



Date: 17th January 2024, 1.30 pm

Location: Mindarie Regional Council

Attendance: Chief Executive Officer (CEO)
Executive Manager Operations (EMO)
Environmental Supervisor (ES)
Waste Management Coordinator (WMC)
DWER Officer (DO 1)
DWER Officer (DO 2)

Apologies: Nil

1. MRC – OMKS – Previous Meeting – completed actions

- MRC Investigating options for Tamala Park Site Tours
- Last Friday of every month
- Start November 2023
- On-line booking form
- 6-10 capacity
- Adults only
- PPE – enclosed shoes, hat, sunglasses,
- Information to be released on the website

Action: Proposal to be brought to Leadership Team Meeting, for discussion – completed – added to website

Update 17.1.2024 – no requests have been received for tours of the site

2. MRC – OMKS – Working Group

Open discussion:

1. Ongoing discussion with Department of Water and Regulations (DWER)

- Last year the DWER contacted the MRC regarding an increase in Odour Complaints received by the Pollution Watch. Over several on-site visits and meetings and DWER's consultation with the MRC, DWER moved to amend the MRC's environmental licence to reduce the likelihood of odour generation on-site.
- The licence was changed to limit waste disposal at the landfill from 6 am-6 pm daily except for Christmas Day, New Year's Day and Good Friday, rather than the site's previous 24-hour waste disposal operation. In addition to this, DWER informed the MRC of a Community Update on its website. The Tamala Park Waste Facility would now be placed on the update page, so the broader community was informed of updates. See the link below:
Community Update webpage: <https://www.wa.gov.au/organisation/department-of-water-and-environmental-regulation/community-updates>
- As part of the community engagement on this web page, DWER states that if members of the public have any questions relating to the Tamala Park Waste Management Facility, they should contact DWER directly.
- Proposed Action: MRC to request from the DWER if any community residences have requested new information.

2. DWER – Pollution Watch – information

On invitation from the MRC, DWER was able to attend January's meeting and provided DWER Pollution Watch information to the group. The information presented (Appendix 1) shows:

- Increase in notification in the last half of 2023, with the highest month being October 2023
- Suburb notifications per month were also presented throughout 2023

In addition to this, the DWER provided a yearly summary of odour notifications from 2020-2024 Financial Years.

Table 1 DWER, Pollution Watch - Odour notification - Finance Year 2020-2024

FY	DWER received
2020-2021	2
2021-2022	10
2022/2023	24
2023/2024	119 (YTD, Jan 2024)

Both parties agreed that there has been a significant increase in odour complaints being registered with the DWER and the MRC.

3. Community Champions/stakeholders

The current stakeholders currently informed of the monthly meeting via the receipt of the released OMSK-WG meeting minutes are:

- Department of Water and Environmental Regulations (DWER)
- Local Member of Parliament for Burns Beach

- All Community Odour Complaints Registered
- Mindarie Regional Councils – Member Councils
- Catalina Regional Council

Open Discussion:

Different views on community champions were expressed across attendees. It was concluded to be a very complex task with specific requirements required by the community champions. For transparency, the drafting of these community requirements will be managed by a third-party consultant, with the view that the consultant works closely with the community and the MRC.

Examples of community champions' requirements raised: Nose calibration, training, site validation, uniform reporting, eg FIDOL (Frequency, Intensity, Duration and Offensiveness, Location) for example.

Action: MRC to engage an experienced odour consultant to assist.

4. EcoSorb – scheduled delivery to landfill

During January 2024, EcoSorb was sprayed in the Evaporation mats (East and West) to reduce odour generation and to neutralise odour molecules.

- Trial: Spraying EcoSorb in the evaporation mats, and ponds at the end of the day and over the closing working cell at the end of the day. .
- 2,500L Eastern Mat, 5,000L Western Mat, 5,000L Batter 1 pond, 7,500L Eastern Ramp pond (while extraction is underway).
- Outcome: early figures would suggest that EcoSorb in the afternoon has assisted in reducing odour complaints.

