

**APPENDIX 9**

**DUST MANAGEMENT PLAN**

**Lot 1503 Harris Road, Myalup**  
**Shire of Harvey**

**Prepared For:** Gotam Pty Ltd

**Prepared By:** Jack Ghasseb

**Date:** June 2026

## Table of Contents

1.0 INTRODUCTION.....	3
2.0 SITE & BACKGROUND.....	3
2.1 LOCALITY & OWNERSHIP.....	3
2.2 LAND USE.....	3
2.3 GEOLOGY & SOILS.....	3
3.0 SENSITIVE RECEPTORS & WIND.....	4
3.1 RESIDENCES.....	4
3.2 PREVAILING WINDS.....	4
4.0 DUST SOURCES & RISKS.....	5
4.1 PLANT & EQUIPMENT.....	5
4.2 MINING ACTIONS.....	5
4.3 RISK CLASSIFICATION.....	6
5.0 DUST MANAGEMENT.....	6
6.0 REFERENCES.....	6

Figure 1: Site & Surrounds

Addendum 1: Particle Size Analysis

Addendum 2: Wind Roses Bunbury

Addendum 3: Site Classification Chart

## 1.0 INTRODUCTION

This Dust Management Plan (DMP) follows the guideline for managing the impacts of dust and by the Department of Water and Environmental Regulation). It accompanies, and should be read with, the *Extractive Industries Licence Application and Environmental Management Plan, Lot 1503 Harris Road, Myalup*.

The requirement for this plan arises under the Shire of Harvey Local Planning Scheme No. 2 (gazetted 2024) and, for workplace health and safety, under the Work Health and Safety Act 2020 and the Work Health and Safety (Mines) Regulations 2022, which from 31 March 2022 replaced the Mines Safety and Inspection Act 1994 and its 1995 Regulations.

The objectives of this DMP are:

- to describe the nature of the proposed operation;
- to identify any sources of dust that might arise from operations.
- to identify the proximity of any sensitive premises in this regard;
- to identify measures that will limit the generation of dust from the operations; and
- to identify measures that will limit the impact of dust on sensitive premises.

## 2.0 SITE & BACKGROUND

### 2.1 LOCALITY & OWNERSHIP

Lot 1503 Harris Road, Myalup, in the Shire of Harvey, owned by Gabi Ghasseb. The site, its surrounds and the proposed EIL area are shown at Figure 1.

### 2.2 LAND USE

Land use. The lot is used for light grazing & is largely pasture, with about 13 hectares of native vegetation along its western edge; the extraction area itself has been cleared previously in 2015. Adjoining land is rural-zoned and used mainly for limestone quarrying and farming.

### 2.3 GEOLOGY & SOILS

The material and its dust character. The site lies in the Yoongarillup landform — shallow sandy topsoil over interbedded limestone, calcarenite, marl and shell beds of the Tamala Formation (WAPC, 2003), with the limestone 20–25 m thick over the Leederville Formation (Commander, 1988).

Field testing shows the soil is dominantly sand (coarse/medium/fine sand 80%, gravel 8%, silt 8%, clay 4%); the low fines content limits lift-off during stripping and stockpiling, although fine material can

become airborne in strong winds when disturbed by excavation (Section 5). In place the limestone is cemented and carries no loose fines, but screening produces fugitive dust finer than PM50.

Particle-size analysis of crushed limestone from a limestone operation about 1 km south (Lot 3618) returned:

- Gravel 42% (> 1.18mm)
- Sand 54% (< 1.18 > 0.0135mm)
- Fines 4% (<0.0135mm)

The proportion of total suspended particles finer than PM50 is estimated at around 5%. A particle size analysis is in Addendum 1.

The operation. Sand and limestone are extracted from a 7.2 ha area (Figure 1) using a front-end loader and bulldozer, averaging around 87,000 m<sup>3</sup> per year subject to demand. The overlying sand is worked first across the footprint, followed by the limestone, with the ground progressively rehabilitated to pasture.

## **3.0 SENSITIVE RECEPTORS & WIND**

### **3.1 RESIDENCES**

There is no residential dwellings within 1000m of the area of potential impact, when extended to 1500 m from the boundary of the extraction areas only a single dwelling falls within the area of potential impact.

