Air Quality Management Plan

Buronga Landfill

Wentworth Shire Council

26-28 Adelaide Street,
Wentworth NSW 2648

Prepared by:

SLR Consulting Australia

Tenancy 202 Submarine School, Sub Base Platypus, 120 High Street, North Sydney NSW 2060, Australia

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2.0	16 February 2024	K Barker	G Starke	G Starke
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Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Wentworth Shire Council (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

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1.0 Introduction

This Air Quality Management Plan (AQMP) has been prepared by SLR Consulting on behalf of Wentworth Shire Council (WSC) for the expansion to the Buronga Landfill (the site); owned and operated by WSC, located at 258 Arumpo Road, Buronga.

The development (the Project) expands the waste management services provided by WSC at the site. The Project will operate under the Development Consent (SSD-10096818) dated 19 July 2023 and Environmental Protection Licence (EPL 20209) for the following:

- Progressive excavation, landfilling and rehabilitation of new landfill cells constructed in four stages.
- Maximum waste disposal of 90,000 tonnes per annum (tpa) of general solid waste.
- Total waste acceptance at the gate of 100,000 tpa for waste disposal, resource recovery and transfer.
- Operation of the expanded landfill for 38 years.
- Construction and use of additional resource recovery and waste transfer infrastructure.

1.1 Objectives

The objectives of this AQMP are as follows:

- Identify environmental values of the Site and surrounding area.
- Characterise the existing air quality environment, including sensitive receptors, topography, and local meteorology.
- Identify potential air emission impacts which are likely to arise from the existing operations and how these will affect the relevant environmental values.
- Provide an overview of, and direction to the systems, processes and documentation that have been established to:
    - Ensure compliance with operating conditions of all active approvals.
    - Minimise the impact of dust on the environment and nearby receptors.
    - Minimise the release and impact of offensive odours on nearby receptors.
    - Evaluate and report on the effectiveness of the air quality management system.
    - Maintain an effective response mechanism to deal with exceedances and complaints.

1.2 Background

WSC provides waste collection and management services to its population with its waste facilities comprising the Buronga Landfill, Wentworth Transfer Station, Dareton Transfer Station and three small rural facilities at Ellerslie, Pomona and Pooncarie. The Buronga Landfill (the site) at 258 Arumpo Road, Buronga is located 4.75 km north of the town of Buronga and over 2.5 km north-west of the Murray River. The site occupies Lot 197 and 212 of DP756946 and Lot 1 DP1037845 and is zoned SP2 (Infrastructure) for the purpose of waste or resource management facility. The Project is to expand the waste management services provided by WSC at the Buronga Landfill and is anticipated to result in the life of the landfill site extending for over 38 years. The Project comprises:

- upgrading the existing recycling infrastructure to provide a dedicated recycling facility, community resource recovery area and bulking up areas to improve recycling rates and economics of recycling over the next 5 years.
- constructing new landfill cells to the north of the existing landfill area, increasing the landfill footprint from 13 ha to approximately 32 ha not including recycling areas or ancillary infrastructure. The expansion is proposed to be undertaken in four stages (Stages 1A to 1D) with each stage providing 3-5 landfill cells.
- increasing approved maximum waste volumes from 30,000 tonnes per annum to 100,000 tonnes per annum. Current waste acceptance from within WSC is nearing the limit of 30,000 tonnes per annum. It is also proposed to accept waste from the surrounding NSW local government areas (LGAs), such as Balranald, Central Darling and Murray River and from interstate councils such as Mildura and Renmark-Paringa. The combination of increased waste quantities and improved resource recovery facilities is likely to increase the total quantity of waste accepted at the Site to nearer 100,000 tpa.

An Air Quality Assessment (AQA) was conducted for the Project as a part of the Project Approval application (Vipac Engineers & Scientists (HK) Ltd 2021). The AQA assessed the following pollutants:

- Particulates
  - Total suspended Particles (TSP)
  - Particulate matter <10 microns (PM_{10})
  - Particulate matter <2.5 microns ($PM_{2.5}$)
  - Dust deposition (deposited matter that falls from the air and settles on surfaces)
- Odour

The results of the AQA are summarised in **Table 1** and show that the modelling assessment predicted impacts for odour, TSP, PM_{10}, $PM_{2.5}$ and deposited dust are below the relevant criteria for all averaging periods at all sensitive receptors considered. The emission sources identified in this AQMP are those identified in the AQA for the Project.

Table 1 Summary of AQA results

Pollutant	Averaging Period	Criteria	Maximum Prediction at Any Receptor		Compliant
			In isolation	Cumulative	
TSP	Annual	90 µg/m^3	1.68 Ig/m^3	53.18 µg/m^3	✓
PM_{10}	24 Hour	50 µg/m^3	13.12 µg/m^3	114.7 µg/m^3	✓
	Annual	25 µg/m^3	0.62 µg/m^3	21.22 µg/m^3	✓
$PM_{2.5}$	24 Hour	25 µg/m^3	2.11 µg/m^3	28.1 µg/m^3	✓
	Annual	8 µg/m^3	0.09 µg/m^3	7.49 µg/m^3	✓
Dust Deposition	Monthly Total	4 g/m^2/month	0.36 g/m^2/month	2.36 g/m^2/month	✓
	Monthly Increase	2 g/m^2/month	0.36 g/m^2/month	0.36 g/m^2/month	✓
Odour		7 OU	2.76 OU	2.76 OU	✓

Source: (Vipac Engineers & Scientists (HK) Ltd 2021)
Note: Values are replicated as originally presented in the source document.

2.0 Statutory Requirements

This AQMP has been developed in accordance with the requirements of its Development Consent (SSD-10096818) and Environmental Protection Licence (EPL 20209). Requirements and where they are addressed in this AQMP is shown in **Table 2** and **Table 3**.

Table 2 Assessment against SSD-10096818

Condition		Response / Section Reference
Dust Minimisation		
B23	B23. The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent.	Addressed by this AQMP. **Section 5.0**
B24	B24. During construction of the development, the Applicant must ensure that: (a) exposed surfaces and stockpiles are suppressed by regular watering; (b) all trucks entering or leaving the site with loads have their loads covered; (c) trucks associated with the development do not track dirt onto the public road network; (d) public roads used by these trucks are kept clean; and (e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.	Construction impacts are not captured by this AQMP. The construction contractor should produce a construction dust management plan for the construction activity.
Air Quality Discharges		
B25	B25. The Applicant must ensure the development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).	Addressed by this AQMP. **Section 5.0**

Condition		Response / Section Reference
B26	B26. The Applicant must install and operate equipment in line with best practice to ensure that the development complies with all load limits, air quality criteria/air emission limits and air quality monitoring requirements as specified in the EPL applicable to the site.	Addressed by this AQMP. **Section 5.0**
Air Quality Management Plan		
B27	Prior to the commencement of any works on site, the Applicant must prepare an Air Quality Management Plan (AQMP) to the satisfaction of the Planning Secretary. The AQMP must form part of the LEMP required by condition **C2.** The AQMP must: NSW Government 11 Buronga Landfill Expansion Department of Planning and Environment (SSD-10096818) (a) be prepared by a suitably qualified and experienced person(s); (b) be prepared in consultation with the EPA; (c) consider both particulate emissions and odour impacts; (d) describe the objectives and targets, including specific reference to the offensive odour provision under Section 129 of the Protection of the Environment Operations Act, 1997; (e) detail and rank all emissions from all sources of the development, including particulate emissions; (f) describe a program that is capable of evaluating the performance of the operation and determining compliance with key performance indicators; (g) identify the control measures that will be implemented for each emission source; (h) nominate the following for each of the proposed controls: (i) key performance indicator; (ii) monitoring method; (iii) location, frequency and duration of monitoring; (iv) record keeping; (v) complaints register must document investigations undertaken to identify the causes(s) of and action(s) taken to rectify any complaints received; (vi) response procedures; and (vii) compliance monitoring. (i) include contingency strategies to reduce odour impacts; and (j) establish a communications strategy so that affected neighbours are kept informed about the operation of the development and are consulted about aspects of the operation likely to result in particulate emissions and odour.	(a) – (c) This AQMP (d) **Section 2.3** (e) **Section 3.4** (f)-(i) **Section 5.0**

Table 3 Assessment against EPL 20209

Condition		Response / Section Reference
L5 Potentially offensive odour		
L5.1	No condition of this licence identifies a potentially offensive odour for the purposes of Section 129 of the Protection of the Environment Operations Act 1997. Note: Section 129 of the Protection of the Environment Operations Act 1997 provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.	Addressed by this AQMP.
O3 Dust		
O3.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	**Section 5.0.**

2.1 Legal and other objectives

2.1.1 Protection of the Environment Operations Act 1997 & Amendment Act 2011

The Protection of the Environment Operations (POEO) Act 1997 and Amendment Act 2011 are a key piece of environment protection legislation administered by the NSW Environment Protection Authority (EPA) which enables the Government to establish instruments for setting environmental standards, goals, protocols and guidelines.

All landfills must meet the requirements of the Protection of the Environment Operations Act 1997 and the regulations made under that Act. The landfill occupier must not cause air pollution in breach of sections 124, 125 or 126, or emit offensive odour in breach of section 129 of the Act.

- The following sections of the POEO Act are of general relevance to the Site:
- Section 124 and 125 of the POEO Act state that any plant located at a premise should be maintained in an efficient condition and operated in a proper and efficient manner to reduce the potential for air pollution.
- Section 126 of the POEO Act requires that materials are managed in a proper and efficient manner to prevent air pollution.
- Section 128 of the POEO Act states:
    - The occupier of a premises must not carry on any activity or operate any plant in or on the premises in such a manner to cause or permit the emission at any point

specified in or determined in accordance with the regulation of air impurities in excess of the standard of concentration and/or the rate prescribed by the regulations in respect of any such activity or any such plant.

