



# Woodlawn Eco-Precinct Community Liaison Committee Meeting February 2024

*NSW Woodlawn Eco-Precinct  
619 Collector Road / Tarago / NSW 2580 Australia  
off.: +61 2 8588 1360  
[www.veolia.com/anz](http://www.veolia.com/anz)*





# Introductions / Welcome

# Acknowledgement of Country

*Veolia acknowledges Ngunnawal people as the traditional custodians of the lands and waters in which we live and work and their continuing connection to land, water and community. We pay respects to their Elders past, present and emerging and any first nations people present here today.*

*Welcome and thank you. Effective community consultation is a participation process that underpins genuine community development. The purpose of the Woodlawn Community Liaison Committee is to help us better understand what the community values and keep us informed of issues that the community finds important so we can provide feedback and continually improve our processes.*



# MEETING AGENDA

Item	Topic
1	<i>Introductions / Welcome/Agenda</i>
2	<i>Present/Apologies</i>
	<i>Actions from last meeting</i>
3	<i>ARC Project Update</i>
4	<i>Woodlawn Eco-Precinct Operational Update</i> <ol style="list-style-type: none"><li><i>1. Woodlawn Bioreactor &amp; Leachate Treatment Plant - tonnage</i></li><li><i>2. Water Management/Leachate Management</i></li><li><i>3. Bioenergy - gas capture &amp; power generation</i></li><li><i>4. Odour Management</i></li><li><i>5. Container Management</i></li></ol>
5	<i>Environmental Compliance Update</i> <ol style="list-style-type: none"><li><i>1. Environmental Audit Action</i></li><li><i>2. General Matters</i></li><li><i>3. EPL Variations</i></li><li><i>4. Project Approval Modifications</i></li><li><i>5. Consultation</i></li></ol>
6	<i>CLC Actions, Q &amp; A</i>
7	<i>Meeting Closed - Next Meeting TBC</i>

# | Present / Apologies

# MEETING ATTENDANCE

<b>Date</b>	Thursday 22nd February 2024	<b>Time</b>	5:00pm to 7.30pm
<b>Location</b>	Woodlawn, Conference Room, 619 Collector Road, Tarago		

<b>Name</b>	<b>Present</b>	<b>Name</b>	<b>Present</b>
Justin Houghton (JH) (Veolia)		Raymond Choy (RC) (Veolia)	
Cr Andy Wood (AW) (GMC Councillor)		Mark Quinlan (MQ) (Community Rep)	
Cr John Preston (JP) (QPRC Councillor)		Dr Samantha Johnson (SJ) (Community Rep)	
Kym Wake (KW) (Community Rep)		Kathryn Whitfield (KLW) (Veolia ARC Project Director)	
Fiona Jeffery (FJ) (Community Rep)		Lee Smith (LS) (Veolia ARC Project Team)	
		Wayne Baynham (WB) (Community Rep)-	
		Scott Martin (SM) (GMC Director Planning & Environment) - Invited Visitor	

# | Actions from Last Meeting

# MEETING

## Actions

Action	Status
Update community on H2S study in the Tarago Times - "not completed need more data"	More information
Veolia to investigate "snap send solve" app - IT looking at any cyber security risks	IT investigating
Veolia to continue to source a suitably qualified CLC meeting Facilitator	<b>Complete</b>



# | ARC Project Update

# VEOLIA ARC NEXT STEPS



## Response to Submissions Report

- In late 2023 Veolia submitted our interim response to submissions report to DPHI and EPA
- We addressed the concerns and issues raised in the community and responding to government body submissions
- The report also includes updated technical studies
- As part of the adequacy review process we will receive feedback which we will incorporate and finalise the report and technical studies