One dwelling (Res 1 on figure 2) is 1334m from the nearest site border, lies on the adjoining property to the southeast of the extraction area at 255 (Lot 1734) Finn Road, it is a worker dwelling for an established limestone quarry on that property. The dwelling is no longer occupied by its owner, Biaggio Versaci, who in any event has provided a letter confirming that he has no objection to the proposed operation at Lot 1503. For these reasons Res 1 is not treated as a sensitive receptor.

### **3.2 PREVAILING WINDS**

Wind over the site is represented by the Bunbury records of the Bureau of Meteorology for Bunbury, which now extend from 1995 to 2026. The pattern is consistent and well established: winds are dominantly from the west and south-west (WSW), freshen through the afternoon under the sea-breeze influence, and are strongest over the summer months of November to February, when mean speeds are in the order of 20 km/h. Morning winds more often come from the east and south-east, though the strongest morning winds still blow from the west. Wind roses are reproduced at Addendum 2.

Because the prevailing winds blow from the west and south-west, dust raised on site is carried predominantly east and away from the only nearby dwelling. Res 1 lies to the south-east of the extraction area, so it sits downwind of the operation only when the wind comes from the north-west — a direction that occurs only a small proportion of the time, in the order of 4 to 5%. Dust generated on site is therefore very seldom carried toward Res 1.

## 4.0 DUST SOURCES & RISKS

**Table 1: Dust-Generating Activities, Aspects and Impacts**

<b>Activity</b>	<b>Duration</b>	<b>Aspect</b>	<b>Potential impact</b>
Rip and blade sand and limestone to the processing area	Through the year, up to 5 years	May release dust to the atmosphere	Fine dust — amenity issue for nearby residents
Screening and stockpiling	Through the year, up to 5 years	Screening may release dust	Amenity issue for nearby residents
Loading trucks from stockpiles	Up to 5 years, averaging 8-10 trucks/day	Loading may release dust	Amenity issue for nearby residents
Transport from site	Up to 5 years	Dust may escape from trucks in transit	Amenity, health or traffic safety
Rehabilitation	Up to 2 weeks/year (winter), from 2026	Disturbance of topsoil may release dust	Amenity issue for nearby residents

### 4.1 PLANT & EQUIPMENT

- D9 bulldozer
- Caterpillar 980 front-end loaders
- mobile jaw crusher
- Finlay Screen 693
- Striker 25 m stacker
- Caterpillar generator set
- standard rigid truck (14 t)
- single semi-loader (24 t)

### 4.2 MINING ACTIONS

Sand is extracted first and then the underlying limestone; topsoil and overburden are stockpiled separately within the license area to no more than five meters; within the active area the bulldozer rips, blades and crushes the material before pushing it to a stockpile; screening is carried out as required; trucks enter via Harris Road and are loaded from the stockpiles by a front-end loader (Figure 1); excavation proceeds only to the design floor set well above the maximum groundwater level (Water Management Plan); and the worked ground is returned to pasture after topsoil is re-spread.

## 4.3 RISK CLASSIFICATION

Applying the assessment in the WA Government/DEC guideline (Addendum 3), the site classifies as negligible risk (Classification 1). Management measures follow in Section 5.

## 5.0 DUST MANAGEMENT

Although no sensitive receptor has been identified, the following measures are applied:

- A 15 kL water cart damps down any areas of concern during crushing or material movement.
- If wind is blowing strongly toward the nearest residence in dusty conditions, operations cease until adequate wetting down has been achieved.
- Screening and stockpiling are sited in topographic low points, with raw and processed stockpiles arranged as windbreaks to further shield receptors from fugitive dust.
- Limestone stockpiles naturally crust over and generally do not raise dust; where topsoil and overburden stockpiles do not stabilize by crusting and grass regrowth, a polymer spray-on soil stabilizer is applied.
- Internal roads are limestone-surfaced, with a 20 km/h truck speed limit at all times.
- Truck loads are always covered so no dust is generated in transit.
- Employees and contractors are briefed on minimizing dust emissions.
- The Quarry Manager's mobile number is displayed at the entrance for any complaints.

Water for dust suppression is the operation's only water requirement, drawn from the on-site soak (up to 700 kL) under a 5C groundwater license from DWER. Visual monitoring is undertaken to confirm the measures are keeping dust emissions at acceptable levels.