- Where neither a standard nor rate has been so prescribed, the occupier of any premises must carry on activity, or operate any plant, in or on the premises by such practicable means as may be necessary to prevent or minimise air pollution.

- Section 129 of the POEO Act states that odours generated by operational activities should not be detectable beyond the site boundary.

Changes under the POEO Amendment Act 2011 include that the owner of a premises, the employer or any person carrying on the activity which causes a pollution incident is to immediately notify the relevant authorities when material harm to the environment is caused or threatened.

2.2 Relevant Guidelines and Standards

In addition to the regulatory requirements outlined in Section 3.1 to Section 3.3, air quality management at the site will be undertaken regarding the following standards and guideline documents.

2.2.1 Standards

- AS/NZS 3580.1.1:2016 Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment.
- AS/NZS 3580.9.6 – 2015 Methods for sampling and analysis of ambient air – Determination of suspended particulate matter PM10 high volume sampler with size–selective inlet – Gravimetric Method.
- AS/NZS 3580.9.3 –2015 Methods for sampling and analysis of ambient air Determination of suspended particulate matter - Total suspended particulate matter (TSP) - High volume sampler gravimetric method.
- AS 3580.10.1-2016 Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

2.2.2 Guidelines

- Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales, NSW EPA, 2006.
- Environmental Guidelines: Solid waste Landfills, NSW WPA, 2nd Edition 2016 (The Landfill Guidelines).

2.3 Relevant Air quality Criteria

2.3.1 Suspended Particulate

The NSW EPA assessment goals for PM_{10} set out in the Approved Methods are a 24-hour maximum of 50 µg/m^3 and an annual average of 25 µg/m^3. The NSW EPA assessment goals for $PM_{2.5}$ are a 24-hour maximum of 25 µg/m^3 and an annual average of 8 µg/m^3 while the annual average goal for TSP is 90 µg/m^3.

A summary of the particulate guidelines is shown in **Table 4**.

Table 4 EPA Goals for Particulates

Pollutant	Averaging Time	Goal
TSP	Annual	90 µg/m^3
PM_{10}	24 Hours Annual	50 µg/m^3 25 µg/m^3
$PM_{2.5}$	24 Hours Annual	25 µg/m^3 8 µg/m^3
Source: (NSW EPA 2022)		

2.3.2 Deposited Particulate

In NSW, accepted practice regarding the nuisance impact of dust is that dust-related nuisance can be expected to impact on residential areas when annual average dust deposition levels exceed 4 grams per square metre per month (g/m^2/month).

Table 5 presents the impact assessment goals set out in the Approved Methods for dust deposition, showing the allowable increase in dust deposition level over the ambient (background) level to avoid dust nuisance.

Table 5 EPA Goals for Allowable Dust Deposition

Averaging Period	Maximum Increase in Deposited Dust Level	Maximum Total Deposited Dust Level
Annual	2 g/m^2/month	4 g/m^2/month
Source: (NSW EPA 2022)		

2.3.3 Odour

The detectability of an odour is a sensory property that refers to the theoretical minimum concentration that produces an olfactory response or sensation. This point is called the odour threshold and defines one odour unit (ou). An odour goal of less than 1 ou would theoretically result in no odour impact being experienced.

In practice, the character of a particular odour can only be judged by the receiver's reaction to it, and preferably only compared to another odour under similar social and regional conditions. Based on the literature available, the level at which an odour is perceived to be a nuisance can range from 2 ou to 10 ou depending on a combination of the following factors:

The NSW EPA recommends within the Technical Framework (NSW DEC 2006) that, as a design goal, no individual be exposed to ambient odour levels of greater than 7 ou. This is based on experience gained through odour assessments from proposed and existing facilities in NSW indicating that an odour performance goal of 7 ou is likely to represent the

level below which “offensive” odours should not occur (for an individual with a ‘standard sensitivity’ to odours). This is expressed as the 99th percentile value, as a nose response time average (approximately one second).

A summary of the impact assessment criteria given for various population densities, as drawn from the Approved Methods, is given in **Table 6**. For areas such as that surrounding the Site, the relevant odour impact assessment criterion set by the Approved Methods for complex mixtures of odorous air pollutants is 2 ou (nose-response-time average, 99th percentile). As there is no other obvious sources of odour around the Site and the surrounding sensitive receptors are likely to have a high sensitivity to odour, the conservative assumption of a 2 ou criteria for the site will aid in ensuring that development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).

Table 6 NSW EPA Impact Assessment Criteria for Complex Mixtures of Odorous Air Pollutants

Population of Affected Community (number of receptors)	Impact Assessment Criteria for Complex Mixtures of Odours (ou) (nose-response-time average, 99th percentile)
Urban area (≥ 2000)	2
~500	3
~125	4
~30	5
~10	6
Single residence (≤ 2)	7
Source: (NSW EPA 2022)	

3.0 Project overview

3.1 Site Location

The Buronga Landfill (the site) at 258 Arumpo Road, Buronga is located 4.75 km north of the town of Buronga and over 2.5 km north-west of the Murray River. The local setting is shown in **Figure 1**. The site occupies Lot 197 and 212 of DP756946 and Lot 1 DP1037845 and is zoned SP2 (Infrastructure) for the purpose of waste or resource management facility.

3.2 Site Layout

The layout of the site Project infrastructure (concept design of existing and approved development) is shown in **Figure 2**. The existing infrastructure consists of:

- Gate house.
- Site office.
- Lunch room/ first aid room.
- Toilet block with septic tank underneath.
- 40 m long permanent weighbridge.
- Public drop off area.
- Maintenance area/sheds.
- Recycling area, (encompassing public drop off area, garden waste storage and processing area, concrete storage and processing area, and scrap metal and tyre storage areas).
- Rural fence to prevent access by unauthorized personnel.
- The landfilling area.
- Community Recycling Centre (CRC).
- Leachate storage pond.
- Existing stormwater pond.

The Project is to expand the waste management services provided by WSC at the Buronga Landfill, this includes:

- Dedicated car and trailer area established at the Front End Recycling Facility.
- Upgrading the existing recycling infrastructure to provide a dedicated recycling facility, community.
- Resource recovery area and bulking up areas to improve recycling rates and economics of recycling.
- Constructing new landfill cells to the north of the existing landfill area, increasing the landfill footprint from 19 ha to approximately 40 ha. The expansion is proposed to be undertaken in eleven stages with each stage providing 3-5 landfill cells.
- Increasing maximum waste volumes from 30,000 tonnes per annum to 100,000 tonnes per annum.

This Project is proposed to be staged and is anticipated to result in the life of the landfill site extending for over 38 years.

Figure 1 The Site Location (Source: 202597R04 Buronga Landfill Expansion - Environmental Impact Statement)