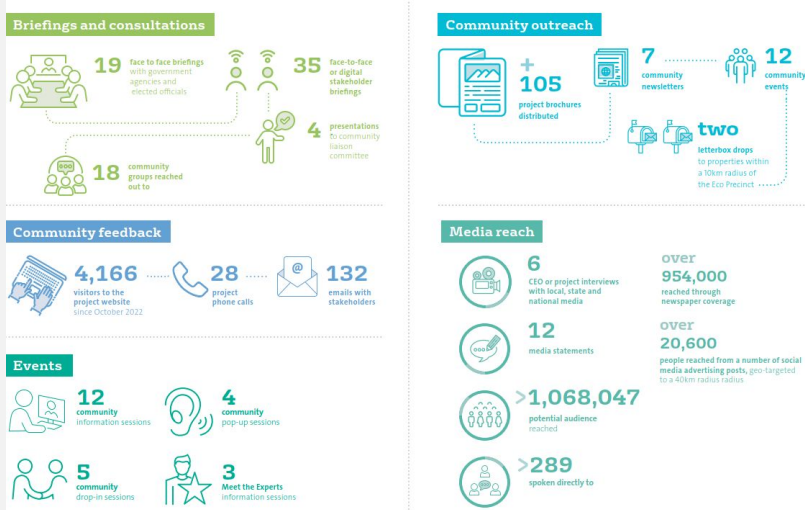
We are expecting to receive feedback from DPHI and EPA late Feb / early March. We anticipate the report will be completed second quarter of 2024, after which the report will be made publicly available.

## Independent Planning Commission

IPC is the consent authority for this project. Once the IPC process commences there will be review of project documentation, DPHI's assessment report and a process of engagement by IPC with government agencies and stakeholders.

A public hearing will be held at which the community can present. The IPC will then make its determination on the project.

# VEOLIA ARC ENGAGEMENT



## Stakeholder Engagement

- Preparing the 2024 stakeholder engagement plan
- Reviewing findings from last year and previous years
- In the past we have used door knocking, FAQs, project website, flyers, stakeholder briefings, community drop in sessions, meet the experts events, pop ups at events and local venues, webinar, print media, radio and social media
- What topics would you like us to focus on?

# Eco-Precinct Operational Update

# ECO-PRECINCT OPERATIONAL UPDATE

## Performance

### Bioreactor Landfill - Licence tonnage

YTD Waste Processed (7 Sep 2023 - Feb 2024)

- Regional Waste 62,606t - (licence 125,000t)
- Sydney Waste 291,227t - (licence 900,000t)
  - Both were within licence limits for Sep 2022- Sep 23 period

### Mechanical Biological Treatment

YTD Waste Processed (7 Sep 2023 - Feb 2024)

- Sydney Waste 68213 t - (licence 144,000 t)
- MWOO to Bioreactor (ADC) 12,123 t
- WOO to Tailings Rehabilitation 7056 t
- Ferrous Recovery 247 t



