A large, gnarled tree with sparse green foliage stands in a desert landscape. The ground is reddish-brown soil with patches of green grass. The sky is a mix of blue, purple, and orange, suggesting a sunset or sunrise. The text is overlaid on the image in white.

Annual Environmental Performance Report 2021-22

Woodlawn Bioreactor
and Crisps Creek Intermodal
Facility

November 2022

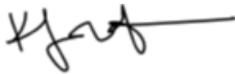
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Introduction

This Annual Environmental Performance Report (Report) has been prepared in accordance with condition R1.8 of Environment Protection Licence (EPL) 11436 for the Woodlawn Bioreactor (Bioreactor), as well as Environment Protection Licence (EPL) 11455 for the Crisps Creek Intermodal Facility (IMF), issued and regulated by the NSW Environment Protection Authority (EPA).

In accordance with relevant legislative requirements and industry best practice, the environmental performance of the Bioreactor and the IMF is managed to stringent conditions, the reporting of which forms the basis of this Report. This Report covers the period of 6 September 2021 to 5 September 2022.

Background

The Bioreactor and Crisps Creek Intermodal Facility (IMF) form part of the Woodlawn Eco-Precinct (the Eco-Precinct) which is owned and operated by Veolia Australia and New Zealand (Veolia) and located approximately 250 kilometres (km) south west of Sydney in the NSW Southern Tablelands. A site location plan is provided in **Appendix 1**. The Eco-Precinct, which covers an area of 6000 hectares, comprises of the 'Pylara' and 'Woodlawn' agricultural properties. The Bioreactor is where waste landfilling and landfill gas extraction occurs in the void of a remnant open cut mine, approximately 33 million cubic metres (m³) in capacity.

The Bioreactor has been operating since September 2004, with the collection of landfill gas from landfill waste to extract methane for energy generation commencing in 2008. This occurs at the adjacent Woodlawn Bio Energy Power Station (the Power Station). Waste to the Bioreactor from Sydney is transported in shipping containers via rail and unloaded onto road trucks at the IMF which is located approximately 8 km away in the township of Tarago. Local waste from neighboring councils and businesses is transported to the Bioreactor via road.

In October 2018, Veolia commissioned the Leachate Treatment Plant (LTP) designed and constructed to facilitate improved environmental and operational performance by allowing Veolia to extract and treat greater volumes of leachate minimising and reducing the generation of odour, enabling more efficient gas extraction, and maximizing the waste to energy benefits of the Bioreactor.

Legislative Requirements

The main legislative instrument governing the environmental performance and activities undertaken at the Bioreactor and the IMF, pertaining to this Report, is the *Protection of the Environment Operations Act 1997* (POEO Act) regulated by the EPA, as well as its associated regulations.

The EPL for each site has been issued under Section 55 of the POEO Act. Conditions of the EPLs stipulate the environmental and operational parameters that need to be addressed by Veolia, in the management strategies adopted for both the sites, to maintain compliance. This Report is split into a section for each EPL and contains these management strategies.

Part 1 EPL 11436 Woodlawn Bioreactor

1.1 Bioreactor Operations

In accordance with EPL 11436, the Bioreactor is permitted to accept material classified as General Solid Waste (Putrescible) as described in the *Waste Classification Guidelines Part 1: Classifying Waste* (EPA, 2014) for the scheduled activity 'Waste disposal by application to land'. The other ancillary activity permitted on the EPL is 'Electricity generating works' for the generation of energy from the extraction of landfill gas.

In addition to the waste management and energy generation activities, the site EPL mandates the administrative, operating and reporting conditions for the Bioreactor, as described in Table 2.1 below. A licence boundary plan is provided in **Appendix 2**.

1.2 Bioreactor Licence Conditions

EPL 11436 details the operating conditions and environmental monitoring requirements for the Bioreactor as noted in Table 2.1.