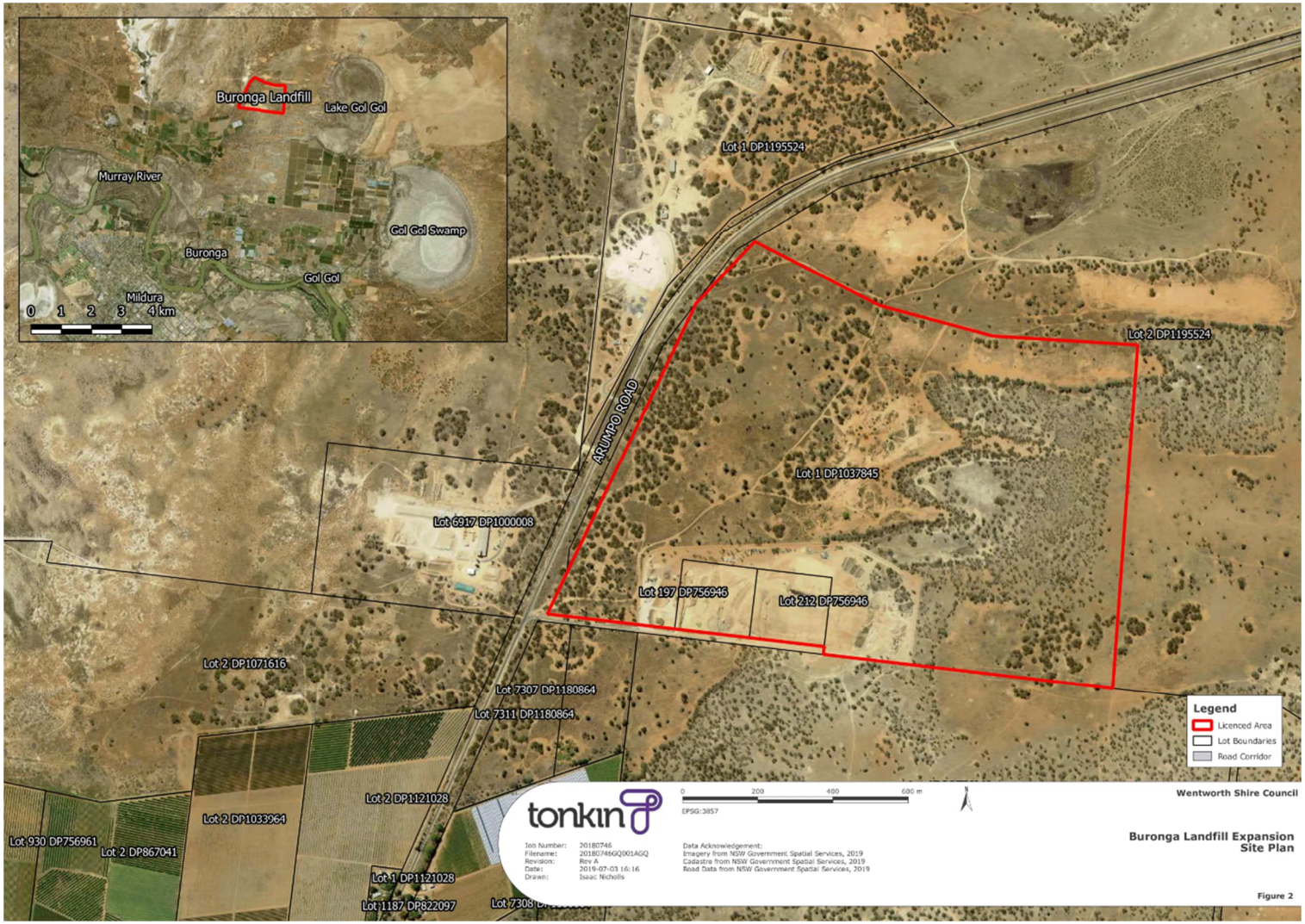
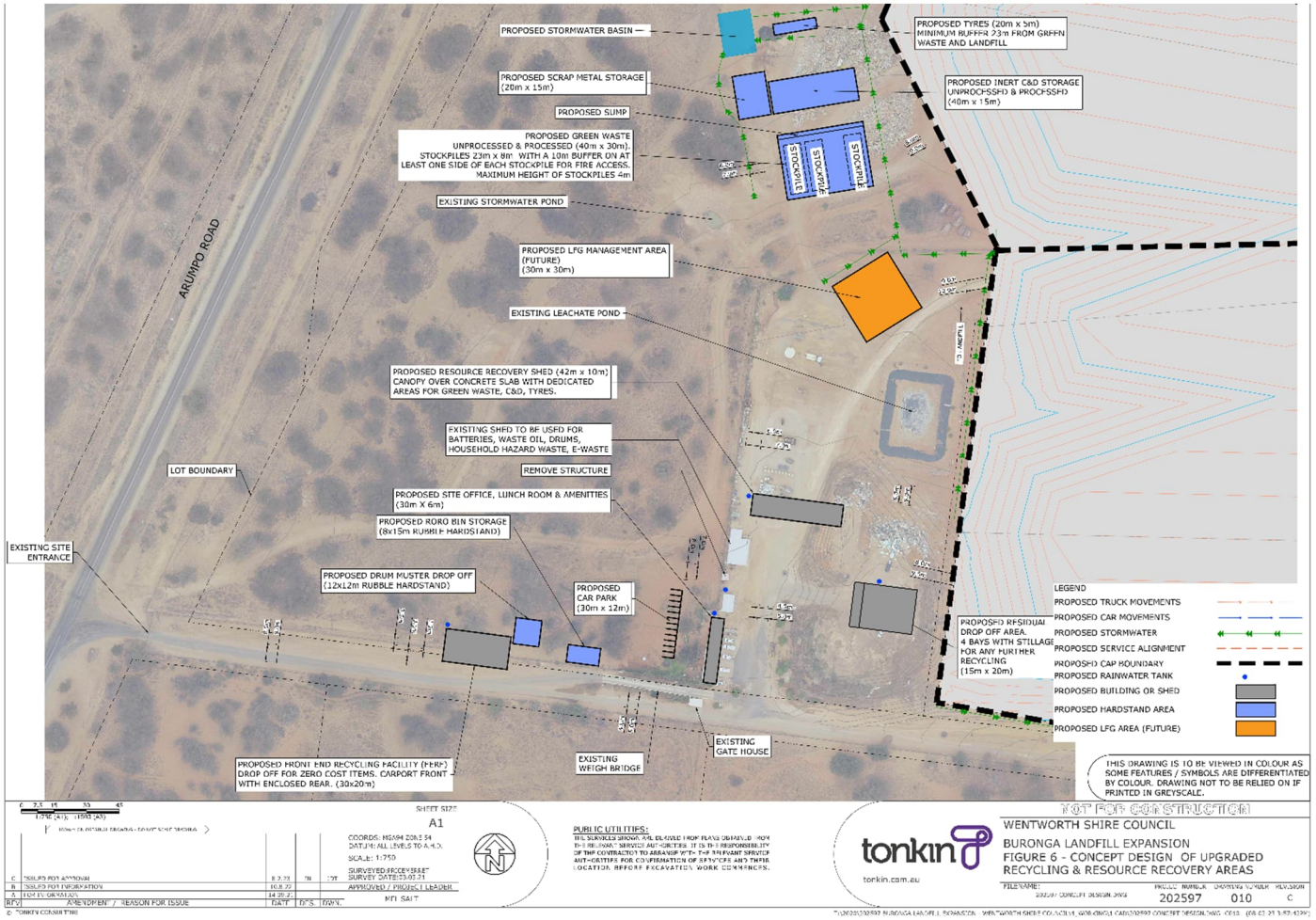


Figure 2 Concept Design of Upgraded Recycling and Resource Recovery Areas (Source: 202597R04 Buronga Landfill Expansion - Environmental Impact Statement)



3.3 Operational activities

The operations of the Project are in accordance with the best management practices of the time, as defined by the EPL and Landfill Guidelines. Facilities for the public to separate recyclables and disposal of waste will continue to be provided. Buronga Landfill accepts building and demolition waste, general exempted waste, waste mineral oils, tyres, asbestos and general solid waste (both putrescible and non-putrescible) as permitted under the EPL.

Building and demolition waste and waste oils are received for resource recovery. WSC personnel take all reasonable steps to ensure that recyclable and reusable items received are diverted from landfill. Where possible building and demolition waste (concrete, bricks and tiles) is mixed with soil to be used as daily cover. Clean fill accepted at the landfill is stockpiled as appropriate on site for use as cover material or for rehabilitation. Garden waste (apart from noxious weeds which are disposed of in the landfill) is stockpiled until the volume reaches a sufficient size for a contractor to shred and remove the mulch created from site.

WSC has constructed a Community Recycling Centre (CRC) on site in accordance with the NSW Environmental Trust Community Recycling Centre Grants Program. The CRC on site accepts recyclables and hazardous waste from the public. Materials accepted at the CRC include paints, motor oils, cooking, hydraulic and transmission oils, household single use batteries, car batteries, fluorescent and compact fluorescent lighting, gas cylinders and smoke detectors. Other recyclable materials accepted at the facility include scrap metal, mineral oils, glass and plastic containers, garden waste and cardboard and paper. The CRC facilitates the diversion of these recyclables away from landfill for reuse and this facility is to continue under the proposed development.

Remaining wastes, i.e. general waste, tyres and asbestos, are disposed of through landfilling. The site currently accepts bonded asbestos materials which are disposed of in accordance with the procedure set out in the LEMP requiring asbestos materials to be appropriately wrapped and sealed and immediately covered when placed. Waste disposed in the landfill is placed and compacted to achieve a maximum practical in situ density in accordance with the site licence. The waste is covered daily with a minimum of 150 mm of material in accordance with the LEMP to maintain sanitary conditions on site and minimise environmental impact.

3.3.1 Operational Hours

The operational hours for the site are 6 am to 7 pm Monday to Friday and 7 am to 6 pm Saturdays, Sundays and Public Holidays.

3.3.2 Site Equipment

- 826 landfill compactor.
- D7 dozer.
- Water truck (15kL).
- 20t excavator.
- 30t tipper truck.
- 12t loader.
- Stormwater pump (diesel).
- 1 site vehicle.
- Weighbridge.

3.4 Potential Sources of Air Emissions During Operations

The AQA (Vipac Engineers & Scientists (HK) Ltd 2021) for the Project found that the main emissions to air from the landfill operations were anticipated to be caused by the following:

- Wind-borne dust (wind erosion emissions).
- Vehicle usage (combustion emission).
- Materials handling and transfer.
- Unloading of trucks.
- Front end loader and excavator operations.
- Wind erosion from disturbed areas and stockpiles.
- Materials handling.
- Vehicle movements.
- Storage of leachate.

The pollutants of concern from these sources include the following:

- Particulates:
  - Total suspended Particles (TSP).
  - $PM_{10.}$
  - $PM_{2.5.}$
  - Dust deposition.
- Odour.

Additionally, Greenhouse Gas (GHG) emissions and Landfill Gas (LFG) emissions were considered by the AQA and were found not to be significant sources. The Landfill Environmental Management Plan (LEMP) outlines the management of the LFG emissions. Therefore, LFG and GHG are not considered sources significance relevant to this AQMP.

3.4.1 Source significance

The emissions sources identified by the AQA and their emission rates have been summarised and ranked in **Table 7** and **Table 8**. The ranked particulate emissions inventory in **Table 7** identifies the wheel generated dust from hauling to be the highest dust generating activity followed by excavator/front end loader activity on the active landfill. The ranked odour emissions inventory in **Table 8** identifies the waste with an interim cover to be the largest odour source. This is due to the size of the area however, as the active tip face have a higher specific odour emission rate.