Odour Identified for January 2024

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Odour Identified per Week
1	2	3	4	5	6	7	
3	8	2	1	0	0	3	17
8	9	10	11	12	13	14	
2	0	1	1	1	2	1	8
15	16	17	18	19	20	21	
0	0	0	0	0	1	0	1

5. Budget Discussion:

- 2023/24 Budget in place
 - Ongoing works funded
 - Ambient Air Monitoring Units -
 - RFQ – two units (mobile)

- Sensors to include determination of the following gases: hydrogen sulphide, total volatile organic compounds, nitrogen dioxide, carbon dioxide and carbon monoxide, Temperature, Humidity, wind, direction
 - Guided by OMP
- Odour Misting/vapour system ring around the landfill
 - Discussions around the table expressed the value for money. It is proposed that money best spent undertaking field surveys/modelling and engaging with the community
 - Requesting a performance-based product including service and maintenance
 - On hold, to be determined by the Odour Consultants
- 2024/25 Budget
 - Future work budgeted
 - Investigation of Leachate Treatment Plant options
 - Preliminary investigations underway
 - Update – Third-party sewage plant have provided information that will assist in determining if leachate to sewage option is viable.
 - Capping of the Western side of the landfill
 - Preliminary investigations underway
 - Update – Tender is open, site visit has been undertaken and the tender closes next week.
 - Increase in odour management budget
 - Ecosorb, Zeolite, Consultants
 - Complete

6. Odour Management Plan

Action – be incorporated into the RFQ –Odour Management Consultant

3. Operations Optimisation Programs to reduce odours

Operational activity to reduce odours on-site during the period Dec 2023 / Jan 2024

Item	Activities on site to reduce odour issues	Comments
Landfill Operations	EcoSorb (odour neutralisation product (enzymes that eat odour gases)	EcoSorb is applied to landfill strategically. 2 x 10,000 water carts (evap, ponds) each day.
	Zeolite	Spread around leachate Mats, ponds and landfill working cell leading up to the Christmas Season and New Year
	Odorous Loads/ Special Burials/ water cart with Ecosorb	Restricted hours applied to Biosolid deliveries
	Covering the waste	150mm limestone and/ no tarps have been used on landfill since 10 November 2023

	Zeolite spread out on wet/rainfall areas on landfill	No wet areas, leachate impacted areas
	Investigating barrier mitigation	On hold until RFQ – OMC is awarded
	Northern Barrier Odour Pods	Serviced and maintained
	Landfilling bench	5m reduced to 3.5m
Power Station	Generated Kwh	Yet to be supplied for December
	Efficiencies – Tonnes CO _{2-e} Abated	Yet to be supplied for December
Landfill gas	Landfill Gas Monitoring	Within Licence Condition parameters
	Efficiencies	December 2023 Wellfield adjustment Program - completed
Leachate	Leachate pond	<ul style="list-style-type: none"> BioWish added once a week.

4. Special Investigations

1. Odorous complaints - Sunday 17th December 2023 — investigation

The Event: 3 odour complaints were received (2 Mindarie, 1 Clarkson), all reported after hours, and during the same time.

Investigation/ Findings:

- a. Biosolid loads were noticed being delivered over the weekend. The organic content level of disposed rubbish is significantly lower on the weekend, due to reduced putrescible rubbish being delivered. This means that the odorous load is more evident.

Outcome:

- a. Biosolid contractor was approached to restrict their delivery loads to 7-3 pm Monday to Friday. This gives the landfill operators enough time to landfill additional rubbish over the top of the odorous biosolids.
- b. Management has proposed a significant increase to the disposal cost to encourage disposal elsewhere. It is expected that WTE will accept this waste in the future.
- c. Odour Mitigation Measures were put into place 12 days before the Christmas Break (23rd Sat – 1 Jan 2024). These measures included
 - a. Re-sheet daily cover on portions of the landfill
 - b. Restrict any movement of leachate within the landfill
 - c. Increase BioWish management to the Evaporation Pods
 - d. Increase the use of EcoSorb before the closing of the working cell that afternoon.
 - e. Deploy Zeolite onto all temporary capped areas and areas of historical odour points.
- d. DWER – Pollution Watch was notified