Table 1.2 Bioreactor EPL 11436 Licence Conditions

Condition	Compliance with Condition
1. Administrative conditions	Noted
2. Discharges to air and water and application to land	P1. Location of monitoring/discharge points and areas These monitoring points have been documented in a monitoring location plan (Appendix 3) and a program is in place for sampling as required.
3. Limit conditions	L1. Pollution of Waters The Bioreactor is deemed a zero discharge site, as all surface and stormwater that comes into contact with waste or leachate is captured, stored and treated onsite. Non-contaminated water is managed through diversion drains and bunds. No water was discharged during this reporting period.
	L2. Concentration Limits Air concentration limits are noted.
	L3. Waste All waste received at the Bioreactor during this reporting period was in accordance with the waste types permitted in the EPL. Waste generated onsite

	<p>was deposited in the Bioreactor. This is explained further in Section 1.7 of this report.</p> <p>L4. Noise Limits No noise complaints were received during this reporting period. The noise limit criteria for the Bioreactor is 35 dB(A) LAeq (15 minute) at the most affected residential receiver. Noise monitoring will be undertaken by Veolia on the receipt of any such complaints.</p> <p>L5. Hours of Operation All operational activities at the Bioreactor, including haulage of waste from the IMF were undertaken between 6:00 am and 10:00 pm, Monday to Saturday during this reporting period as permitted.</p> <p>L6. Potentially Offensive Odour An annual independent odour audit (IOA) is used to assess the effectiveness of odour control measures and to identify improvements to existing odour management practices at the site. The IOA for the Bioreactor was undertaken by The Odour Unit Pty Ltd in March 2022. Veolia will continue to implement recommended actions from the odour audit in combination with improving current odour control measures identified onsite. A non-compliance relating to Condition L6.1 of the EPL occurred during the reporting year. This is noted in Section 1.8 of this report.</p>
<p>4. Operating conditions</p>	<p>O1. Activities Carried out in a Competent Manner All licensed activities undertaken at the Bioreactor in this reporting period were carried out in a competent manner and under a high standard of environmental management for which Veolia is certified under <i>ISO 14001:2015 Environmental Management Systems</i>.</p> <p>O2. Maintenance of Plant and Equipment The maintenance and operation of all plant and equipment on the premises associated with the licensed activities was undertaken in a proper and efficient condition as required by qualified technicians. Details of all major plant and equipment at the site are stored in a computerised maintenance management system in order to schedule and complete the required maintenance. Veolia operators hold the appropriate qualifications and licenses to operate plant and equipment used as part of Bioreactor operations.</p> <p>O3. Dust All operations and activities were carried out at the Bioreactor in a manner to minimise dust at the boundary of the premises. These included all access roads from the IMF to the Bioreactor and the haul road used for ancillary operations being sealed, the use of water trucks for dust suppression as required and monthly sampling to monitor for the presence and quantity of depositional dust.</p>

	<p>O4. Emergency Response</p> <p>The Emergency Response Plan (ERP) for the Eco-Precinct, incorporates the Pollution Incident Response Management Plan (PIRMP) in accordance with s153A of the POEO Act.</p> <p>The ERP/PIRMP is maintained electronically on Veolia’s Business Management System, an online platform for storing Veolia policies, procedures, plans and working documents. Hard copies of the ERP/PIRMP are available at various locations on site for ease of use.</p> <p>The ERP/PIRMP contains procedures for minimising the risk of and managing incidents such as fires, spills, explosions etc. at the Bioreactor, as well providing guidance on the notification protocols to relevant authorities in the event of a pollution incident. The PIRMP was tested during the reporting period.</p>
	<p>O5. Processes and Management</p> <p>The processes implemented onsite to manage water quality in accordance with the EPL are documented in the <i>Landfill Environmental Management Plan (LEMP)</i>, prepared by Veolia. The LEMP (MAN-13298 WL - Bioreactor Landfill Environmental Management Plan) provides guidance on the management of surface and stormwater systems such as drainage and pumping networks to divert clean water from any water that has come in contact with waste or leachate.</p> <p>Clean surface and stormwater collected from within the void is pumped to Evaporation Dam 3 South (ED3S) for evaporation. Water that has come into contact with waste and/or leachate is pumped to the onsite Leachate Treatment Plant for treatment and/or transferred to ED3S-S prior to transfer for storage in the coffer dam in Evaporation Dam (ED1) for evaporation and potential use as process water for Develop, upon commencement of mining operations. The existing leachate aeration dam is used as a contingency.</p> <p>Mechanical evaporators may be used to assist evaporation and are controlled by wind direction sensors to prevent the drifting of sprayed liquids from the premises.</p> <p>A non-compliance relating to Condition O5.2 of the EPL occurred during the reporting year. This is noted in Section 1.8 of this report.</p>
	<p>O6. Waste Management</p> <p>Veolia has comprehensively re-designed the landfill tipping profile and its gas collection infrastructure to maximise gas collection and minimise the impacts of higher leachate levels in the void. This included investing in new collection infrastructure across the void. Veolia continues to extract and treat leachate from the void at an average of 5.45 litres per second (L/s), totalling 171728 m³ over the reporting using the current system.</p> <p>Gas collection remains steady at an average of 3965.53 cubic metres per hour (m³/h) of landfill gas flow this reporting period.</p>