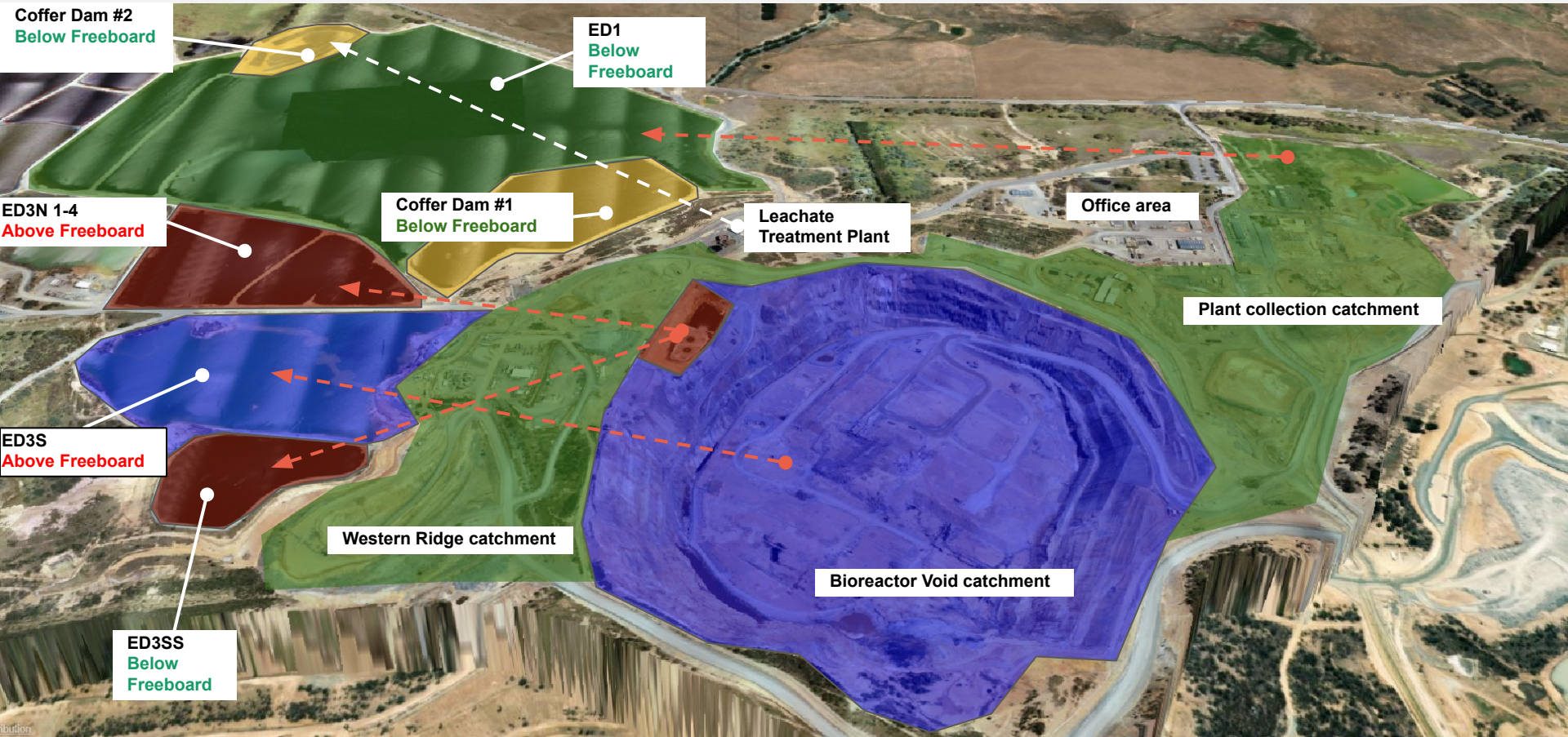
### Leachate Treatment Plant

YTD Leachate Treated (19/02/2024)

- Current treatment rate of 4.1 L/s (membrane maintenance)
- Average treatment rate YTD 4.09/s
- Licence requirement 4L/s

# Water Management

## Storage status and location (End of Jan 2024)



# Water Management

## Freeboard Management - compliance

- **ED1 - Below 0.5m freeboard**
  - All proposed evaporation system has been installed,
  - Current evaporation throughput 196 L/s, @20% efficiency = 3.4 ML /day volume loss
- **ED3N Over 0.5m freeboard and ED3SS - Below 0.5m freeboard - remaining capacity to overflow 28 ML**
  - Currently 54 L/s mechanical evaporation
  - In the process of adding another 10 L/s throughput, aiming March 2024
- **ED3S stormwater - Over 0.5m freeboard - remaining capacity to overflow 39 ML**
  - Current 4 L/s evaporation throughput
  - In the process of adding another 10 L/s throughput, aiming March 2024
- **Coffer Dam #1 - Below 0.5m freeboard**
  - Repair completed and start being used since end of 2023
  - 36 L/sec installed mechanical evaporation
- **Coffer Dam #2 (50ML) - Below freeboard**
  - Reached 0.5m freeboard end of 2023 and stopped receiving from LTP
  - Current 22 L/s evaporation throughput

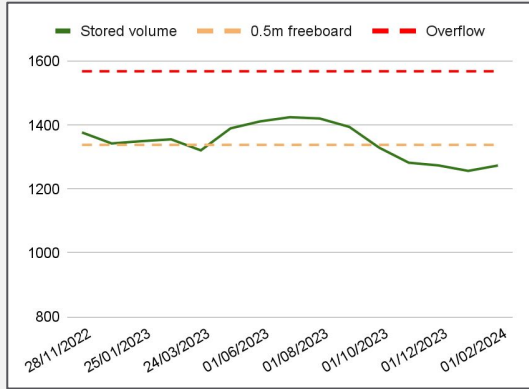
\* Note: 1 L/s = 86,400 L/day @ 20% evaporation = 17,280 L/day



