annually. ➤ Daily visual monitoring is maintained as per Environmental Log.
Hardstand dust Traffic movement on premises	Dust may be generated from vehicle disturbance	<ul style="list-style-type: none"> ➤ Water will be available from stormwater retention area for dust suppression, drawn from the extra depth concrete liner on site. ➤ At the end of each daily production, or during if necessary, the hardstand is swept with a dedicated roller sweeper. ➤ Hosing down is also used to remove and settle fines and dust. ➤ Perimeter screening bunds are in place and will be retained, as will the screening trees to the west north and east. ➤ Yard surfaces are to be paved. ➤ Vehicle speed limit on the premises restricted to 5km, signage in place. ➤ Regular sweeping of the premises conducted to prevent airborne dust generation.
Dust from the storage bins	The raw feed storage bins have tall sides.	<ul style="list-style-type: none"> ➤ Aggregates are placed onto a firm floor which shall be at least level, or graded towards the face of the stockpile so that water does not settle on the floor and saturate the lower layers of the aggregate via capillary action. ➤ The height of any raw materials storage is limited to the top of the wall to eliminate the possibility of spillage and reduce the possibility of wind-blown contamination or loss. ➤ In dry, windy conditions, the Plant Operator is responsible for ensuring that wherever possible, the stockpile aggregate is kept damp by means of the automated "Cannon" sprinkler system to reduce wind-blown dust both from the surface of the stockpile and from the aggregate when being tipped into the cold feed bins. ➤ Raw material truck deliveries. All road trucks are to be fitted and use retractable covers to prevent airborne dust. ➤ Raw material aggregates are sufficiently dampened when leaving the onsite quarry, prior to delivery to the storage bays. ➤ Sprinkler systems are to be provided on the aggregate bays to maintain the materials in a damp state. ➤ Stockpiles held in aggregate concrete panel bays shall not exceed the height of the bay walls or extend past the sides of the bays to minimise airborne dust. ➤ Traffic movement managed on premises with designated drive ways and signage. ➤ Sweeping of yard is conducted when necessary, with special sweeper trucks fitted with misting spray bars and a suction sweeper to minimise airborne dust generation. ➤ There remains a contingency to place a roof over the bins if required at some point in the future. This is not considered necessary at commencement because of the distance to sensitive premises. ➤ The cold feed bins have high sides and a roof to minimise dust



		<p>lift off from loading the bins.</p> <ul style="list-style-type: none">➤ The bins are installed with water sprays which are used to wet down materials as required.➤ Recovered asphalt pavement is also to be stored in a bin prior to reuse.
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6A.2 Emission Type: Stormwater