## 6.0 REFERENCES

- Bureau of Meteorology (BoM) (2026). *Wind records and wind roses for Bunbury (station 009965)*. [www.bom.gov.au](http://www.bom.gov.au). Accessed 2026.
- Commander, D.C. (1988). *Geology and hydrogeology of the "superficial formations" and the coastal lakes between Harvey and Leschenault Inlets (Lake Clifton Project)*: Western Australia Geological Survey, Report 23, pp. 37-50.
- Department of Environment and Conservation (DEC) (now Department of Water and Environmental Regulation) (2011). *A guideline for managing the impacts of dust and associated contaminants from land development sites, contaminated sites remediation and other related activities*.
- Lundstrom Environmental Consultants Pty Ltd (2015). *Extractive Industries Licence Application and Environmental Management Plan, Lot 1503 Harris Road, Myalup*. Prepared for Omaha Nominees Pty Ltd. Perth, Western Australia.
- Shire of Harvey (2024). *Local Planning Scheme No. 2*. Gazetted 12 April 2024.
- Western Australian Planning Commission (WAPC) (2003). *Greater Bunbury Region Scheme Environmental Review, Figure 6 - Landforms and Soils Map*. <https://www.planning.wa.gov.au>.
- Western Australian Planning Commission (WAPC) (2013). *Greater Bunbury Region Scheme Map Sheet 1 - Myalup, Lake Preston*. <https://www.planning.wa.gov.au>.
- Windfinder (2026). *Wind & weather statistics, Bunbury (2002-2025)*. [www.windfinder.com](http://www.windfinder.com). Accessed 2026.
- Work Health and Safety Act 2020 (WA); Work Health and Safety (Mines) Regulations 2022 (WA).



# **ADDENDUM 1**

## **PARTICLE SIZE ANALYSIS**

## TEST REPORT

Sheet No. 1 of 6

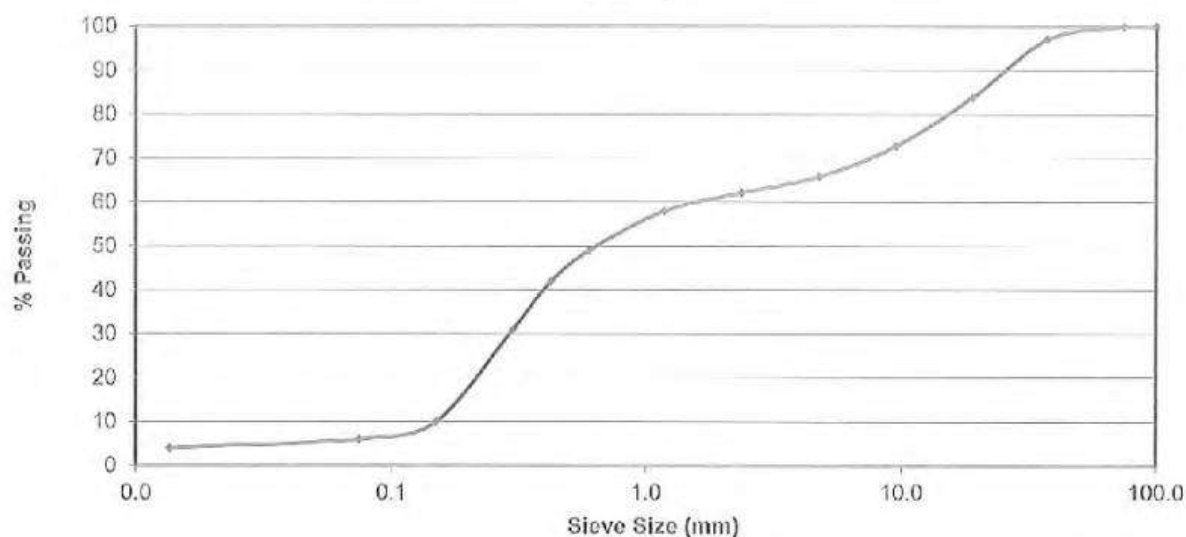
**CLIENT:** Lake Preston Lime  
**PROJECT:** QA Testing - Finn Road, Myalup  
**LOCATION:** Sample 1