Table 7 Detail and Rank of Particulate Emissions Sources

Rank	Activity		Emission Rate (g/s)			Control Applied
			TSP	PM_{10}	$PM_{2.5}$	
1	Hauling	Wheel generated dust – Heavy vehicles	3.29	0.972	0.056	Watering and limiting vehicle speeds <50km/h
2	Active Landfill Area	Excavator/FEL on waste	0.486	0.233	0.051	
3	Wind erosion	Active landfill	0.311	0.156	0.033	Watering and windbreaks
4	Active Landfill Area	Trucks dumping waste	0.233	0.084	0.025	
5	Hauling	Wheel generated dust – Light vehicles	0.183	0.064	0.007	
6	Wind erosion	Inactive landfill	0.036	0.018	0.001	Revegetation
7	Wind erosion	Historical landfill	0.021	0.011	0.002	
Total			4.56	1.54	0.18	

Table 8 Detail and Rank of Odour Emissions Sources

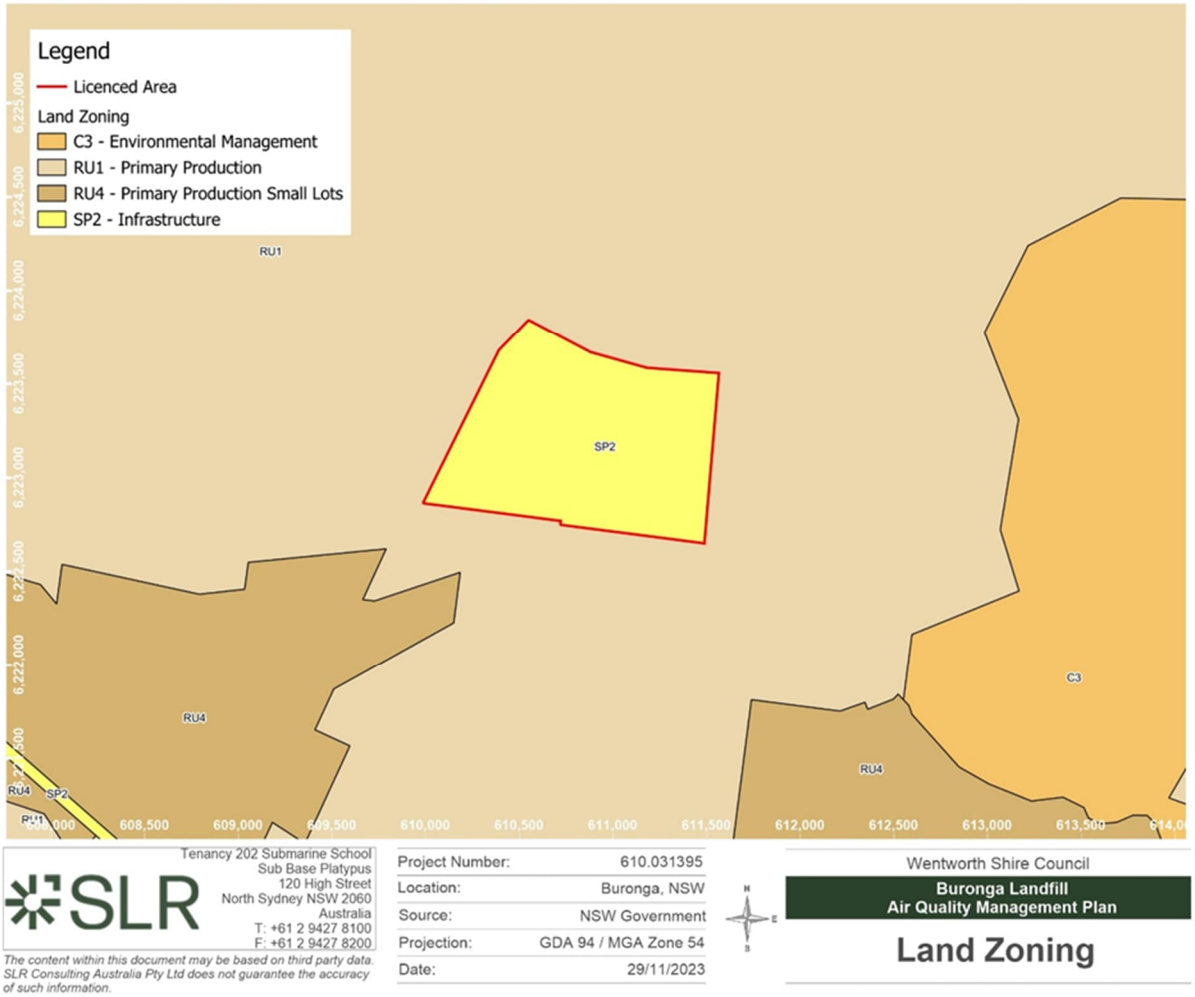
Rank	Source	Area (m^2)	Specific odour emission rate ($OU/m^2/s$)	Peak to mean	Modelled odour emission rate ($OU/m^2/s$)
1	Interim covered waste	400,000	0.16	2.5	55,760
2	Active tipface	600	3.3	2.5	4,950
3	Leachate	12,828	0.459	2.5	1,205

4.0 Existing environment

4.1 Land uses

The Local Environment Plan relevant to the site is the Wentworth Local Environmental Plan 2011 (LEP). The Land Zoning Map shown in **Figure 3** shows that the Site is zoned SP2 (Infrastructure) for the purpose of "Waste or Resource Management Facilities". The surrounding land is zoned RU1 (Primary Production) with areas zones as C3 – Environmental Management further to the east and RU4 (Primary Production Small Lots) further to the southeast and southwest.

Figure 3 Surrounding Land Zoning



4.2 Sensitive Receptors

The sensitive receptors located identified and assessed by the AQA (Vipac Engineers & Scientists (HK) Ltd 2021) are shown in **Figure 4**. The nearest sensitive receptors are located approximately 1 km to the south.

Figure 4 Surrounding Sensitive Receptors

4.3 Air Quality

There is no baseline monitoring conducted for the pollutants of concern for the site. Regional air quality monitoring is performed by the NSW Department of Planning and Environment (DPE). Real-time PM_{10} and $PM_{2.5}$ data are available from the Wagga Wagga North Air Quality Monitoring station (AQMS). The Wagga Wagga North AQMS is located in the Wagga Wagga racecourse adjacent to Beckwith Street in Wagga Wagga, approximately 485 km southeast of the site. In lieu of any site-specific data, PM_{10} and $PM_{2.5}$ for 2016 data from this AQMS was used within the AQA (Vipac Engineers & Scientists (HK) Ltd 2021) as an approximation of regional air quality surrounding the site. More recent particulate monitoring data is available for PM_{10} and $PM_{2.5}$, NO_x and is presented in **Table 9**. The results indicate that the 24-hour average criterion for PM_{10} was exceeded in years 2018 – 2021 and approached in 2022 and the 24-hour average criterion for $PM_{2.5}$ was exceeded in years 2019-2022. The number of exceedances for each criterion is provided in brackets for each year. The results indicate the potential for regional increases in particulate matter concentrations which may be further impacted upon by the operation of the site.

Table 9 Wagga Wagga North AQMS data 2018-2022

Pollutant	PM_{10}			$PM_{2.5}$			NO_2		
Averaging Period	Maximum 24-hour	Annual	90th percentile 24-hour	Maximum 24-hour	Annual	90th percentile 24-hour	Maximum 1-hour	Annual	90th percentile 1-hour
Units	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
2018	127.2 (34)	26.6	48.4	21.6	8.0	14.3	-	-	-
2019	251.7 (63)	33.5	67.3	239.6 (18)	10.7	15.9	-	-	-
2020	295.3 (25)	22.8	41.5	559.5 (13)	10.5	15.8	-	-	-
2021	69.1 (7)	17.4	32.4	25.4 (1)	6.0	10.8	43.1	1.1	2.1
2022	46.8	12.9	21.9	27.1 (1)	5.3	9.7	90.2	1.8	4.1
Average	158.0	22.7	42.2	174.6	8.1	13.3	66.6	1.4	3.1
Criterion	**50**	**25**	-	**25**	**8**	-	**164**	**31**	-

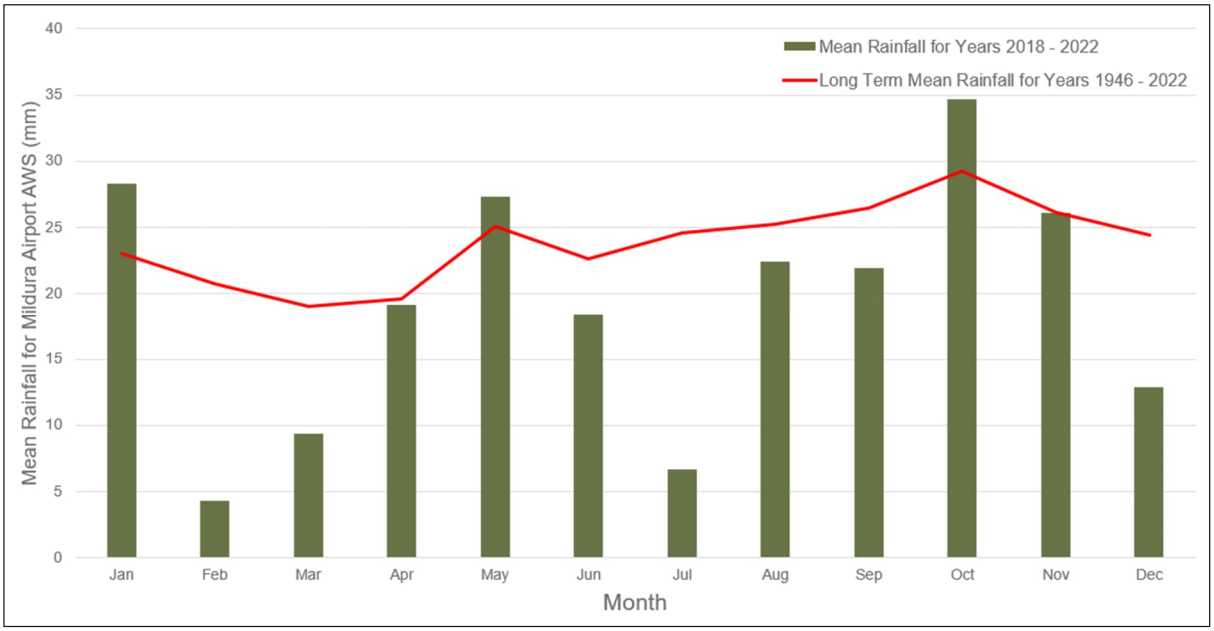
4.4 Meteorology

The following section provides characterisation of the local climate and weather patterns (e.g. rainfall, wind speed and wind direction) relevant to the generation and dispersion of air emissions based on data from the nearest meteorological station(s) operated by the Bureau of Meteorology (BoM). The Mildura Airport Automatic Weather Station (AWS) is the closest, located approximately 15 km southwest of the site. The AQA used TAPM-CALMET generated meteorological input data generated from 2016 data. The AQA showed that the modelled meteorological data was well consistent to the Mildura Airport AWS (Vipac Engineers & Scientists (HK) Ltd 2021). As such, the Mildura Airport AWS has been used to characterise the site using the most recently available data.