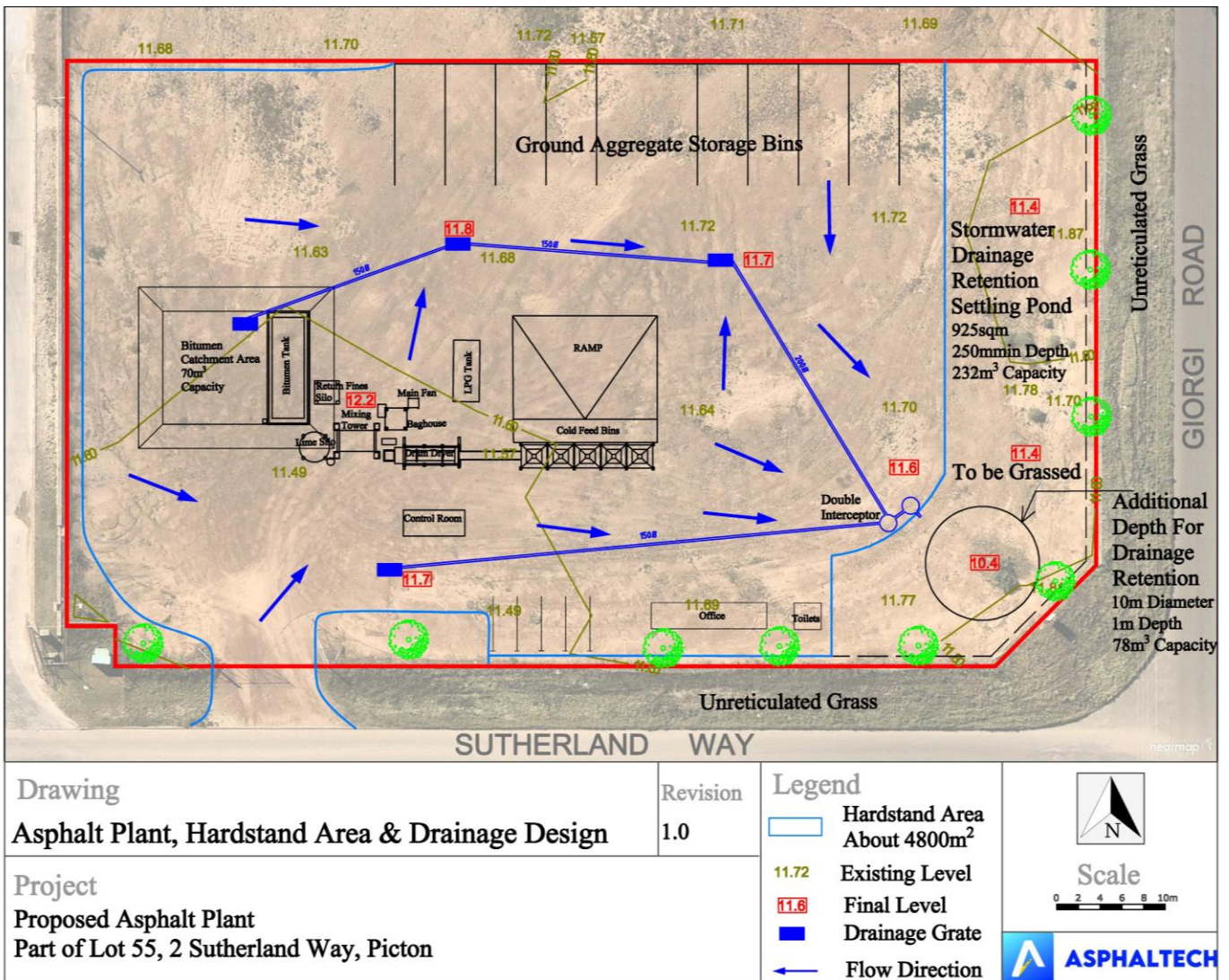


Figure 2 Stormwater

The only possibility of stormwater contamination may be caused from refuelling the loader by Contractor fuel suppliers and engine oil drips/spills from trucks and loader which is what may occur on any road surface.

All stormwater runoff will be directed and drained to a proposed double interceptors before entering into the stormwater drainage retention / settling pond. Please refer to stormwater layout plan attached, Figure 2.

The detention basin will enable water to be recycled.

Aspect	Impact	Control Methods
		<ul style="list-style-type: none"> ➤ The asphalt plant burner will operate on LPG Gas, which reduces the risk of water contamination.
Refueling Loader and other vehicles	Minor Spillage	<ul style="list-style-type: none"> ➤ Any diesel required, e.g loader, will be provided by an external fuel service vehicle. ➤ A spill kit will be present on site. Any spill will be contained by the spill kit. ➤ Staff will be trained in the use of the spill kit.



		<ul style="list-style-type: none">➤ Stormwater intersecting any spill area will be directed to the double interceptor.
Hydrocarbons Contamination	Minor Stormwater runoff	<ul style="list-style-type: none">➤ Double Interceptors installed.➤ All surface water runoff is to be directed through the double interceptor prior to entering the detention basin.
Bitumen Storage Tank	Potential issue from a leak in the tank.	<ul style="list-style-type: none">➤ The bitumen tank will be located in a self-contained bunded area.➤ Stormwater from this bunded area will be directed to the double interceptor.