**SAMPLE NO:** CT 48890  
**JOB NO:** 45-1-2  
**FIELD DESCRIPTION:** Limestone  
**DATE PSD TESTED:** 30-Sep-14  
**DATE P.I. TESTED:** 04-Oct-14  
**DEPTH:** -

**PROPOSED USE:** Submitted Sample  
**CLIENT REF:** -

PARTICLE SIZE DISTRIBUTION

WA 115.1



PARTICLE SIZE DISTRIBUTION WA 115.1				PLASTICITY INDEX & LINEAR SHRINKAGE	
Sieve Size mm	% Retained				
37.5	3				
Sieve Size	% Passing	Sieve Size	% Passing	Liquid Limit % WA 120.2	Not Obtainable
75.0 mm	100	1.180 mm	58	Plastic Limit % WA 121.1	Non-Plastic
37.5 mm	97	0.600 mm	49	Plasticity Index % WA 122.1	NP
19.0 mm	84	0.425 mm	42	Linear Shrinkage % WA 123.1	0.0
9.50 mm	73	0.300 mm	31	Length of Mould mm	250
4.75 mm	66	0.150 mm	10	Sample history	Air Dried
2.36 mm	62	0.075 mm	6	Sample Preparation Method	Dry Sieved
		0.0135 mm	4	Nature of Shrink	-

**Notes:** Moisture content of sample taken for shrinkage = 19.1%  
 Sampled by Client

**Approved Signatory:** S. McMahon

**Date:** 07-Oct-14

**Report Number:** CT 48890 / 1



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 PO Box 5068, Bunbury WA 6231  
 29 Halifax Drive, Bunbury WA 6230

## TEST REPORT

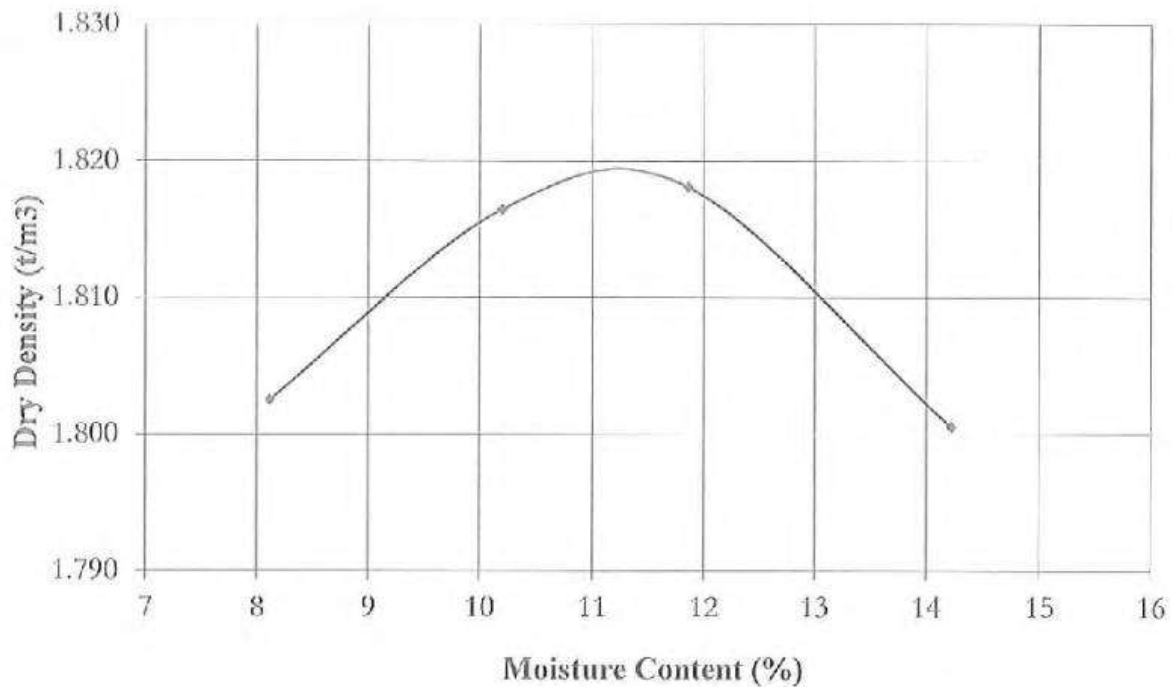
Sheet No. 2 of 6

**CLIENT:** Lake Preston Lime  
**PROJECT:** QA Testing - Finn Road, Myalup  
**LOCATION:** Sample 1  
**PROPOSED USE:** Submitted Sample  
**CLIENT REF:** -