4.4.1 Rainfall

The long-term monthly rainfall averages recorded at Mildura AWS rain gauge are shown in **Figure 5**. Dry periods (no rainfall) have the greatest potential for fugitive dust emission. It is noted that generally rainfall is relatively low in late summer to early autumn and early to mid-winter. Rainfall is highest in mid-Spring, mid-summer, and late autumn-spring. This rainfall pattern suggests that dust emissions from the Site activities have the greatest potential to impact on receptors for the period of late summer to early autumn and early to mid-winter.

Figure 5 Mean Monthly Rainfall for Mildura Airport AWS



4.4.2 Wind Conditions

Wind data recorded by the Mildura Airport BOM AWS was processed into windroses and is presented as seasonal and annual windroses for the period of years 2018-2022 in **Figure 7** and time of day windroses in **Figure 6**.

Prevailing wind directions occur as follows:

- Southerly winds in summer months and autumn months.
- Northerly, north-northeasterly and westerly winds in autumn.
- Southerly to westerly in spring.
- During the night, the prevailing wind direction is south to south-westerly followed by northerly.
- During the day, the prevailing wind direction are similar to the night but westerly winds are more prevalent.

The critical wind direction, in terms of exposure of the nearest sensitive receptors to dust and odour emissions from the site, is northerly winds. The wind roses indicate these winds occur most frequently during winter and throughout both day and night.

Figure 6 Day (6 AM to 6 PM) and Night (6 PM to 6 AM) Windroses for Mildura Airport for the years 2018-2022

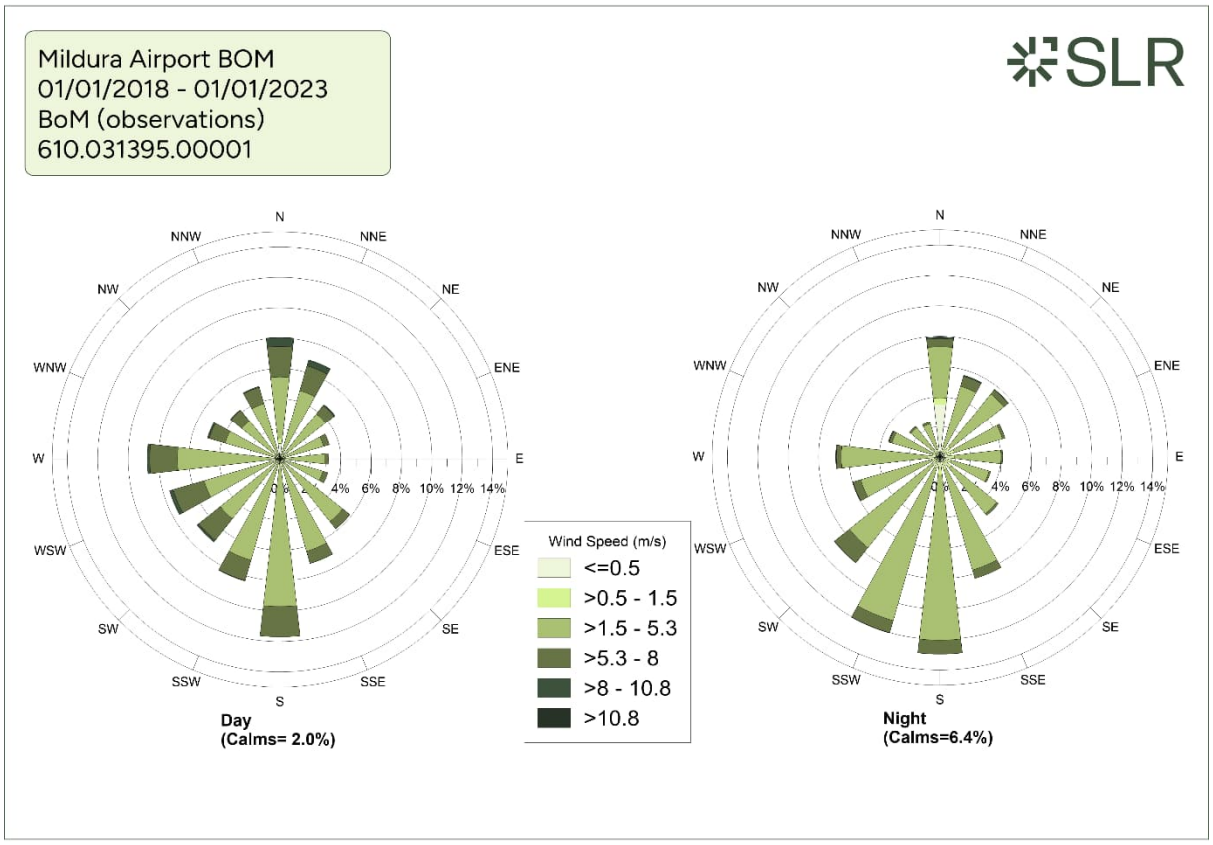
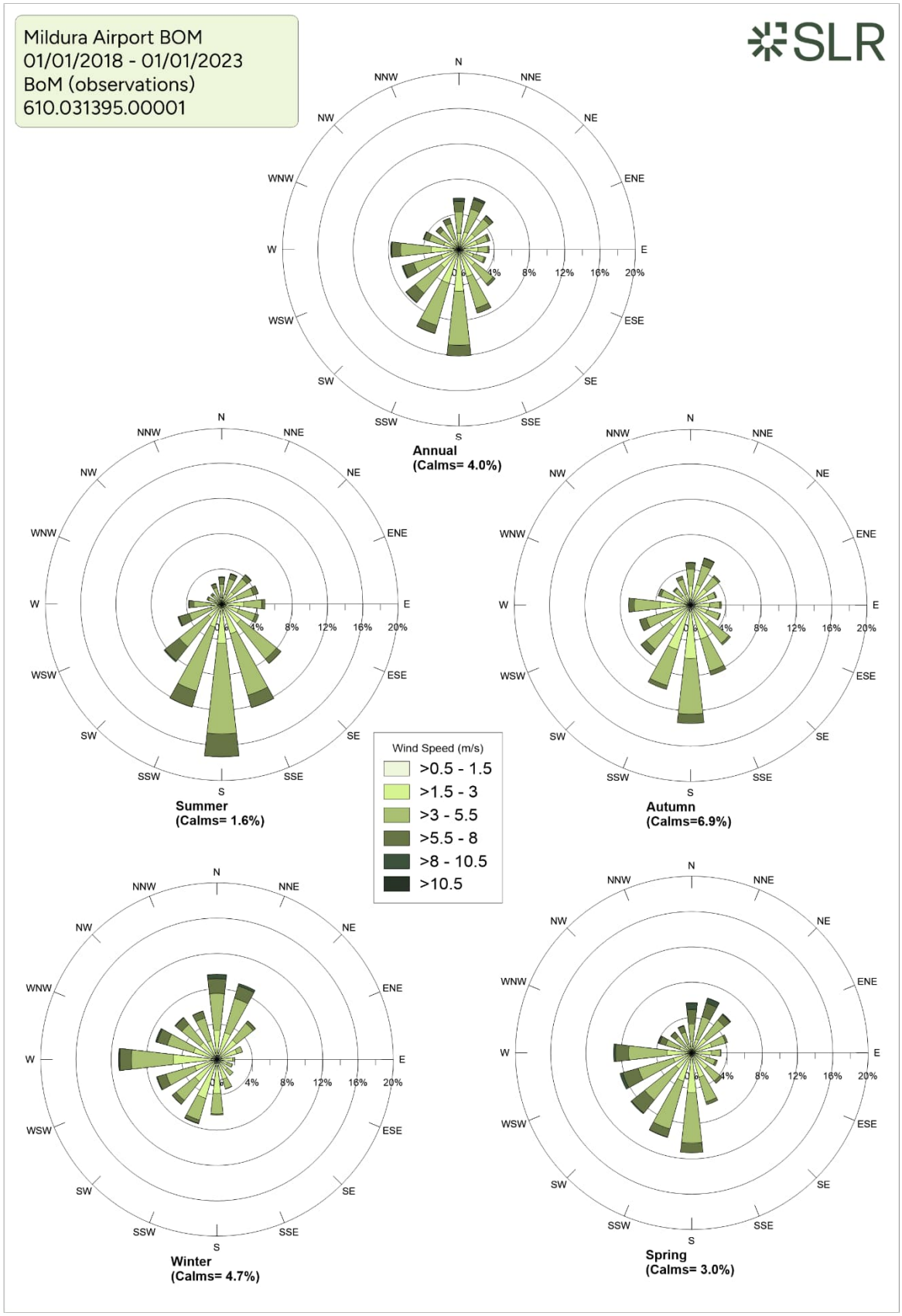


Figure 7 Annual and Seasonal Windroses for Mildura Airport for the years 2018-2022



5.0 Management Plan

5.1 Control measures

The following outlines the mitigation measures used by the site to control air emissions.