	<p>The Leachate treatment system continued to be maintained and operated to optimise the Bioreactor conditions for treatment of leachate, other wastewaters and stormwater entering the void. Excess leachate was extracted, treated and transferred for storage in ED3 lagoons 1, 2, 3, 4 & 5 (ED3N-1, ED3N-2, ED3N-3 & ED3N-4, ED3SS). Following a prolonged period with minimal rainfall and favourable conditions for evaporation, the contents of ED3N-1 was pumped to other dams in the ED3N network. ED3N-1 was cleaned and prepared as a mixing reservoir for various site waters.</p> <p>Leachate from waste via Veolia's Sydney transfer facilities continued to be the only liquid imported during this reporting period and was processed through the leachate treatment system as approved by the EPA.</p> <p>Virgin Excavated Natural Material (VENM) was continuously sourced from onsite and offsite locations for use as cover material during the reporting period.</p> <p>All waste accepted within the Bioreactor in this reporting period was screened prior to final disposal to ensure only waste conforming to EPL 11436 was received.</p> <p>Veolia operates the Bioreactor to maximise the production of landfill gas for generation of renewable energy at the Power Station, where 7 generators have been installed and commissioned, with 2 auxiliary flares as back up treatment of landfill gas emissions captured. The generators and flares satisfy the design, installation and operational requirements within the EPL.</p> <p>The landfill gas extraction and utilisation infrastructure in the Bioreactor has been designed to meet the conditions of the landfill including settlement.</p> <p>A third flare was installed and commissioned at the Power Station in 2022 in accordance with Condition O6.17, O6.17 and O6.18 of the EPL.</p> <p>Veolia has continued to construct temporary access roads to minimise waste delivery vehicles coming in contact with and tracking waste to external surfaces. Dedicated site vehicles that only operate within the void and other operational areas were utilised. Any vehicles exiting the facility are required to use the wheel wash facility to prevent the tracking of materials.</p> <p>In addition to tracking of materials, a monthly site inspection checklist is used to ensure practical measures are in place at the site to prevent materials leaving the premises.</p> <p>In accordance with Condition O6.31 an Odour Management Plan including MWOO has been developed and incorporated into the Woodlawn Air Quality and Greenhouse Gases Management Plan.</p> <p>Non-compliances relating to Condition O6.28 and O6.4 of the EPL were recorded during the reporting year. This is noted in Section 1.8 of this report.</p>
<p>5. Monitoring and recording conditions</p>	<p>Noted, all compliance monitoring was carried out in this reporting period in accordance with EPL requirements. The results of which are detailed in Section</p>

	<p>1.7. There were non-compliances with condition M2 during this reporting period. These are noted in Section 1.8 of this report.</p> <p>The site telephone complaints line was maintained and operated during this reporting period for receiving complaints from members of the public and is available to the public via signage placed at the entry of the site.</p>
<p>6. Reporting conditions</p>	<p>Noted and addressed in this Report and the annual return documents, where relevant. There were non-compliances with condition R4.2 during this reporting period, which have been outlined in the Section 1.8 of this report.</p>
<p>7. General conditions</p>	<p>A copy of the EPL is displayed at the Woodlawn reception.</p>
<p>8. Pollution Studies and Reduction Programs</p>	<p>U1. Long-term Leachate Treatment Solution</p> <p>The Leachate Treatment Plant was commissioned in the 2018-19 reporting period and has implemented the following processes:</p> <ul style="list-style-type: none"> - Throughput management to steadily increase leachate treatment to achieve EPA target of 346 m³/day (4L/sec) ; - Permeate quality management of the final product going into the coffer dam; - Foam management via chemical and mechanical mechanisms; - Temperature control via monitoring through SCADA & in-line monitoring systems; and - Monitoring weather conditions <p>All monthly progress reports on the LTP commissioning and optimisation were submitted to the EPA in this reporting period.</p> <p>An additional membrane filtration train was installed to the membrane bioreactor (MBR) of the Leachate Treatment Plant during the reporting period.</p> <p>A Leachate Assessment Report prepared by Earth2Water Pty Ltd in accordance with the requirements of Pollution Reduction Program (PRP) U1.5 of Environment Protection Licence (EPL) 11436 for the Woodlawn Landfill was submitted for the EPA review.</p> <p>A Leachate management Action Plan developed by Veolia based on the recommendations of the report. This is discussed further in Section 1.6.1 of this report.</p> <p>U2. Investigation and Impact Assessment of Hydrogen Sulfide Gas Emissions</p> <p>Veolia engaged Epic Consulting Pty Ltd to undertake the Hydrogen Sulfide Investigation and Impact Assessment. This is discussed further in Section 1.6.2 of this report.</p> <p>U3. Monitoring station for meteorology and hydrogen sulfide</p>