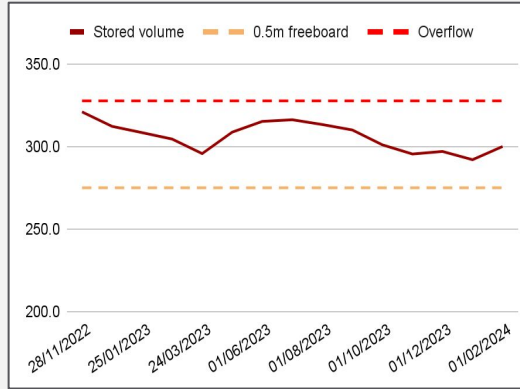
# Water Management

## Liquid Storage change - Trends

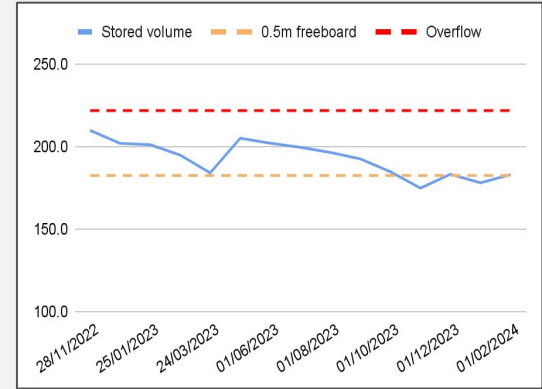
ED1



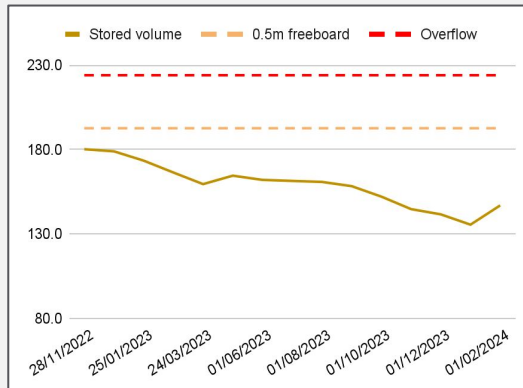
ED3N and ED3SS



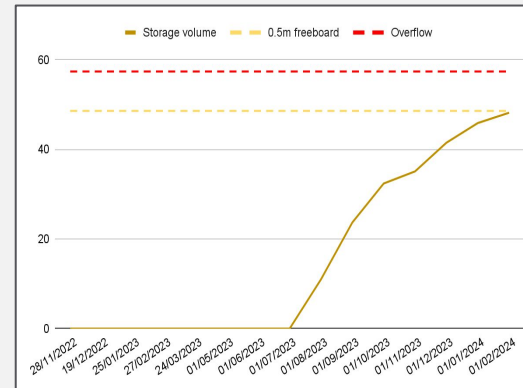
ED3S Stormwater



Coffer dam #1



Coffer dam #2





# ECO-PRECINCT OPERATIONAL UPDATE

## WATER MANAGEMENT

- All Treated Leachate is going into approved and lined dams as per compliance, *i.e.* coffer dam 1 and coffer dam 2
- Increasing mechanical evaporation to manage storage volume, current overall evaporation throughput 325 L/s, @20% efficiency = 5.6 ML/day volume loss
- Investigating other solutions of water management



Site evaporation End Dec 2023



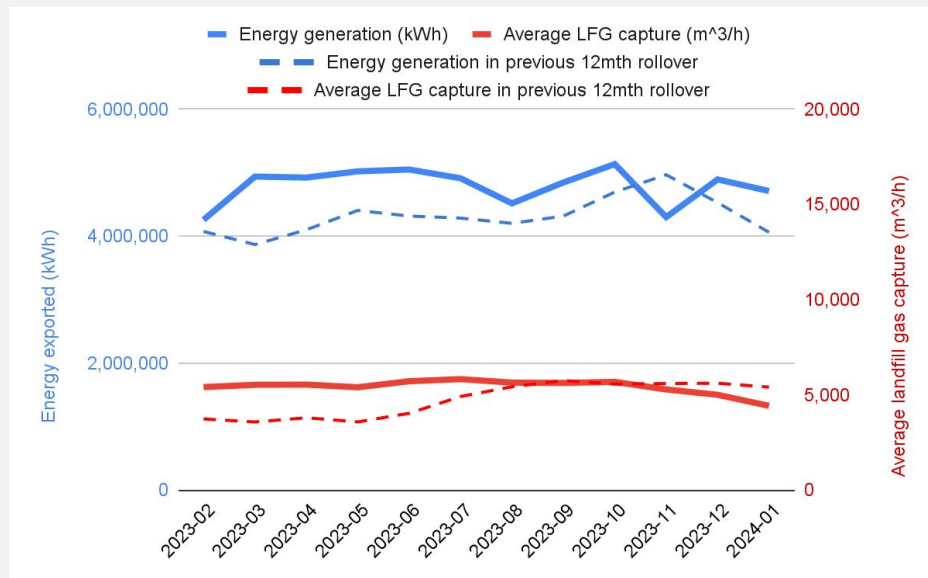
# ECO-PRECINCT OPERATIONAL UPDATE

## BIO-ENERGY

### Bioenergy

#### 2023 Biogas Capture

- Gas collected in 2023 **47,479,212 m<sup>3</sup>**
  - Increased by **7,178,207 m<sup>3</sup>** (18%) compared to same time last year
- Energy Generation **57,669 MWh** in 2023
  - Increased by **5,837 MWh** (11%) compared to same time on last year
- In 2023, the captured emission is equivalent to removing 91,970 cars off the road through the year