5.1.1 Particulates

Particulate emissions will be managed through the adoption of industry best practice as outlined in the NSW Landfill Guidelines (NSW EPA, 2016), including:

- For the active landfill cell:
  - Spray water for dust suppression, particularly over exposed surfaces, at key material transfer points.
  - Use windbreaks to deflect wind from erodible areas and to minimise exposure of falling dusty materials to winds.
- For inactive landfill cells:
  - Revegetate completed areas as soon as practicable.
- For roads:
  - Watering on unsealed haul roads to minimise wheel-generated dust.
  - Limiting vehicle speeds on unsealed roads to 50 km/h to minimise wheel-generated dust.

Additional measures outlined by the NSW Landfill Guidelines that should be used where necessary include:

- Minimise the area of exposed soils.
- Stabilise exposed areas (e.g. through revegetation) and stockpiles of dusty materials as soon as practicable.
- Use sealed or gravel roads, particularly from the public roadway to the gatehouse or waste reception section of the landfill.
- Reduce drop heights, where applicable.
- Appropriately modify excavation works and operations on dry, windy days or when the wind is blowing towards sensitive receptors.
- Cover loads of dusty material transported by road in open-topped trucks.
- Minimise dirt tracked from the site to external roads; measures include visual inspection of trucks leaving the site, use of wheel-wash and shaker grids, and construction of sealed haul roads.

5.1.2 Odour

Emissions will be managed through the adoption of industry best practice as outlined in the NSW Landfill Guidelines (NSW EPA, 2016), including:

- For the active tip face:
  - Restriction of the active tip face to 600 m^2.
  - Placement of daily cover on the active tip face at a depth of 150 mm at the close of business each day.

  - Placement of waste in thin layers to maximise compaction.
  - Immediate covering of malodorous wastes.
- For inactive landfill cells awaiting final capping:
  - The use of intermediate cover on areas awaiting final capping.
  - Minimising disturbance of previously filled areas.

5.1.3 Vehicle Maintenance

Staff responsible for maintenance activities on the vehicles are to have appropriate training regarding the tuning and maintenance of engines to minimise exhaust fumes and in the installation and maintenance of exhaust system requirements.

5.1.4 Minimisation of Onsite Vehicles Idling Times

Vehicle idling times around the Site are to be managed using best management practices, including:

- Vehicle engines must be turned off when loading/unloading
- Appropriate signage is required at multiple locations at the Site encouraging drivers to switch off engines when not in use

5.1.5 Site inspections

Regular site inspections should be undertaken in order to identify and mitigate air quality impacts from the Site before nearby receptors can be impacted. These will be undertaken by trained operational staff.

The Site inspections will involve a walk-over of the site, including all trafficable areas. The following information will be noted on a field sheet during each site inspection:

- The time and date of the inspection.
- The weather conditions at the time of the inspection as measured by the onsite weather station.
- Any unusual activities occurring on site with potential for dust generation.
- Any visible dust observed.
- Any sources of the dust identified during the walk over (eg, moving trucks).

In addition, all employees will be reminded on a regular basis to immediately report any visible dust around the Site caused by site operations to the delegated staff.

Any visible dust identified through the inspections, or staff observations, that are confirmed to originate from the Site will be recorded and the AQMP will be reviewed by staff to ensure required mitigation measures are in use.

5.1.6 Staff Awareness and Training

In addition to general environmental awareness training, specific training is to be provided to relevant staff, which is to include:

- Familiarisation with the contents and requirements of this AQMP.

- Familiarisation with the best management practices to be implemented by staff, such as minimising onsite vehicle movements and idling times, avoiding driving on unsealed areas and watering of dusty areas etc.
- A review of potential air quality impacts that could potentially occur as a result of normal and abnormal operations on site
- Appropriate reporting channels if air quality issues (or potential for air quality impacts) are identified on site (e.g. smoky vehicles, unsafe storage of chemicals, excessive wind-generated dust).
- Procedures for complaint handling.

5.1.7 Communications strategy

Any potentially affected neighbouring residents, community, businesses and stakeholders will be notified in advance of any changes in aspects of operational activity that are likely to result in particulate emissions and odour.

Notification methods will be either via letterboxed notifications or digital communications and will include the following:

- Location of activity in relation to receptors.
- Potential impact from work (e.g. dust or odour).
- Frequency and duration of activity.
- Time of day or night that activity will occur.
- Equipment being used.

5.2 Induction and Training

As part of the site induction, all employees, contractors and visitors to site will be made aware of the following:

- Why management of operations controls and mitigations are required to manage odour.
- The need to plan for odour management based on forecast of weather conditions and production requirements.
- Awareness of wind direction; an understanding of atmospheric dispersion is critical to avoiding odour impact on surrounding townships.
- The need to inform the Operations Manager if abnormal odour conditions/emissions are observed.
- Where practicable work shall be planned around adverse exposure and dispersion conditions to minimise nuisance odour impacts.

5.3 Monitoring Program

Given the nature and scale of the operations at the Site, it is not anticipated that any impacts upon human health, environmental values, or amenity values would be experienced during the operations. The following monitoring methods are provided to ensure that any dust or odour emissions due to the site are addressed as soon as possible.

Table 10 summarises the parameters identified to assess the effectiveness of the control measures shown in **Section 5.1**

Table 10 Summary of the Parameters to Assess the Effectiveness of Control Measures

Parameter	Visible Dust	Odours	Complaints
Key Performance Indicator	No visible dust leaving the Project boundary	No odours detected at the boundary of the Site	No complaints related to dust or other air quality issues
Monitoring Method	Visual inspection/observations	Field observations	-
Location, frequency, and duration of monitoring	Daily onsite inspection	Daily onsite inspection Weekly Boundary Survey	-
Record keeping	In a logbook		Complaints register

5.3.1 Daily Site Inspection

Daily site Inspections will be undertaken in order to identify and mitigate offensive odours and dust impacts from the Project before nearby receptors can be impacted. Daily site inspection assists proactive site management to avoid the release or build-up of emissions on site that may disperse beyond the boundary. These will be undertaken by trained operational staff.

The daily site inspections will involve a walk-over of the site, including the perimeter of active site areas. The walk-over route may vary depending on site activities but should be conducted in a way that ensures potential dust or odour source are included.

The following information will be recorded during each daily site inspection:

- The time and date of the inspection
- The weather conditions at the time of the inspection as measured by the onsite weather station
- Any unusual activities occurring on site with potential for offensive odour generation
- Any odours observed, including the odour intensity and odour description
- Any visible dust observed
- Any sources of the odours or dust identified during the walk over (eg windrows, moving trucks)

The daily site inspection for purposes of dust and odour management can be incorporated into a general daily observations process. The information recorded during daily site inspection required by this AQMP may be built into an overarching daily observations record sheet for the site.

In addition to the daily self-inspections, all employees will be reminded on a regular basis to report any perceived offensive smells or visible dust immediately to the delegated staff. Any offensive odours or visible dust identified through the daily inspections, or otherwise, that are confirmed to originate from the site will be investigated and mitigated.

The findings of the daily walk overs will be reviewed after three months from commissioning to assess whether the frequency of the inspections should be changed.

5.3.2 Boundary Observations

Boundary observations are a standalone exercise distinct from the daily site inspection. They are an exercise to monitor for odour that may be detectable beyond the site boundary and allow for changes to mitigation measures if necessary to prevent an offence against the POEO Act. The boundary odour observations are to be made once a week where possible during peak operational activity at the landfill.

Observations should be made during winds blowing from the northeast, northwest, and southwest (in the direction of sensitive receivers) or during still cold air drainage conditions. Forecasted wind conditions are evaluated weekly during the campaign for selection of best/preferred conditions for each boundary survey. If a wind direction towards the sensitive receptors cannot be obtained for any week an alternative wind direction providing opportunity (with access to downwind odour plume crossings) will be selected.

Where practicable these odour observations are to be made during the first occurrence of these meteorological conditions during the working week. Where these meteorological conditions do not occur during the week, downwind odour observations are optional.

Field odour observations rely on odour intensity observations made by an observer using a prescribed format for recording observed odours using the sense of smell. The field odour observations methodology described in this methodology is a modified version of the German Standard VDI 3490 (VDI 1993) method for odour surveys. The method standardises the odour logging approach by the adoption of a scale for describing odour intensity, as detailed in the German Standard VDI 3882 (described in **Table 11**), which relates to odour measurement.

Boundary observations will require the person conducting the survey to walk the boundary downwind of the landfill for a period of 10 minutes, recording observations every 10 seconds over a 10-minute period.

Generally, the observations are focussed on the targeted odour(s). If other relevant odours or background odours are present in significant intensities, this is also recorded as appropriate. A log sheet for recording of observations should be utilised, recording the following details:

- Date and time.
- The observation location (GPS Location UTM coordinates Easting and Northing).
- Location as address details or set evaluation location.
- Name of person doing the observations.
- Odour intensity observed.
- Odour description.
- Wind direction.
- Wind speed.

- Weather conditions.
- Site activities at the time.
- Photograph of the location.
- Comments.