6A.3 Emission Type: Noise

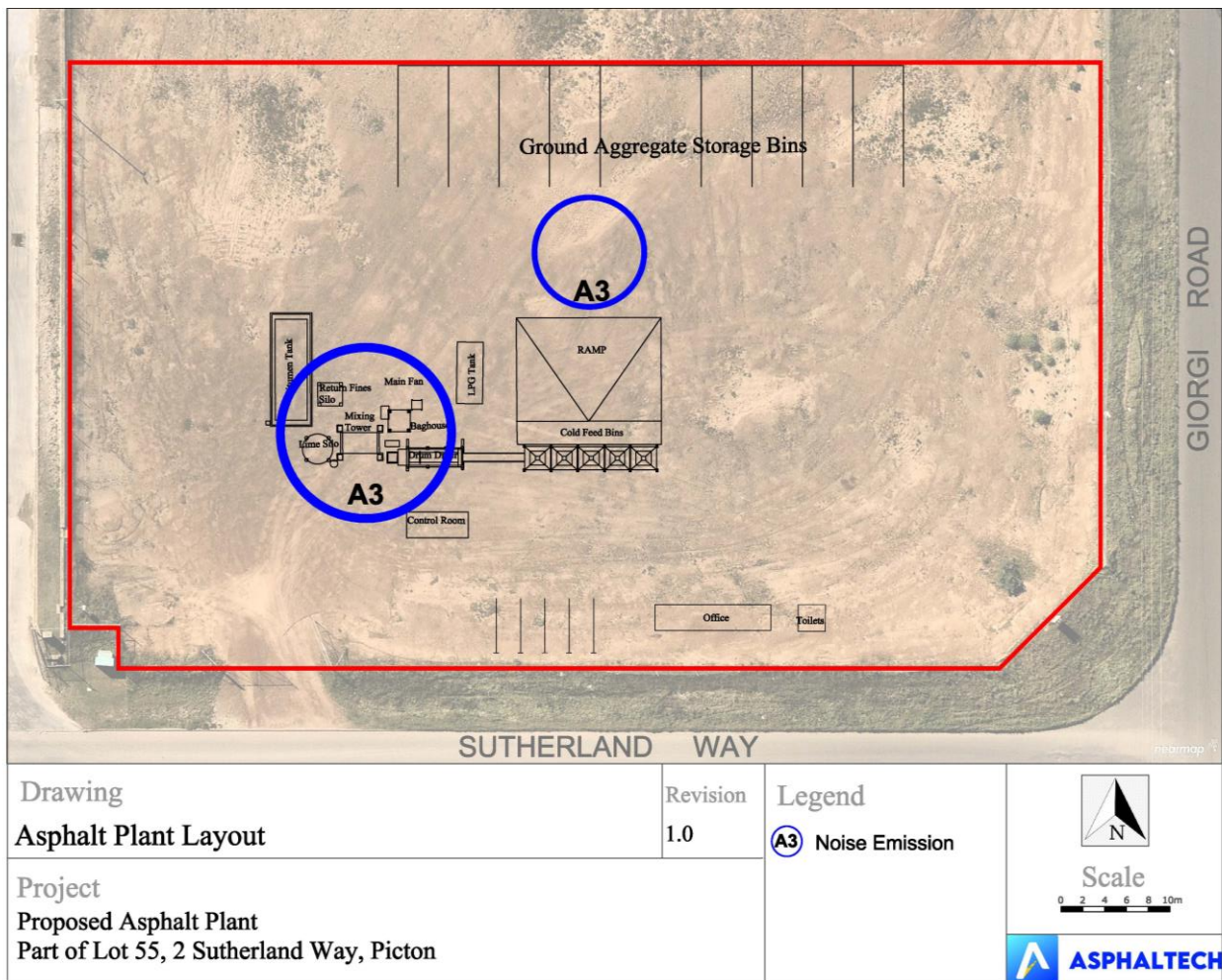


Figure 3 Location of noise emission points

The main sources of noise during the operation of the asphalt plant include:

- Noise from fixed plant.
- Noise from mobile plant.
- On site traffic.
- Truck traffic servicing the operations.