**SAMPLE NO:** CT 48890  
**JOB NO:** 45-1-2  
**FIELD DESCRIPTION:** Limestone  
**DATE TESTED:** 30-Sep-14  
**DEPTH mm:** -

### MODIFIED MAXIMUM DRY DENSITY & OPTIMUM MOISTURE CONTENT WA 133.1

**MDD (t/m<sup>3</sup>)** 1.819      **OMC (%)** 11.3



**% Retained on 19mm Sieve & Excluded** 16

**Notes:** Sites selected by client  
 Sampled by Client

**Approved Signatory:** S. McMahon  
**Date:** 07-Oct-14  
**Report Number:** CT 48890 / 1



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## TEST REPORT

Sheet No. 3 of 6

**CLIENT:** Lake Preston Lime  
**PROJECT:** QA Testing - Finn Road, Myalup  
**LOCATION:** Sample 1

**SAMPLE NO:** CT 48890  
**JOB NO:** 45-1-2  
**FIELD DESCRIPTION:** Limestone  
**DATE COMPACTED:**  
**DEPTH mm:** -

**PROPOSED USE:** Submitted Sample  
**CLIENT REF:** -


### CALIFORNIA BEARING RATIO

WA 141.1

#### SOAKED (4 Days)

MDD Data	Result	Ratio %
MDD ( $t/m^3$ )	1.82	96.0
OMC (%)	11.5	100.0
<b>Compactive Effort Used</b>		
Blows per Layer (Average)	20	
Layers	5	
Rammer Weight (kg)	4.9	
<b>Moisture Contents (%)</b>		
At Compaction	11.3	100.5
Top 30mm	17.3	152.5
Remainder	15.6	138.5
Entire Sample	16.8	149.0
<b>Dry Density (<math>t/m^3</math>)</b>		
At Compaction	1.74	96.0
After Soaking	1.74	96.0
Surcharge (kg)	4.5	
Swell %	0.0	
California Bearing Ratio (%)	60	@2.5 mm
% Retained on 19mm Sieve & Excluded	16	

**Notes:** Sites selected by client  
 Sampled by Client

**Approved Signatory:** S. McMahon:   
**Date:** 07-Oct-14  
**Report Number:** CT 48890 / 1



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## TEST REPORT

Sheet No. 5 of 6

**CLIENT:** Lake Preston Lime  
**PROJECT:** QA Testing - Finn Road, Myalup  
**LOCATION:** Sample 1

**SAMPLE NO:** CT 48890  
**JOB NO:** 45-1-2  
**FIELD DESCRIPTION:** Limestone  
**DATE TESTED:** 03-Oct-14  
**DEPTH mm:** -

**PROPOSED USE:** Submitted Sample  
**CLIENT REF:** -

### CALCIUM CARBONATE CONTENT

WA 915.1

Calcium Carbonate	%	50.3
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#### Notes:

Sampled by Client

**Approved Signatory:** S. McMahon

**Date:** 07-Oct-14

**Report Number:** CT 48890

1 / 1



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## TEST REPORT

Sheet No. 6 of 6

**CLIENT:** Lake Preston Lime  
**PROJECT:** QA Testing - Finn Road, Myalup  
**LOCATION:** Sample 1

**SAMPLE NO:** CT 48890  
**JOB NO:** 45-1-2  
**FIELD DESCRIPTION:** Limestone  
**DATE TESTED:** 03-Oct-14  
**DEPTH mm:** -

**PROPOSED USE:** Submitted Sample  
**CLIENT REF:** -

### LOS ANGELES VALUE

WA 220.2

Los Angeles Value                      28

Test Grading Used                      G

#### Notes:

Sampled by Client

Approved Signatory: S. McMahon

Date: 07-Oct-14

Report Number: CT 48890

1 / 1



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Ph: 08 9726 2204 Fax: 08 9726 2203