Additional investigation:

Two field surveys were undertaken – in the Mindarie area - following the 17th of December 2023 odour complaints –

- a. 18.12.2023 (Monday)
 - Weather conditions suitable for investigation
 - 9-11 pm field assessment

- Odour Field Survey - Plume Tracing Method – a constant smell was identified at the leachate mats/ ponds, and a subtle smell was detected on the site’s boundary (northwest). Mild rubbish was smelt along Aviator Boulevard – Mindarie. Slight odour along Savona Grove – Mindarie. Fish and Chip smell along Anchorage Drive. Wood chip – along Long Beach Promenade.
- 25 field survey points registered during the survey.
- Survey completed by 11 pm,
- An odour complaint was registered in the same area at 11.45 pm.

b. 19.12.2023 (Tuesday)

- Weather conditions suitable for investigation
- 9-11 pm field assessment
- Odour Field Survey - Plume Tracing Method - constant smell was identified at the leachate mats/ ponds, subtle smell on the boundary (northwest), burnt rubber smell (witnessed a drag race along Long Beach Promenade to the beach), slight sewage smell at Water Corp facility along Clarecastle Retreat.
- 23 field survey points were registered during the survey.
- Survey completed by 10.40 pm,

2. Odorous complaints - Tuesday 2nd January 2024 – investigation

The Event: 8 Complaints cluster (1 before opening, 4 after opening, 2 Evening, 1 – the whole day)

Investigation/ Findings:

- Increased the disposal of Christmas/ New Year rubbish to landfill.
- No odour management on New Year’s Day – closed
- Gentle breeze blowing into Mindarie/ Clarkson all-day
- One odour complaint relating to an odorous load

Outcome:

- DWER – Pollution Watch was notified
- No additional odour management was undertaken, as the site opened the next day and odour management continued.

5. Community Odour Complaints Register for December 2023

During December 2023, thirty-two (32) community odour complaints were registered.

Graphs of the December 2023 – Community Odour Complaints – *See Appendix 2*

- 16 days of 31 for December – odours were lodged, 15 days where zero odours experiences were lodged
- 26 odour complaints were identified
- 2 odour complaints were a possible impact
- 1 odour complaint was blowing in the wrong direction and
- 3 odour complaints did not provide enough data to investigate. They are lodged in the register as – No Data Provided (NDP).

Of the odour complaints identified

- 15 odours lodged from Mindarie, 14 odours lodged from Catalina/ Clarkson and 3 from Kinross.
- 21 complainants experienced odours outside of working (6 am-6 pm) and 8 odours were experienced during operational hours
- 21 odours reported outside of office hours via email/ website. 8 odour lodged were lodged during office hours.

- Of the 26 complaints, 21 of these were outside of business hours as no mitigation of odours was possible.
- Two field surveys were undertaken during December 2023.

Registered Community Odour Complaints - December 2023

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total Odour Feedback per Week
Days of the week							
No. Odour complaints							0
4	5	6	7	8	9	10	
2	1	2	1	3	0	2	11
11	12	13	14	15	16	17	
1	0	0	0	0	0	2	3
18	19	20	21	22	23	24	
5	1	0	1	4	0	0	11
25	26	27	28	29	30	31	
0	0	3	2	1	0	1	7
8	2	5	4	8	0	5	

Total for Month **32**

7. External Correspondence

DWER –

- Odour event 17.12.2023 – Notified Pollution Watch of an odour cluster and will share the findings of the investigation. – discussed in this meeting
- Odour event 2.1.2024 – Notified Pollution Watch of an odour cluster and will share the findings of the investigation – discussed in this meeting
- Thank you to the two DWER officers for attending the OMKS-WG.