# ECO-PRECINCT OPERATIONAL UPDATE

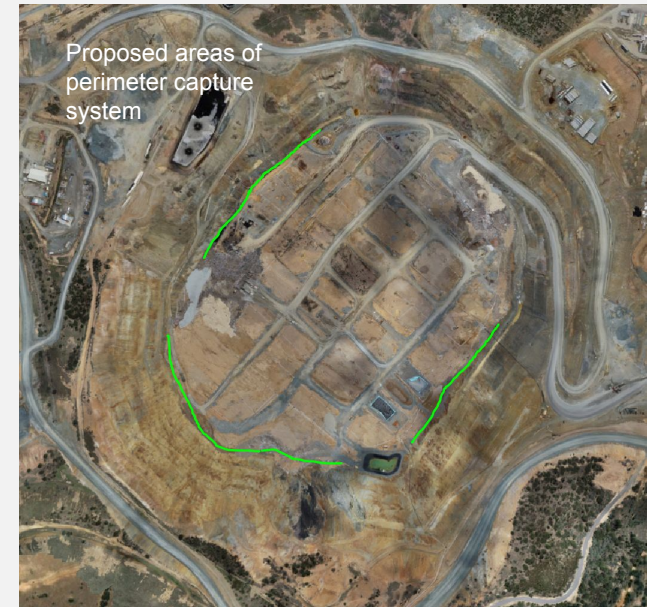
## ODOUR MANAGEMENT

- **Completed**

- Biofilter around the perimeter of the waste/rock face
- Rock trench covers southern and western area of the void
- ED3N Aeration - 3 aerator in operation, one more to install
- MBT Biofilters - refurbishment 2023 (Dec #1 March #2).
- Monthly surface monitoring - **350 points, 0 exceedance** of 500ppm methane trigger on surface of void since July 2023.
- Carbon filter deployed in any hotspots
- LTD performance improvement
- Additional aeration unit installed in ED3N

- **To do**

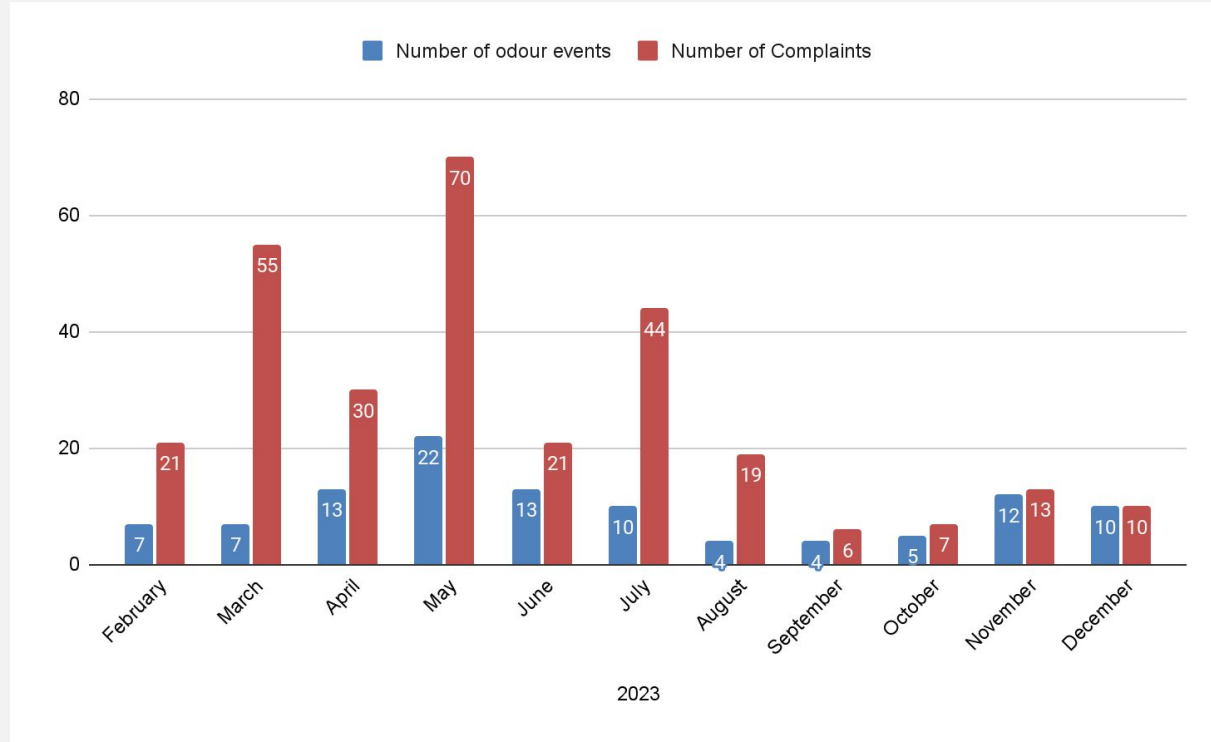
- Improve waste and rock interface gas collection in the bioreactor, plan to install perimeter extraction system - concept design completed
- Odour data management - feedback on public portal
- Additional surge aeration capacity in ED3N (IOA advised 14 February ) - delivery and installation of unit in March
- Trials to undertake chemical dosing in-situ (IOA action) - scope and plan being developed by The Odour Unit