PO Box 5068, Bunbury WA 6231

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## **ADDENDUM 2**

### **WIND ROSES BUNBURY**

# Rose of Wind direction versus Wind speed in km/h (22 Nov 1995 to 09 Feb 2026)

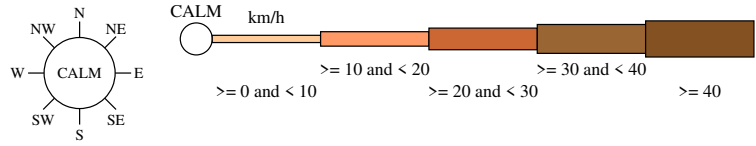
Custom times selected, refer to attached note for details

## BUNBURY

Site No: 009965 • Opened Nov 1995 • Still Open • Latitude: -33.3567° • Longitude: 115.6447° • Elevation 5.m

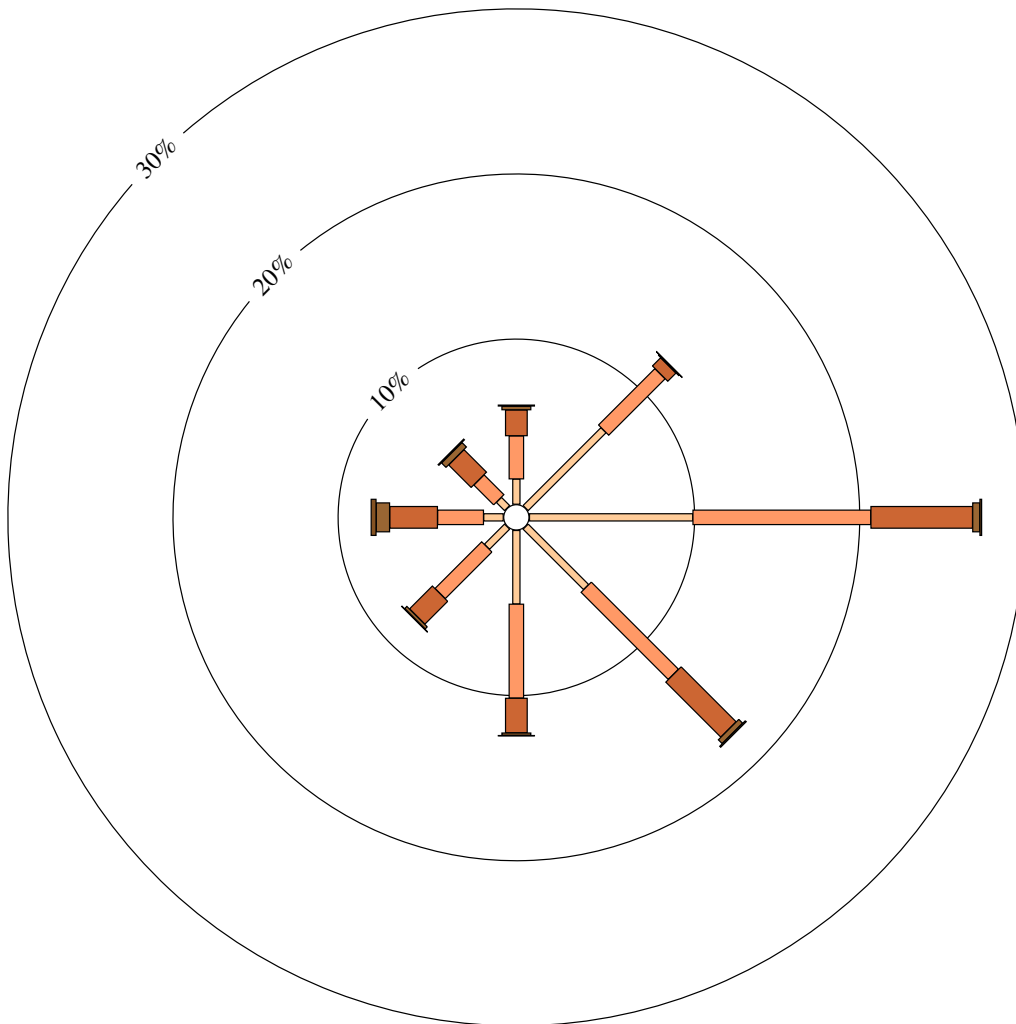
An asterisk (\*) indicates that calm is less than 0.5%.