Community Correspondence –

Letter received from Community resident in Mindarie. 18.1.2023

- Reported an on-going Issue for 12 months,
- Odours being experienced at their home
- Particularly evening and early morning
- Predominantly one particular odour
- MRC investigations are wrongly ruled based on the direction of the wind.
- Provided details on their discomfort when experiencing the odours

Discussions within the meeting:

MRC is aware of the resident who wrote the letter, and has previously invited them to the site and assisted in investigating their specific situation. All odour complaints are lodged and investigated (using time, date, weather information and what is happening on site). MRC notes that odour experiences mostly occur in weather that is higher in humidity, low in wind speed and in the direction of the complaint. MRC also notes that several additional odour sources within the area have the combined ability to contribute to the odours being experienced at the complainant's location.

Over the past 12-18 months, the site's landfilling operation has changed position within the site several times. Also, the landfilling height has risen from above ground level. Outside the facility, urban development to the northwest has been cleared, and irrigation/ garden works/ road bitumen works have been undertaken over the last 2 to 4 years. Collectively, all these changing operations may have significantly altered the way odour moves and collects in the landscape.

Action: Information to be provided to the Odour Consultant once appointed.

8. Key Meetings/ Events Ahead

Drafting of the RFQ – Odour Management Consultant

9. Next Meeting

February 2024

Appendix 1 – DWER Approved – Odour information

Pivot 1: Complaints received by Month and Suburb of complainant

MONTH 2023	MONTH	Number of Complaints by Suburb
January	1	1
	MINDARIE	1
February	2	1
	MINDARIE	1
March	3	2
	CLARKSON	1
	MINDARIE	1
April	4	2
	CLARKSON	1
	MINDARIE	1
May	5	2
	MINDARIE	2
June	6	1
	CLARKSON	1
July	7	4
	KINROSS	1
	MINDARIE	3
August	8	15
	CLARKSON	8
	KINROSS	3
	MINDARIE	4
September	9	9
	ANONYMOUS	1
	CLARKSON	7
October	10	30
	CLARKSON	21
	KINROSS	6
	MINDARIE	3
November	11	24
	CLARKSON	7
	KINROSS	14
December	12	25
	CLARKSON	9
	JOONDALUP	1
	KINROSS	10
	MINDARIE	5
Grand Total		116

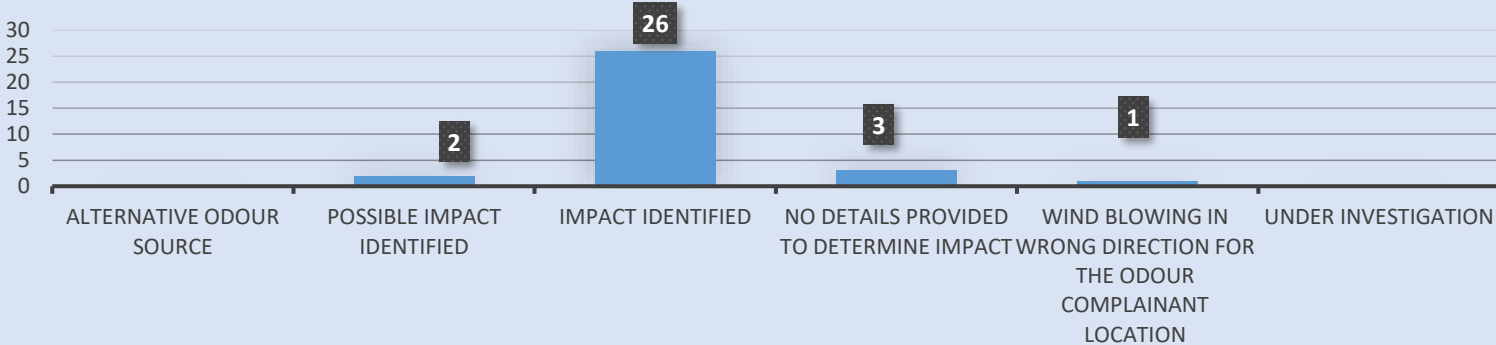
Pivot 2: Number of Complaints by Month

Months in 2023	Total number of complaints per month
January	1
February	1
March	2
April	2
May	2
June	1
July	4
August	15
September	9
October	30
November	24
December	25
116	