	Veolia is currently in consultation with the EPA, and Community in relation to the installation of a new weather and H2S monitoring station in the village of Tarago. This is discussed further in Section 1.6.3 of this report.
9. Special Conditions	<p>The financial assurance (FA) is adjusted each financial year in accordance with condition E1.</p> <p>The FA calculations were undertaken according to conditions E1.4 and E1.9 and submitted to the EPA for approval, prior to Veolia submitting the adjusted bank guarantee to the EPA by the EPL anniversary date.</p>

1.3 Community Engagement

1.3.1 Community Liaison

In order to proactively engage in effective odour management, Veolia participates in regular community consultation to encourage and gather feedback from the local residents regarding the odour performance at the Bioreactor.

As part of the consultation process, a number of meetings are held with representatives from the local community, committee members of Tarago & District Progress Association Inc. (TADPAI) and local councillors from Goulburn Mulwaree and Queanbeyan-Palerang Regional Councils. Veolia continues to attend such meetings and engage proactively with the community regarding activities related to the site.

The Veolia Community Liaison Committee (VCLC) operates for the Woodlawn Bioreactor which consists of an independent chair, representatives from Goulburn Mulwaree Council and Queanbeyan Palerang Council, local community groups and independent community members. The committee meets up to four times per year.

1.3.2 Complaints

Veolia operates a 24-hr telephone complaints line that enables the receipt of complaints from members of the public, as required under the EPL. Other complaints that were received off site during this reporting period were logged by the EPA.

Upon receipt of an odour complaint, Veolia records the details of the complaint into the Eco-Precinct complaints register as follows:

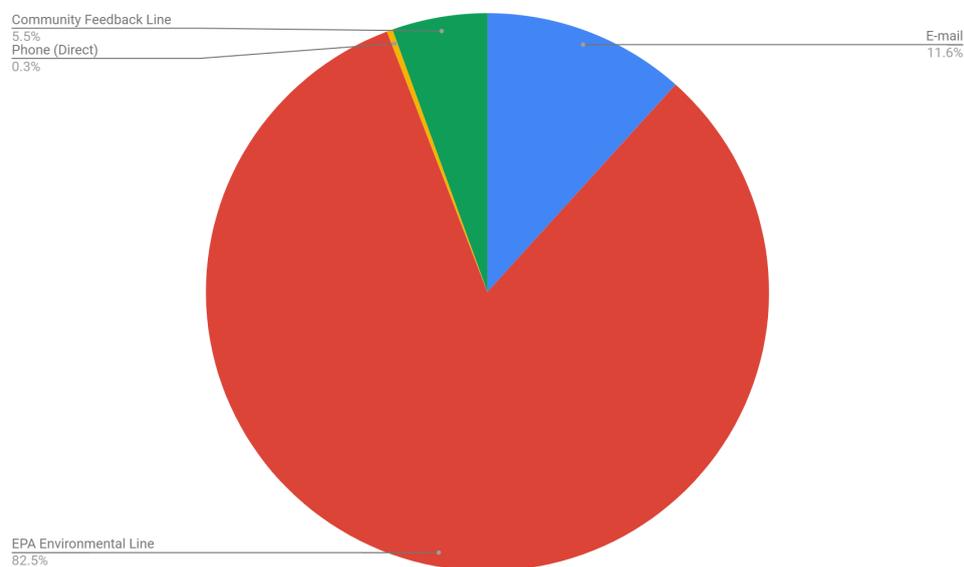
- Date and time of complaint
- Method by which the complaint was made
- Personal details of the complainant if available
- Nature of the complaint
- Action taken by Veolia in relation to the complaint ie. investigation

- If no action was required, the reason why no action was undertaken

Following an investigation of an odour complaint and implementing any remedial action as necessary, a report is prepared and submitted to the NSW EPA as stipulated in condition R4.2 of the EPL, and made publicly available on the Veolia website.