Other important info about this analysis is available in the accompanying notes.



9 am  
10926 Total Observations

Calm 4%



# Rose of Wind direction versus Wind speed in km/h (22 Nov 1995 to 09 Feb 2026)

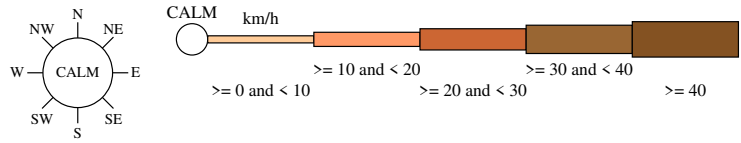
Custom times selected, refer to attached note for details

## BUNBURY

Site No: 009965 • Opened Nov 1995 • Still Open • Latitude: -33.3567° • Longitude: 115.6447° • Elevation 5.m

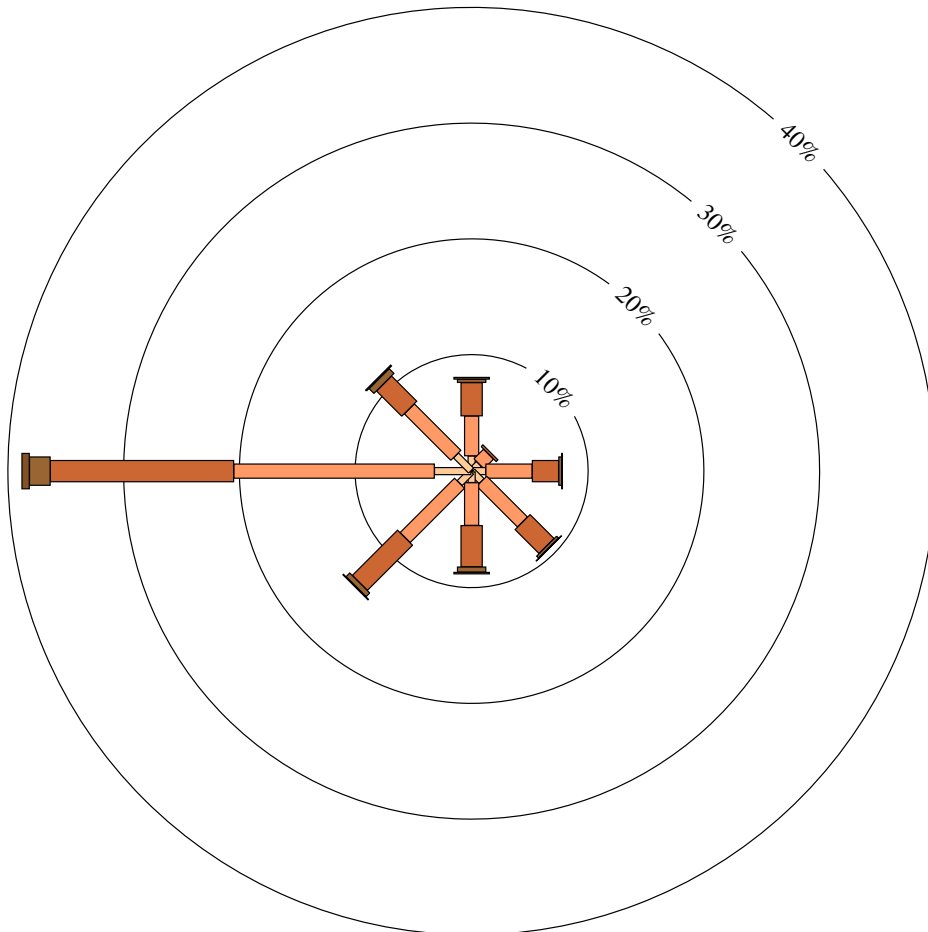
An asterisk (\*) indicates that calm is less than 0.5%.

Other important info about this analysis is available in the accompanying notes.