# ECO-PRECINCT OPERATIONAL UPDATE

## ODOUR MANAGEMENT

- Odour complaints and events have been reducing since July
- Have reached the end of another tipping lift some impact of LFG capture
- Installed extra drainage to ensure additional gas can be extracted from under the waste surface in the impacted areas



# ECO-PRECINCT OPERATIONAL UPDATE

## CONTAINER MANAGEMENT

All containers are designed and constructed by qualified and experienced contractors to prevent leakage and odour from containers during transport and handling activities.



- **Containers**

- Currently have 381 containers in the system - 27,000 full container movements from Crisps creek to Woodlawn per year

- **Container Design and Construction**

- New inspection and testing schedule in place. All containers are being put through this process (table)

- **Container Maintenance and Inspection**

- A container maintenance programme is in place to ensure the prevention of leakage from containers during transport and handling activities - continuous
- 50 new containers ordered to arrive in September 2024 - and will be quality inspected and water tested prior to using.
- New containers will replace older 300 series and any damaged containers that are currently out of service

Container Series	Total number	Inspected and Water tested	To be water tested	
300	28	28	0	Complete
400	55	55	0	Complete
500	74	74	0	
600	79	79	0	
700	82	82	0	Complete
800	63	43	20	Less than 2 years old
<b>Total</b>	<b>381</b>	<b>361</b>	<b>20</b>	*some will be decommissioned and replaced



# Environment Update

# Independent Odour Audit updates

Action	Status	Completion Date
The ambient landfill gas composition laboratory analysis	The Odour had arranged to deploy the sampling equipment between 29 January - 2 February 2024. Due to unfavourable wind conditions during this period, the deployment was delayed and expected to occur prior to 15 March 2024.	15 March 2024
H2S monitoring program data interpretation	The Odour Unit have been engaged to undertake the H2S data interpretation from the H2S monitoring program which includes the monitoring stations located within Tarago. Veolia has proposed this action and date as a Pollution Reduction Program to the EPA.	1 March 2024 commencing
Improved management of the Biofilter ay the MBT	Veolia refurbished the biofilter media mid 2023. Additional improvements were made to intensify the spray humidification system. Veolia to engage a hygiene system specialist to undertake a technical review of the biofilter moisture control	15 March 2024

# Independent Odour Audit updates

Action	Status	Completion Date
Leachate Management System improvement	<p>Veolia investigated the cause of the elevated odour levels within the LMS, and implemented improvement actions. The Odour Unit have resampled the dams with elevated odour. Generally an overall improvement was noted, with most dams now within acceptable limits. The identified trends show that areas of outstanding elevated odour should return to within acceptable limits with additional aeration. Veolia to implement further improvement measures to increase reduction of odour.</p> <p>Veolia have engaged Membrane Futures to undertake a review of the Leachate Treatment Plant. The report has been finalised and sent to the EPA. The LTP is now operating at designed capacity.</p>	<p>Ongoing - surge aeration capacity is on order with a delivery and install date of 19 March 2024.</p> <p>Completed</p>
<ul style="list-style-type: none"> <li>• Odour mitigation from the void</li> <li>• Active tipping face</li> <li>• Management of High Rainfall Events</li> <li>• IMF and Waste Transport Activities</li> </ul>	<p>Veolia have engaged a landfill engineer to undertake a review of the landfill operating practices. This review will address odour mitigation from the void, active tipping face practices, Management of high rainfall events, and improvements identified within the IMF and transportation of waste.</p>	<p>Engaged</p>