There is also the risk of cumulative impacts from the quarry and the operation of the asphalt plant and therefore noise measurements and modeling has been conducted by Asphalttech and Herring Storer Acoustics as outlined below.

Aspect	Impact	Control Methods
Noise from fixed plant	Excessive noise levels on and offsite.	The plant components are fitted with noise reducing/silencing features. The burner fan is covered with a colorbond sheet. The air compressor is fitted with a sound proof cover. Cladding and insulation will be fitted to exterior for durability and noise suppression. Noise testing will be conducted on plant and machinery every five years as per the Code of Practice – Managing Noise at Workplaces.
Noise from mobile plant.	Excessive noise levels	Mobile plant equipment regularly serviced and maintained to manufacturer's specification. Equipment replaced regularly with latest new models meeting



		<p>Australian Standards. Noise testing will be conducted on plant and machinery every five years as per the Code of Practice – Managing Noise at Workplaces.</p>
External noise levels	Excessive noise levels on and offsite.	<p>The proposed asphalttech plant previously operated in the Perth Metropolitan Area at Malaga. That plant has been disabled and will be moved to Lot 55. During operations in 2013 the noise levels of the various parts of the plant were measured and details are attached by Asphalttech. The relocated plant will be essentially the same with some improvements to the environmental management and therefore the noise pressure readings can be taken as a worst case scenario. The noise contours have been overlaid on the Picton site to show that noise impacts are managed and do not impact on local sensitive premises. The closest dwelling to the asphalt plan is over > 1200 metres away. At that distance the predicted noise output was modeled to be 21.82 dB well within compliance of the Noise Regulations.</p>



6A.4 Emission Type: Odour

The main sources of odour during the operation of the asphalt plant include:

- Bitumen Ventilation during hot bitumen transferring from road tanker to storage tank.
- Hot Asphalt Discharge to Trucks at Pugmill