3 pm  
10902 Total Observations

Calm \*



Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years	Plot	Map
<b>Temperature</b>																
Mean maximum temperature (°C)	30.0	30.1	27.9	24.3	21.1	18.5	17.3	17.7	18.7	21.2	24.7	27.7	23.3	30	1995-2026	
Mean minimum temperature (°C)	15.5	16.0	14.6	11.9	9.3	8.1	7.4	7.8	8.5	9.7	12.1	13.7	11.2	30	1995-2026	
<b>Rainfall</b>																
Mean rainfall (mm)	9.8	7.9	19.0	39.7	97.7	138.7	149.2	122.9	78.2	35.8	20.9	14.4	729.8	30	1995-2026	
Decile 5 (median) rainfall (mm)	2.0	1.2	11.1	35.4	81.6	151.3	137.2	125.7	75.6	33.2	18.8	5.0		31	n/a	
Mean number of days of rain ≥ 1 mm	1.4	1.0	2.3	5.3	9.0	12.9	15.3	13.9	11.1	6.0	3.2	1.7	83.1	30	1995-2026	
<b>Other daily elements</b>																
Mean daily sunshine (hours)																
Mean number of clear days														3	1995-1999	
Mean number of cloudy days														3	1995-1999	
<b>9 am conditions</b>																
Mean 9am temperature (°C)	22.4	22.4	20.6	18.1	15.1	12.8	11.7	12.6	14.5	16.5	19.2	21.0	17.2	15	1995-2010	
Mean 9am relative humidity (%)	54	56	61	71	80	83	85	82	74	67	60	55	69	15	1995-2010	
Mean 9am wind speed (km/h)	18.2	18.0	16.7	13.8	12.1	12.5	12.7	12.8	16.1	16.8	18.4	17.3	15.5	15	1995-2010	
9am wind speed vs direction plot																
<b>3 pm conditions</b>																
Mean 3pm temperature (°C)	27.4	27.8	25.9	22.4	19.7	17.1	16.0	16.1	16.9	19.2	22.5	25.0	21.3	15	1995-2010	
Mean 3pm relative humidity (%)	44	43	46	55	59	64	65	66	64	58	52	48	55	15	1995-2010	
Mean 3pm wind speed (km/h)	22.3	22.0	20.4	18.3	17.1	17.9	18.5	19.2	20.9	20.8	22.6	22.0	20.2	15	1995-2010	
3pm wind speed vs direction plot																

red = highest value blue = lowest value

Product IDCJCM0030 Prepared at Thu 04 Jun 2026 01:57:54 AM AEST

**Related information**

# **ADDENDUM 3**

## **SITE CLASSIFICATION CHART**

## Appendix 1: Site risk assessment/classification for activities generating uncontaminated dust

### Sheet 1: Site classification assessment chart

#### Part A. Nature of site

Item	Score options				Allocated score
1. Nuisance potential of soil, when disturbed	Very low..... <b>1</b>	Low..... <b>2</b>	Medium..... <b>4</b>	High..... <b>6</b>	2
2. Topography and protection provided by undisturbed vegetation	Sheltered and screened..... <b>1</b>	Medium screening.... <b>6</b>	Little screening..... <b>12</b>	Exposed and wind prone..... <b>18</b>	6
3. Area of site disturbed by the works	Less than 1ha..... <b>1</b>	Between 1 and 5ha.. <b>3</b>	Between 5 and 10ha..... <b>6</b>	More than 10ha..... <b>9</b>	9
4. Type of work being done	roads or shallow trenches..... <b>1</b>	roads, drains and medium depth sewers..... <b>3</b>	Roads, drains, sewers and partial earthworks..... <b>6</b>	Bulk earthworks and deep trenches..... <b>9</b>	9
<b>TOTAL score for Part A</b>					<b>26</b>

#### Part B. Proximity of site to other land uses

Item	Score options				Allocated score
1. Distance of other land uses from site	More than 1km..... <b>1</b>	Between 1km and 500m..... <b>6</b>	Between 100m and 500m..... <b>12</b>	Less than 100m..... <b>18</b>	1
2. Effect of prevailing wind direction (at time of construction) on other land uses	Not affected..... <b>1</b>	Isolated land uses affected by one wind direction..... <b>6</b>	Dense land uses affected by one wind direction..... <b>9</b>	Dense/sensitive land uses highly affected by prevailing winds..... <b>12</b>	6
<b>TOTAL score for Part B</b>					<b>7</b>

**SITE CLASSIFICATION SCORE (A X B) = 182**