Veolia recorded a total of 292 complaints relating to odour which is fairly consistent with the previous reporting year (302). Complaints received in the 2021-22 reporting period are detailed in **Table 6.1** (refer **Appendix 6**) and noted in **Section 1.8** of this report.

Figure 1.3.2.1 Odour Complaint Method of Reporting



The majority of odour complaints were reported using the EPA Environmental Line as demonstrated in the graph above (refer **Figure 1.3.2.1**).

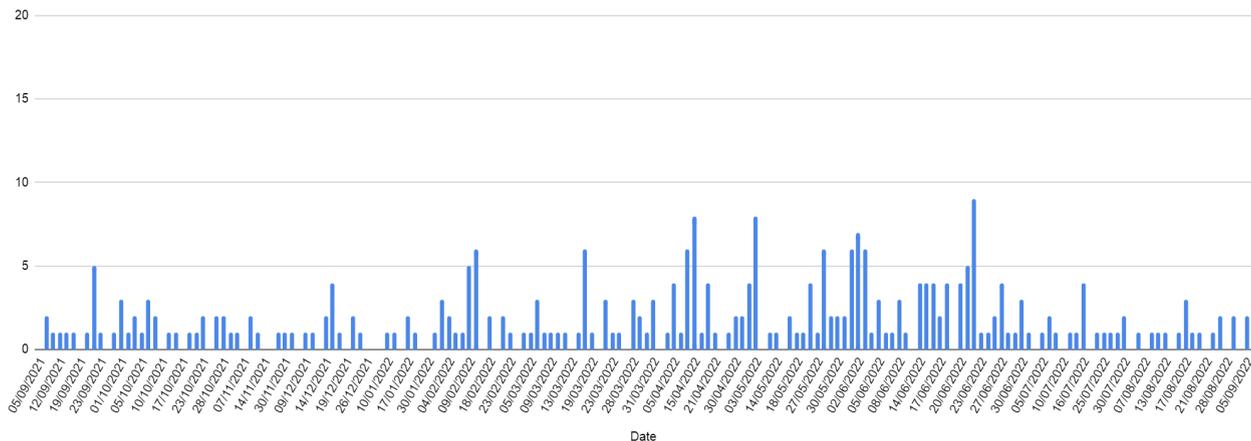
Starting in May 2022, Veolia submitted 13 consolidated R4.2 reports that contained multiple reports of odours within a two-week period. Reporting in this format has been useful in identifying odour sources, potential influences, such as meteorological or operational factors.

Although Veolia is unable to follow-up with complainants due to the anonymity of the reports received from the EPA, it continues to make every practicable attempt to validate odour complaints in accordance with Woodlawn’s Odour Management System. This includes:

- Continued implementation of appropriate controls to ensure all potential odour sources identified at the Facility are managed;
- Undertaking of periodic site odour surveys and inspections;
- Annual independent odour audits of site facilities and operations;
- A detailed analysis of the weather conditions at the time of the Event;
- An assessment of operational factors contributing to reports of odours, such as unusual activities, leachate dam levels, and the runtime of the evaporation systems; and
- Whenever odour is detected, survey off-site and boundary odours.

The number of reports of odour received during the reporting period has shown a clear downward trend, indicating that the continuous improvements in gas capture which have resulted in a reduction in landfill gas emissions and significantly reduced odour impacts. This is demonstrated in **Figure 1.3.2.2** below.

Figure 1.3.2.2 Odour Complaints



1.3.2 Odour Management

Odour emissions are minimised through a combination of daily covering waste practices, effective biofiltration media, and a robust landfill gas collection and extraction system. There is a constant planning and implementation process to continue to increase gas extraction. During the placement of waste, the configuration of the landfill gas collection system and the design of the waste lift ensure consistent gas and leachate extraction.