Positive odour observations with an intensity rating of 3 or higher (see **Table 11**) will necessitate an immediate review of conditions and activities by the Site Supervisor or delegate who will have the authorisation to review operations performed on-site and alter site activities and/or additional controls necessary to effectively manage those risks.

The monitoring frequency is to be reassessed if offensive odour emitted from the landfill is detected at the site boundary or an off-site complaint/observation is received.

The findings of the boundary observations will be reviewed after three months from commissioning to assess whether the frequency of the inspections should be changed.

Table 11 Odour Intensities and Interpretation

Perceived Odour Strength	Intensity Rating	Interpretation
Extremely Strong	6	In normal circumstances, this should be very rare in a field situation. For an offensive type of odour, the reaction would be to immediately mitigate against further exposure until the exposure level is reduced. The odour cannot be tolerated
Very Strong	5	The odour character is clearly recognisable. For an offensive type of odour, exposure to this level is considered unpleasant/undesirable to the point that action to mitigate against further exposure is considered or taken.
Strong	4	The odour character is clearly recognisable. For an offensive type of odour, exposure to this level would be considered unpleasant/undesirable.
Distinct	3	The odour character is clearly recognisable. This is still a fact even if in a different context or situation. The odour is tolerable – even for an offensive odour.
Weak	2	A detectable weak odour stronger than very weak and less strong than distinct. Most of the time the odour is recognisable.
Very Weak	1	Odour only just detectable. Depending on the type of odour and context the odour may not always be recognisable.
Not Perceptible	0	No odour present.
Sources: VDI 3490 (VDI 1993) and modified interpretations from (Pitt 2014)		

Note: On the day each week where a boundary observation for odour is conducted, the formal daily site inspection for that day may be omitted. However, all employees should remain generally observant of any perceived offensive smells or visible dust and report these to their supervisor.

5.4 Complaints

5.4.1 Response procedure

In order to ensure an appropriate and consistent level of reporting, response and follow-up to any complaints is adopted by Buronga, the following complaints management protocol will be followed:

- A publicly advertised telephone complaints line will be in place to receive complaints during operating hours and record complaints at other times.
- Each complaint received will be recorded on a complaints form and all complaints forms are to be kept in the Complaints Register.
- The Site Manager will be responsible for ensuring that an initial response is provided within 24 hours of receipt of a complaint when received within normal business hours (except in the event of complaints recorded when the mine is not operational).
- An investigation is to be carried out in the event of a complaint being received to identify whether it is related to Site activities. If the Site operations are identified as the source of the emissions, the actions taken to rectify the situation and prevent a reoccurrence are to be documented alongside the complaint record.
    - If a substantiated air pollution complaint is made to the WSC or NSW EPA that cannot be rectified through the above procedures, a suitably qualified person will be engaged to develop mitigation measures and ongoing management strategies to prevent such impacts occurring in future, such as additional monitoring to take place to confirm the source of the complaint is adequately mitigated.
    - The developed mitigation measures and ongoing management strategies will be submitted to the appropriate authority for review and approval. Until suitable remedial control measures are in place, activities at the Site will be managed to the satisfaction of an authorised officer of the authority in order to reduce emissions to a level that does not cause a continuation of unacceptable nuisance.
- Additional measures will be undertaken as required to address the complaint.
- Once the identified measures are undertaken, the Site Manager will sign off on the relevant complaint within the Complaints Form.
- Advise the complainant of any corrective action undertaken to avoid, remedy or mitigate the effect detected by the complainant within 10 working days.
    - All complaints will be responded to in writing, and in some cases, this may be after clarification.
    - Copies of the written responses will be filed in the complaints register.
- All complaint forms will be kept in a Complaints Register that will be kept by WSC and made available to the NSW EPA and the complainant (on request).

5.4.2 Register

A complaints register is to be maintained and kept on Site. A copy of all complaint form records will be kept for at least four (4) years after the complaint was made and will be produced to any authorised officer of the EPA who asks to see them.

Complaints forms are to include prompts to note down the following details:

- Details of the staff member logging the complaint.
- The contact details of the complainant, and any personal details the complainant wishes to provide or if no such details are provided a note to that effect.
- The date/time of the complaint received.
- Nature of the impact causing complaint: odour, dust or other.
- The date/time when the impact was detected.
- The location where the impact was detected by the complainant.
- Detailed description of the incident, including the time of the dispersal and its duration.
- A description of the wind speed and wind direction when the impact was detected by the complainant.
- Activities occurring on Site at the time of the complaint (if relevant).
- Perceived or assumed source of the emissions giving rise to the complaint (if known).
- Weather conditions (i.e. wind, rainfall, temperature) experienced on the day of the complaint (if relevant).
- The action taken by the site in relation to the complaint, including any follow-up contact with the complainant.
- If no action was taken by the site, the reason why no action was taken.

5.4.3 Validated Complaints

Should investigation of odour/dust complaints indicate that discharges from the landfill are causing objectionable or offensive effects beyond the boundary, site staff are to instigate the relevant response outlined in the Contingency Management Plan (Section 6.0).

WSC will offer the complainant(s) and any other concerned neighbouring residents the opportunity to participate in an odour diary program. The design of the odour diary programme shall be in accordance with recognised good practice.

An odour diary record sheet is to be provided to all participants for them to record the details of any experienced odour, including date, time, odour description, wind direction, weather conditions. The odour diary program is to continue for a minimum period of three weeks (pending participant approval). Contact details of the General Manager are to be supplied to the participants of the odour diary program such that direct feedback can be provided to WSC if and when landfill odour is detected beyond the boundary of the site. This feedback will used by WSC to further investigate odour sources on-site and implement additional controls where required.

Where appropriate, WSC shall notify NSW EPA of the odour diary program and provide a summary of the results on request.

5.4.4 Ongoing Air Quality Complaints

If a complainant is dissatisfied with a response to a complaint, every reasonable attempt is to be made to find a satisfactory solution. If all reasonable measures are rejected, the complainant will be referred to NSW EPA. Details of the measures offered will be sent to the regulatory authority at the same time as being offered to the complainant or if offered verbally as soon afterwards as is practical.

6.0 Contingency Management Plan

The contingency management plan for the landfill operational activities is shown in **Table 12**.

Table 12 Air Quality Contingency Management Plan for Construction

Key Element	Trigger / Response	Condition Green	Condition Amber	Condition Red
Visible dust or offensive odour leaving the site	Trigger	Daily inspections show that there is no visible dust or offensive odour leaving the site.	Daily inspections show that there is visible dust or offensive odour leaving the site.	Daily inspections show that there is visible dust offensive odour leaving the site multiple times during a day OR from multiple locations within the site.
	Response	Continue monitoring program as normal.	Review and investigate activities and respective control measures. Where appropriate, implement additional remedial measures.	Undertake an investigation of the dust or odour generating activities, and if necessary, temporarily halt the dust generating activities
Complaints received regarding nuisance dust/odour	Trigger	There are no complaints received during operations	An air-quality related complaint is received from a nearby resident	Further complaints are received from the same complainant after the additional mitigation measures have been implemented
	Response	Continue monitoring program as normal.	Report the complaint to the regulator, in line with complaints handling procedure. Review and investigate operational activities and increase mitigation measures or amend activity where appropriate.	Engage a suitably qualified air quality consultant to develop mitigation measures and ongoing management strategies to prevent such impacts occurring in future. The developed mitigation measures and ongoing management strategies will be submitted to the appropriate authority for review and approval.

6.1 Compliance monitoring

Given the nature and scale of the operations at the Site, it is not anticipated that any impacts upon human health, environmental values, or amenity values would be experienced during the operations.

Should there be ongoing Air Quality Complaints or a request from the relevant authority is made, site management will engage a suitability qualified air quality consultant to conduct compliance monitoring in accordance with the relevant legislation.

7.0 Roles and Responsibilities

The key responsibilities in regard to effective air quality management at the Site are as follows:

7.1 All Workers on Site

All workers onsite are responsible for the following:

- Follow any air emission control instructions (including dust) and procedures that apply to their work.
- Observing any dust emission control instructions and procedures that apply to their work.
- Taking action to prevent or minimise dust emission incidents.
- Identifying and reporting air emission incidents to Site Manager for action.

7.2 Site Manager

The Site Manager is responsible for the following:

- Ensuring appropriate resources/plant/personnel are available for the implementation of this AQMP.
- Provide necessary training, assistance and advice to all employees to fulfil the requirements of this AQMP.
- Ensuring that site inductions include familiarisation for all staff on the requirements and responsibilities of this AQMP so that all staff are aware of their environmental responsibilities and obligations.
- Ensuring that all personnel and contractors conform with requirements of the AQMP.
- Assess data from regular inspections and provide site-wide advice to ensure good management practices are implemented to minimise air emissions, and ensure consistent approaches and outcomes are achieved.
- Assess and implement (as required) appropriate mitigation controls to best manage the risks of off-site air quality impacts, ensuring that the controls are effective.
- Maintaining a complaints register and liaising with relevant regulatory agencies (if required) in the event of complaints being received.
- Ensuring that monitoring as specified is performed to inform the operations.
- Responding to and investigating odour complaints, as per procedure.
- Review (and update if required) this AQMP on an annual basis, to ensure that it remains relevant and appropriate for the activities being undertaken at the Site.
- Assess and implement (as required) appropriate mitigation controls to best manage the risks of off-site air quality impacts, ensuring that the controls are effective.
- Undertake regular visual assessments of on-site dust levels and the effectiveness of any dust controls that have been implemented, which may include engaging additional resources to reduce or mitigate the risk of dust leaving the site, if required.