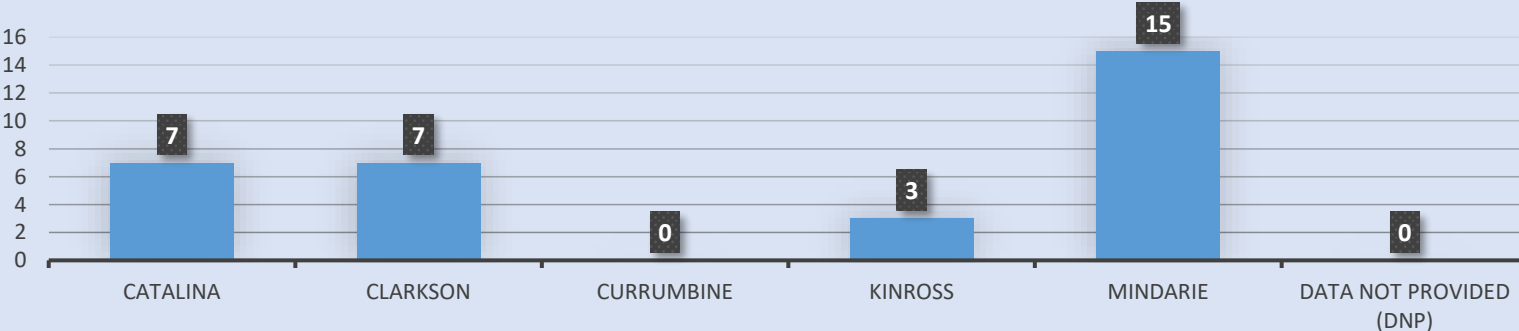
DWER received odour complaints per month for the year 2023