# ENVIRONMENTAL COMPLIANCE UPDATE

## PA MODIFICATIONS & POST APPROVAL APPLICATIONS

Approval	Type	Description	Status
MP 10_0012 AWT 06_0239	Modifications	<p>Modify the existing project approval for the Bioreactor and MBT to:</p> <ul style="list-style-type: none"><li>• Construct an approximately 15 megalitre (ML) dam at the MBTF to hold leachate pumped from the existing approved leachate dam via a pipeline.</li><li>• Construct an approximately 100 ML dam at the Bioreactor to hold leachate pumped from the existing approved leachate dams via a pipeline.</li><li>• Transport leachate from the existing and proposed dams to Veolia's Spring Farm Advanced Resource Recovery Facility (ARRF) via road and/or rail.</li></ul>	<p>Additional surveys required for new species by DPE have been completed.</p> <p>Transport to ARRF removed following community feedback.</p>
MP 10_0012 (Bioreactor)	Modification	<p>Reverse Osmosis for beneficial reuse. High expenditure water treatment plant that will facilitate significantly improved treatment of treated leachate. Brine will report to the existing dams. Beneficial reuse of the drinking quality water for the water carts, irrigation to the onsite farm, washdown processes, operational processes onsite.</p>	<p>Additional surveys required for new species and heritage completed. Further progressing through DPE in February/ March with MOD report</p>
MP 10_0012 (Bioreactor)	Modification	<p>Remediation of old contaminated mine area. Remediate with material that is clean and guaranteed. Goal to prevent rainfall being contaminated in that area. High expenditure but requirement of site to remediate.</p>	<p>Independent third party (WSP) doing conceptual remediation plan, Site contamination auditor Monday 19th February was positive.</p>

# ENVIRONMENTAL COMPLIANCE UPDATE

## EPL VARIATIONS - Reporting of complaints and investigations

Time	Method	Type	Location	Proximity to Site	Description	Av_Wind Speed (m/s)	Av_Wind Direction (deg)	Bar_Pressure (HPa)	Temp10m_Av (°C)	Activity on site consistent with normal operation?
8:30:00 am	E-mail	Odour	Mulwarae Street, Tarago	6.5 km East South East	Complainant reported being impacted by a smell of rotten garbage from 8:30am to 10:30am. They said it had a strength of 3/5. Wind was reported to be a very Light NW wind.	4.87	273.9	16.1	9	Yes

Action taken or proposed to be taken to deal with the incident and/or prevent a reoccurrence	Photograph of active landfill cell showing intermediate cover (closest to complaint date)	Current level of leachate in each pond at most the most recent survey	Daily H2S Non Zero Value Average (PPB)	Mechanical evaporator run times on ondate of odour complaint	Correlation with wind direction (Y/N)	Conclusion
Site Management responded to complainant to encourage them to report odour incidents such as these directly to Site to ensure a more timely investigation of potential odour sources and/or cause.	24/08/2022 08:00	Date: 31/08/2022 ED3N-1: 791.5 ED3N-2: 791.46 ED3N-3: 791.62 ED3N-4: 793.9 ED3S-S: 790.28	Point 9 - 1.32 Point 71 - 0.0 Point 72 - 0.0	7:00am to 6:00pm	N	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken with no significant impacts evident at the time of the complaint.  Veolia also notes that the complainant's location is inconsistent with the wind direction according to the Woodlawn weather station.