Leachate management and gas extraction systems at Veolia continue to be improved, with a focus on reducing emissions. Operational actions implemented during the reporting period included:

- Leachate extraction from the waste was maintained at an average of 5.47L/s;
- Continued installation of subsurface gas extraction drainage lines;
- Daily checks of void gas extraction infrastructure are conducted to identify any faults and immediate repairs requirements to ensure maximum suction and gas capture;
- Monthly surface landfill gas monitoring, and trigger based corrective actions;
- Work schedules and operational planning based on monthly landfill gas monitoring;
- Ongoing compaction and maintenance around wells; and
- Maintaining and adding biofiltration materials as needed.

Significant efforts have also been made in order to foster community relations and improve odour investigation processes, including:

- Exploring more effective methods of community consultation and engagement;
- Progression on the installation of off-site meteorological station/H₂S monitoring;
- Online odour complaint form to improve the complaint handling process;
- Online feedback form to invite open communications with the Veolia CLC;

- Consultation with qualified experts in relation odour impacts by way of Annual Independent Odour Audits;
- Investigating the use of “real-time” weather forecasting technology; and
- Investigating surface extraction methods for addressing thermal inversion impacts.

Veolia's efforts to develop and implement the above-mentioned engineered controls, which include continuous improvement in gas capture, are progressing well as the rain has subsided.

1.4 Bioreactor Environmental Monitoring Requirements

Veolia is required to monitor environmental performance of the Bioreactor under EPL 11436. **Table 1.4** details the EPL ID, sampling location, frequency and the type of monitoring undertaken at each licensed point. A monitoring location plan is included in **Appendix 3**.

Table 1.4 Bioreactor Licensed Monitoring Points

EPA ID	Sampling Location	Frequency	Type of Monitoring
1	GMBH1	Quarterly	Subsurface Gas
2	GMBH2		
4	GMBH4		
6	Landfill Surface	Monthly	Surface Gas
7	Landfill Gas Flare 1	Annual / Continuous	Air Discharge
69	Landfill Gas Flare 2		
70	Landfill Gas Flare 3		
8	Landfill Gas Engine Exhaust Point	Annual	
5	Gas Extraction Booster	Monthly/Annual	Landfill Gas Input
9	Meteorological Station	Continuous	Meteorological
10	DG28 – Pylara	Monthly	Particulates – Deposited Matter
11	DG22		
12	DG34		
13	Site 115 – Allianoyonyige Creek	Quarterly	Surface Water
14	Spring 2		
15	Site 105 – Crisps Creek		
16	WM200		
17	WM201		
18	ED3SS		
19	WM203 – ED3N		
22	Pond 5		
54	WM202 - ED3S		
59	ED1	Annual	Leachate
23	Leachate Pond		

24	Leachate Recirculation System		
25	MB1	Quarterly / Annual	Groundwater
26	MB2		
27	MB3		
28	MB4		
30	MB6		
31	MB7		
33	MB10		
41	ED3B	Quarterly / Annual	Groundwater
42	WM1		
45	WM5		
46	WM6		
48	P38A & P38B	Quarterly	Standing Water Level
49	P200A		
50	P200B		
51	P58A & P58B		
52	P59A & P59B		
53	P100A & P100B	Quarterly / Annual	Groundwater
55	MW8S		
56	MW8D		
57	MW9S		
58	MW10S (Dry well) (GW10S)		
60	MB28		
66	MB33		
67	MB34		
68	MB35	Weekly	Discharge
61	Effluent from LTP		
62	ED1 Cofferdam (LTP)	Monthly	Surface Water
63	SP2-MW1	Quarterly	Groundwater
64	MW-FRC1		
65	MB10S		

1.5 Bioreactor Monitoring Results

All monitoring data collected at the monitoring points identified in **Table 1.4** during this reporting period has been tabulated and provided in **Section 1.5** or in **Appendix 4**. Graphs of data collected have been developed to assist in the assessment of trends and depict any variability within the monitoring results are presented in **Section 1.5** or in **Appendix 5**.

Any non-compliances relating to Condition M2.1 of the EPL is noted in **Section 1.8** of this report.

1.5.1 Bioreactor Landfill Gas Monitoring Results

Gas monitoring is a critical component of the Bioreactor's landfill and subsurface gas monitoring regime. Portable gas monitors (PGM's) and analysers such as the GEM5000 and TDL Landfill Gas Analyser are used to take spot readings, showing landfill conditions moment-to-moment as well as for the in-house verification of monthly landfill surface gas surveys and subsurface gas monitoring as required by the EPL.