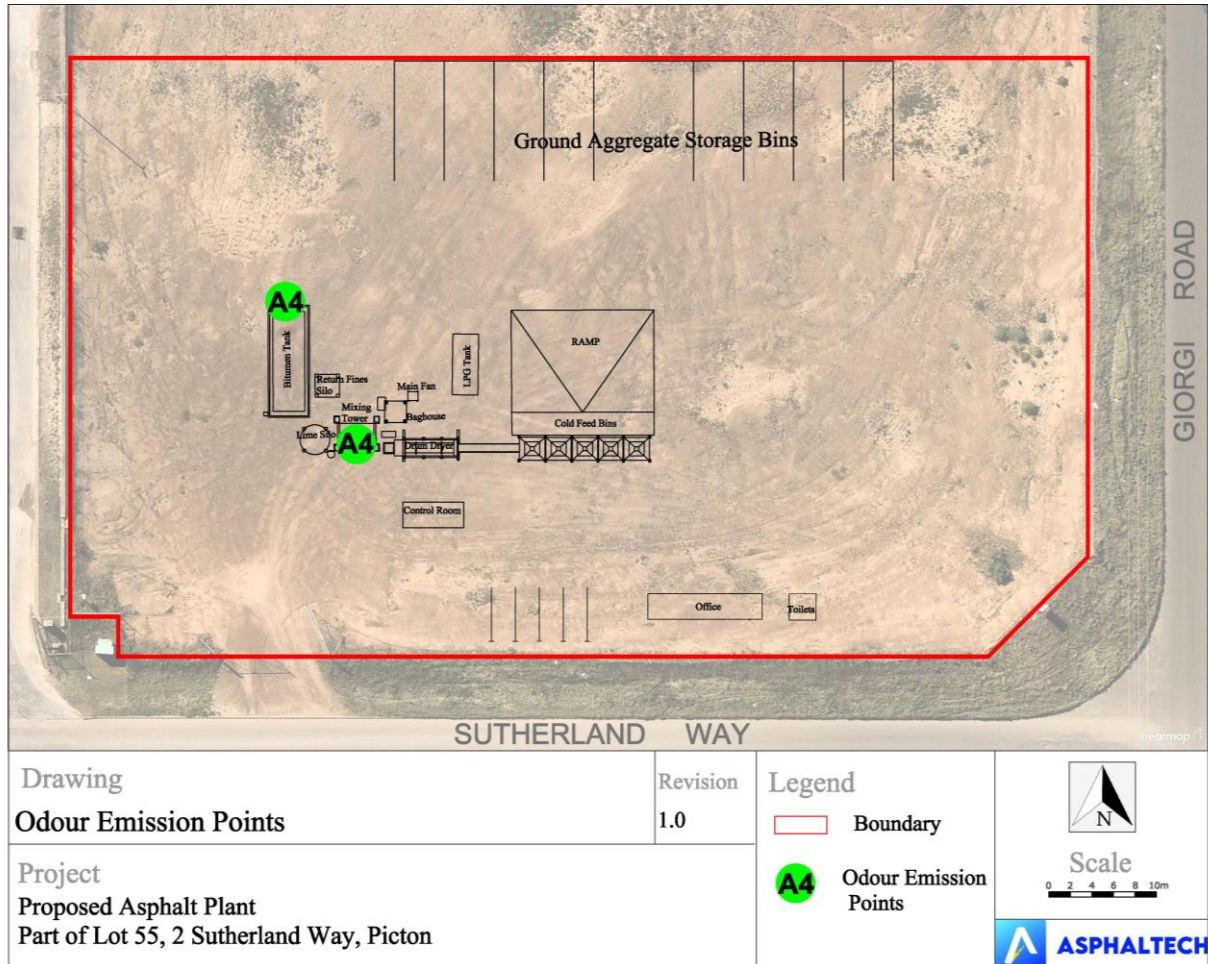


Figure 4 Location of odour emission points

This is the plant that was previously located at 416 Victoria Road, Malaga. Asphalttech has operated this plant in Malaga for 19 years.

Refer to current Licence, Environmental Protection Act 1986, Part V:

- Licensee: Asphalttech Pty Ltd
- Licence: L8447/2010/3

As such an analysis of the operation of that plant and the relocation to the new site on part Lot 55 have been assessed under the principles of the Department of Water and Environment Regulation Draft Odour Guideline for prescribed premises January 2018.

The analysis of complaints, locations, wind patterns and the like, combined with a comparison to other operating sites, is prepared as a separate document and shows that there will be no increased risk from the commissioning of the plant on part Lot 55.

Odour risk is addressed in Document 3A2.



The analysis shows that the plant, when relocated, will be unlikely to cause any adverse impacts from odour generation.

The plant operated for 19 years without complaint, even though there was significant light industrial land uses adjoining and nearby. The plant is being relocated to part Lot 55 which has similar landform but much less dense adjoining land uses.

The main risk is on still winter days. The meteorological data shows the number of calm days increases in winter to around 2.6 mornings per month. There are also times when the winds are light and another 15% or 3 days when gentle easterly winds are blowing.

In winter therefore the number of calm days or light winds is around one working day per week when there is an increased risk of odour.

Even so, with a buffer distance to the closest sensitive premises are > 1000 metres which complies with the EPS Guidelines for Separation Distance from Industrial land uses.

Aspect	Impact	Control Methods
Bitumen Ventilation during hot bitumen transferring from road tanker to storage tank.	Noticeable Odour smell within the prescribed boundary	N/A See below and map attachments at Document 3A2.
Hot Asphalt Discharge to Trucks at Pugmill	Noticeable Odour smell within the prescribed boundary	No elevated temperature asphalt to be dispatched (temperature recorded on dockets). The loading Bay will be installed with a shade cloth tunnel extending approximate 10 metres either end of the loading bay. See Document 3A2.