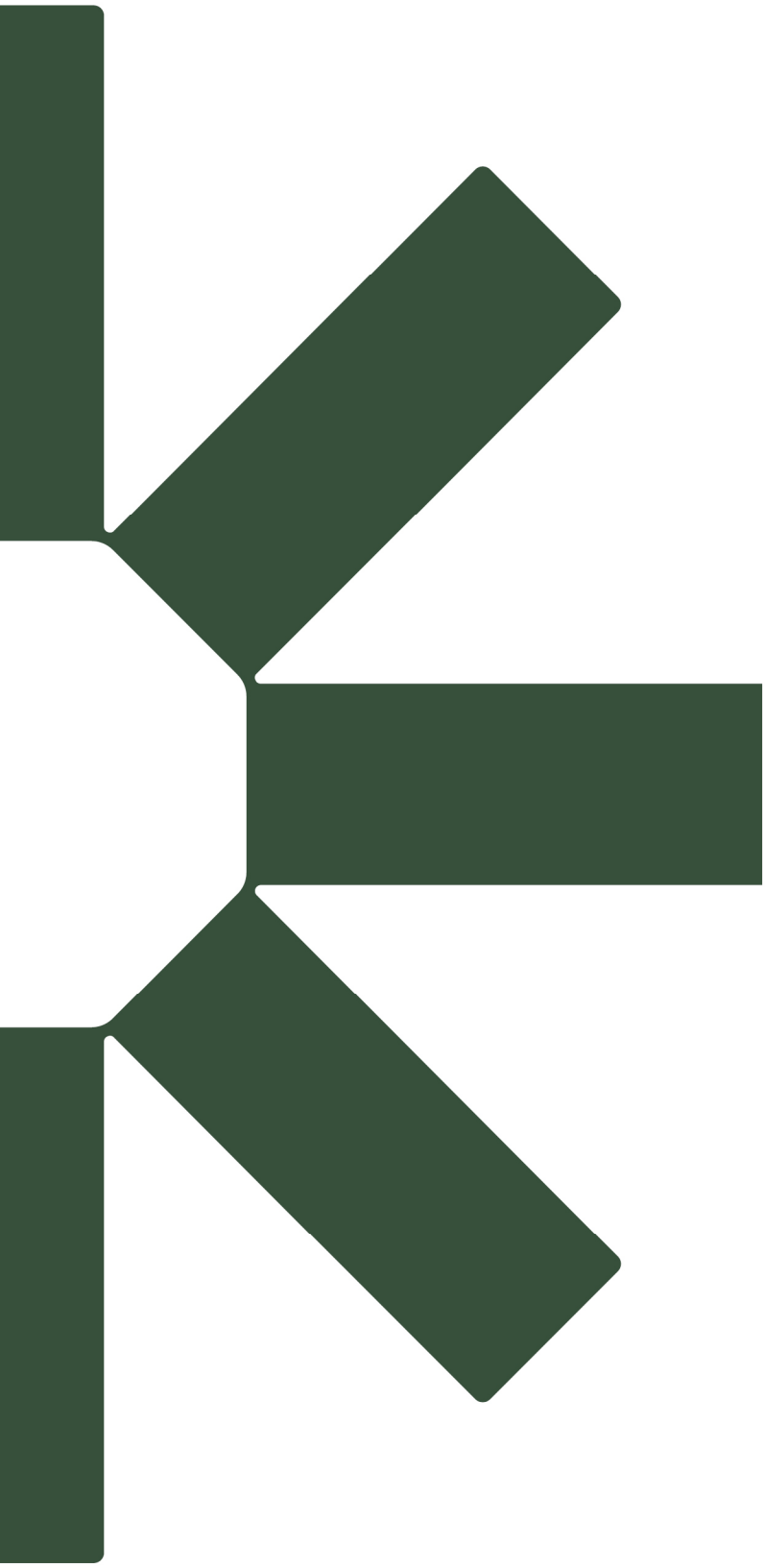
8.0 Review and improvement of the AQMP

This AQMP should reviewed and, if necessary, revised in the following circumstances:

- Where there is any change to the scope of the operational activities.
- Where it is identified that the environmental performance is not meeting the objectives of the AQMP.
- In the event of a substantiated complaint being received regarding air quality impacts.
- At the request of a relevant regulatory authority.

Reviews of the AQMP will comprise, as a minimum, the following:

- Identification of areas of opportunity for ongoing improved environmental performance.
- Analysis of the causes of any recorded non-compliances, including those identified in environment inspections and audits.
- Verification of the effectiveness of corrective and preventative actions.
- Highlighting any changes in procedures resulting from process improvement.



Making Sustainability Happen

Mamdoh Ibrahim

From: Kate Barker <kbarker@slrconsulting.com>
Sent: Tuesday, 19 December 2023 9:43 AM
To: Mamdoh Ibrahim
Subject: FW: Consultation requested regarding Buronga Landfill Air Quality Management Plan

Hi Mamdoh,

Please see the below communication with the NSW EPA.

Kate Barker
Senior Project Consultant - Air Quality

O +61 2 9427 8100
M +61 419 110 808
E kbarker@slrconsulting.com

SLR Consulting Australia Pty Ltd
202 Submarine School, Sub Base Platypus, North Sydney NSW Australia 2060

SLR acknowledges the traditional custodians of Country and recognises their continuing stewardship and connection to land, water and community. We pay our respect to Aboriginal and Torres Strait Islander cultures; and to Elders past and present.

From: Nick Van Lijf <Nicholas.VanLijf@epa.nsw.gov.au>
Sent: Tuesday, December 12, 2023 10:28 AM
To: Kate Barker <kbarker@slrconsulting.com>
Subject: RE: Consultation requested regarding Buronga Landfill Air Quality Management Plan

Hi Kate,

Thank you for your request for input regarding the Air Quality Management Plan (AQMP) being prepared for the Buronga Landfill facility.

The EPA encourages the development of such plans to ensure that proponents and licensees have determined how they will meet their statutory obligations and environmental objectives.

The EPA does not approve or endorse these plans, our role is to set environmental objectives for environmental management, not to be involved in developing strategies such as this plan to achieve those objectives. We have no further comments on this plan.

If you have any further questions about this matter, please don't hesitate to contact me.

Regards,

Nick van Lijf
A/Unit Head – Operations
NSW Environment Protection Authority
T 02 6969 0704
7/130-140 Banna Ave, GRIFFITH NSW 2680

www.epa.nsw.gov.au @NSW_EPA

The EPA acknowledges the Traditional Custodians of the land, waters and sky where we work.
As part of the world's oldest surviving cultures we pay our respect to Aboriginal Elders past and present.

I work on Wiradjuri Country.

Report pollution and environmental incidents 131 555 or +61 2 9995 5555

From: Kate Barker <kbarker@slrconsulting.com>
Sent: Monday, 11 December 2023 4:45 PM
To: Nick Van Lijf <Nicholas.VanLijf@epa.nsw.gov.au>
Subject: RE: Consultation requested regarding Buronga Landfill Air Quality Management Plan

Hi Nicholas,

Hope you are well and made the most of the hot weekend.

I'd like to follow up on this email from last week and confirm whether there is any input from the EPA for this AQMP.

Please reach out if you have any questions.

Kind regards,

Kate Barker
Senior Project Consultant - Air Quality

O +61 2 9427 8100
M +61 419 110 808
E kbarker@slrconsulting.com

SLR Consulting Australia Pty Ltd
202 Submarine School, Sub Base Platypus, North Sydney NSW Australia 2060

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From: Kate Barker <kbarker@slrconsulting.com>
Sent: Wednesday, December 6, 2023 10:17 AM
To: Nicholas.VanLijf@epa.nsw.gov.au
Subject: Consultation requested regarding Buronga Landfill Air Quality Management Plan

Good morning Nicholas,

SLR Consulting have been engaged to prepare the Air Quality Management Plan for Buronga Landfill (EPL - 20209) for the approved expansion (SSD-10096818).

Consultation with the NSW EPA in preparation of the AQMP is a requirement of their Development Consent.

The requirements for the AQMP are listed below. Does NSW EPA have any input regarding the AQMP?

> Air Quality Management Plan
> B27 -Prior to the commencement of any works on site, the Applicant must prepare an Air Quality Management Plan (AQMP) to the satisfaction of the Planning Secretary. The AQMP must form part of the LEMP required by condition C2. The AQMP must:
>
> (a) be prepared by a suitably qualified and experienced person(s);
>
> (b) be prepared in consultation with the EPA;
>
> (c) consider both particulate emissions and odour impacts;
>
> (d) describe the objectives and targets, including specific reference to the offensive odour provision under Section 129 of the Protection of the Environment Operations Act, 1997;
>
> (e) detail and rank all emissions from all sources of the development, including particulate emissions;

(f) describe a program that is capable of evaluating the performance of the operation and determining compliance with key performance indicators;

(g) identify the control measures that will be implemented for each emission source;

(h) nominate the following for each of the proposed controls:

(i) key performance indicator;

(ii) monitoring method;

(iii) location, frequency and duration of monitoring;

(iv) record keeping;

(v) complaints register must document investigations undertaken to identify the causes(s) of and action(s) taken to rectify any complaints received;

(vi) response procedures; and

(vii) compliance monitoring.

(i) include contingency strategies to reduce odour impacts; and

(j) establish a communications strategy so that affected neighbours are kept informed about the operation of the development and are consulted about aspects of the operation likely to result in particulate emissions and odour.

Thank you for your time and assistance in this matter.

Kind regards,

Kate Barker
Senior Project Consultant - Air Quality

O +61 2 9427 8100
M +61 419 110 808
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