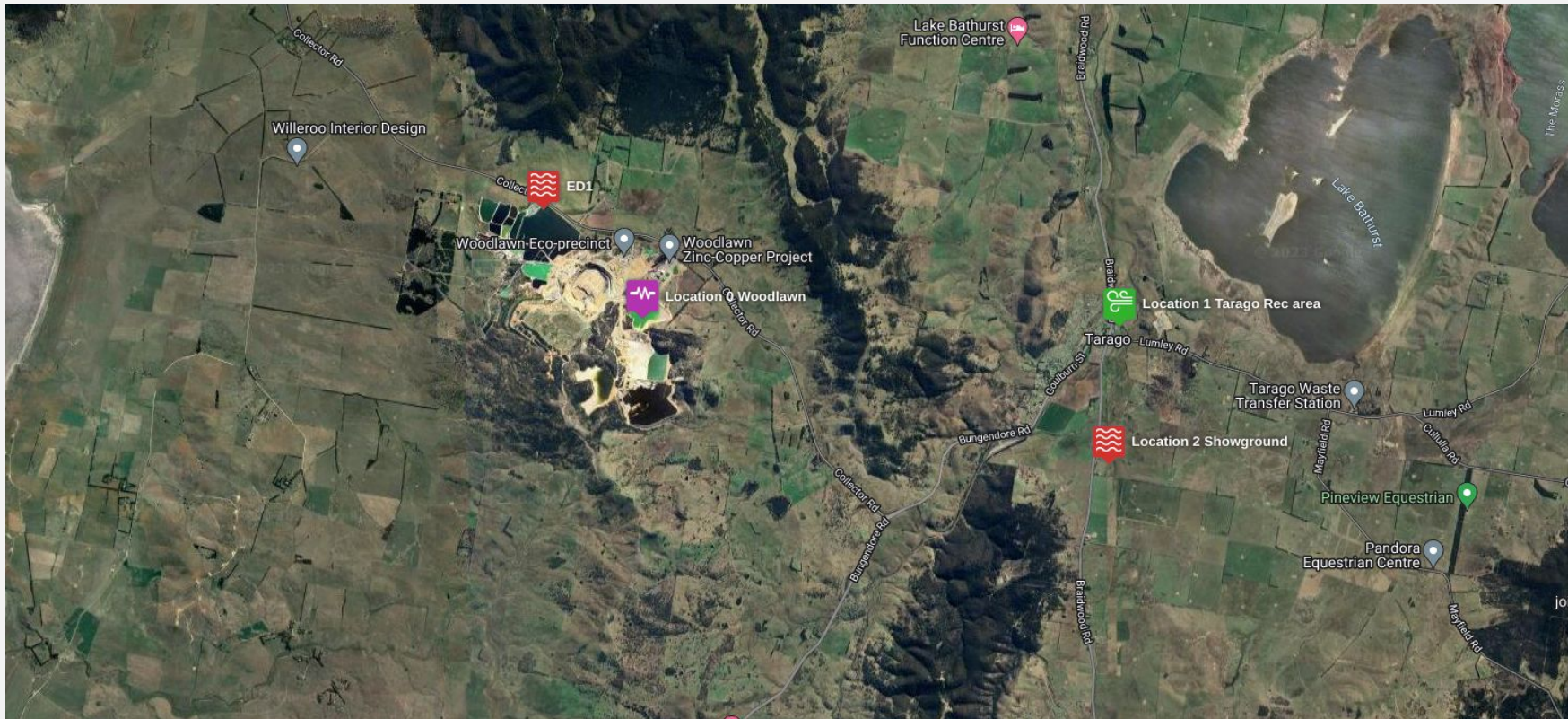
# ENVIRONMENTAL COMPLIANCE UPDATE

## REGULATORY ENFORCEMENTS

EPL/PA	Date	Facility	Description	Context	Action
EPL 11436	24/06/2022	Woodlawn Bioreactor	Prevention Notice	Container transport to site - leaking containers, requirement to leak test	Veolia engaged experts to assist in rectifying the containers including the QAQC management process. Program of leak detection a great initiative to identify containers in need of refurbishment. Report has been submitted to the EPA with several improvements including the revised testing program having been implemented, with annual reviews by Marloc Engineering proposed.
EPL 11436	26/9/2023	Woodlawn Bioreactor	Prevention Notice	Gas characterization analysis	<p>Veolia has engaged a third party to undertake a review and propose an area monitoring program. This was undertaken on some of the site dams, but the community based sampling has been delayed by the third party (The Odour Unit) as they are strictly seeking to capture worst case events with maintained wind direction towards Tarago for 9-12 hours and low wind speed.</p> <p>We agree with that priority and have submitted it to the EPA it will occur prior to 15 March 2024.</p>

# ENVIRONMENTAL COMPLIANCE UPDATE

## Gas characterization and H<sub>2</sub>S data review locations





# Community Q & A

# CLC Actions



# Next Meeting

*The next Community Liaison Meeting will be held at the Woodlawn Eco-Precinct TBC agreed.*