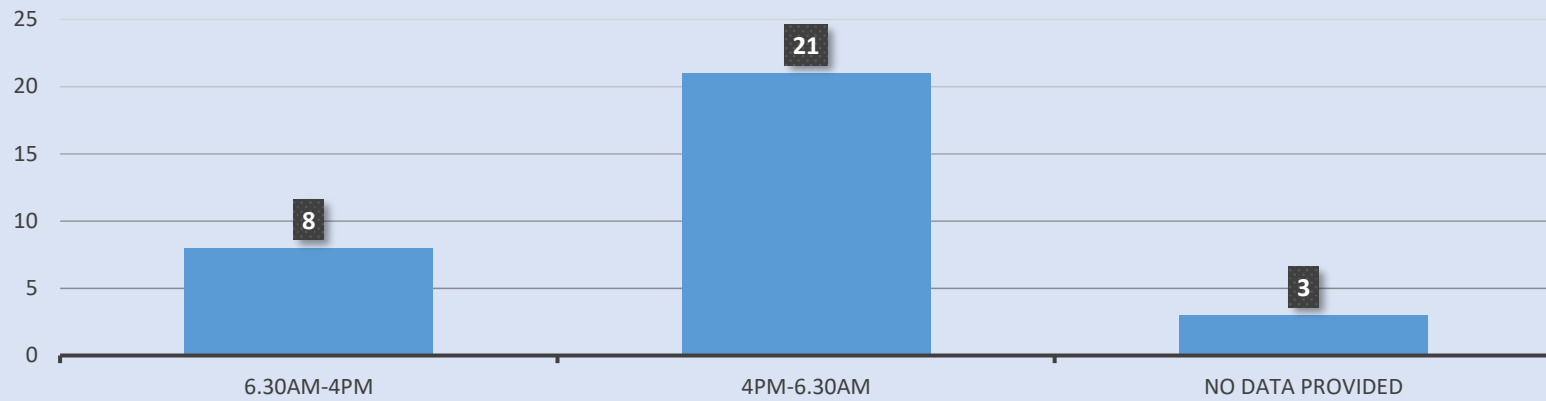
Event Odour Outcomes December 2023



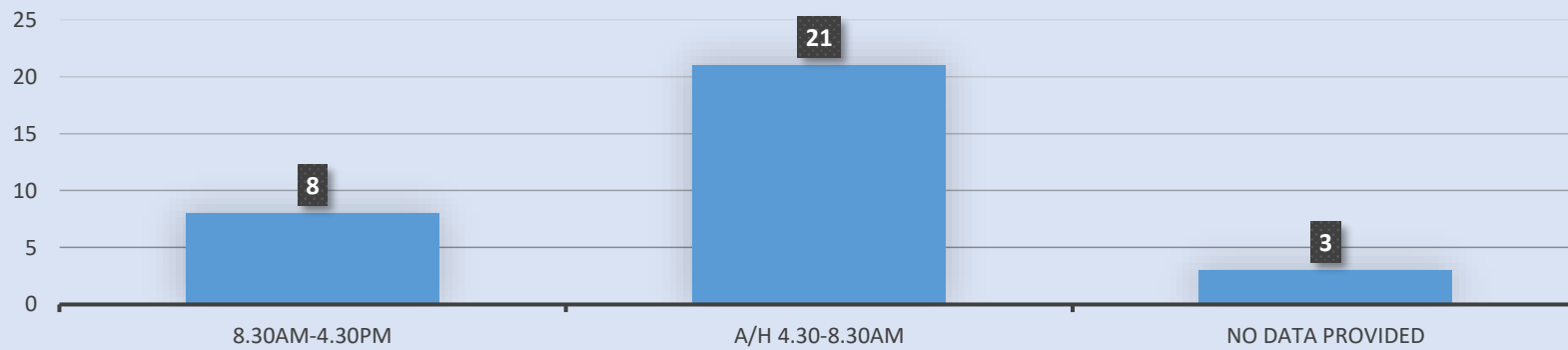
Complaint Location December 2023



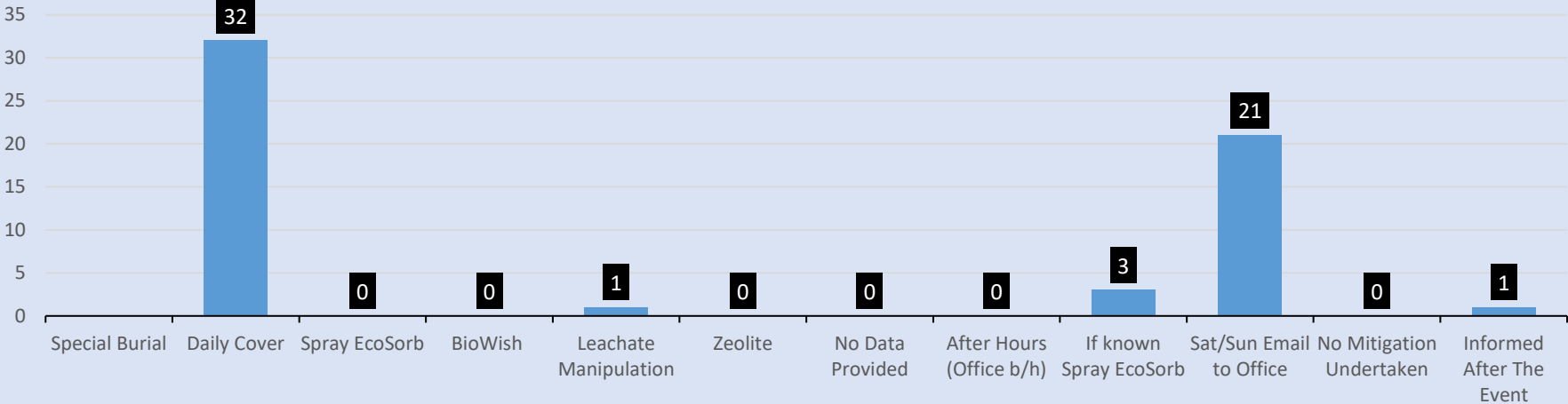
Time that odour was experienced - December 2023



Odour Event Reporting Time - December 2023



Odour Mitigation December 2023



Field Survey Undertaken December 2023