Table 1.5.1 Bioreactor Landfill Gas Monitoring Results

Parameter	Results/Discussion																									
Subsurface Gas	<p>Subsurface landfill gas is currently monitored on a quarterly basis from three (3) subsurface gas monitoring locations in accordance with the EPL requirements and is summarised in Table 1.5.1.1 below:</p> <p style="text-align: center;">Table 1.5.1.1: Subsurface Gas Monitoring Result</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #92d050;">Monitoring Bore ID</th> <th colspan="4" style="background-color: #92d050;">Purged Methane Reading (%)</th> </tr> <tr> <th style="background-color: #92d050;"></th> <th>20/12/2021</th> <th>03/02/2022</th> <th>28/04/2022</th> <th>25/08/2022</th> </tr> </thead> <tbody> <tr> <td style="background-color: #92d050;">GMBH1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td style="background-color: #92d050;">GMBH2</td> <td>0</td> <td>0</td> <td>0</td> <td><0.1</td> </tr> <tr> <td style="background-color: #92d050;">GMBH4</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p>The subsurface gas data recorded at each gas monitoring well was compared against The Environmental Guidelines: Solid Waste Landfills (NSW EPA, 2016) trigger criteria for methane (> 1% (v/v)) and carbon dioxide (> 1.5% above background levels).</p> <p>The results show that the gas collection network is effectively capturing and controlling landfill gas within the landfill void. Engineered impermeable barriers and the natural subsurface of the void wall also minimises the potential movement of landfill gas from the Bioreactor, allowing for maximum extraction through the gas collection system.</p> <p>The monitoring data for each of the subsurface gas monitoring bores is provided in Tables 1.1 to 1.3 (refer Appendix 4).</p>	Monitoring Bore ID	Purged Methane Reading (%)					20/12/2021	03/02/2022	28/04/2022	25/08/2022	GMBH1	0	0	0	0	GMBH2	0	0	0	<0.1	GMBH4	0	0	0	0
Monitoring Bore ID	Purged Methane Reading (%)																									
	20/12/2021	03/02/2022	28/04/2022	25/08/2022																						
GMBH1	0	0	0	0																						
GMBH2	0	0	0	<0.1																						
GMBH4	0	0	0	0																						
Landfill Gas Extraction Booster	<p>The data reported for the landfill gas extraction booster at the Power Station is consistent to the historical average as summarised in Table 1.5.1.2 below:</p> <p style="text-align: center;">Table 1.5.1.2: Landfill Gas Extraction Booster Monitoring Results Summary</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #92d050;">Parameter</th> <th style="background-color: #92d050;">Historical Average</th> <th style="background-color: #92d050;">2021-22 Result</th> </tr> </thead> <tbody> <tr> <td style="background-color: #92d050;">Temperature (°C)</td> <td>2.7</td> <td>4</td> </tr> <tr> <td style="background-color: #92d050;">Volumetric Flow (m³/s)</td> <td>0.67</td> <td>0.72</td> </tr> <tr> <td style="background-color: #92d050;">Carbon Dioxide (%)</td> <td>38.8</td> <td>36.6</td> </tr> </tbody> </table>	Parameter	Historical Average	2021-22 Result	Temperature (°C)	2.7	4	Volumetric Flow (m³/s)	0.67	0.72	Carbon Dioxide (%)	38.8	36.6													
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Volumetric Flow (m³/s)	0.67	0.72																								
Carbon Dioxide (%)	38.8	36.6																								

	<p>The detailed data for each of the parameters required under the EPL for the gas extraction booster is provided in Tables 2.1 and 2.2 (refer Appendix 4).</p>															
<p>Surface Gas</p>	<p>Surface gas monitoring was completed on a quarterly basis as per EPL requirements, which are summarised in Table 1.5.1.3 below. The detailed tabulated data is available in Tables 3.1 to 3.9 (refer Appendix 4).</p> <p style="text-align: center;">Table 1.5.1.3: Surface Gas Monitoring Results Summary</p> <table border="1" data-bbox="478 629 1412 745"> <thead> <tr> <th>Parameter (ppm)</th> <th>Minimum</th> <th>Average</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td>Methane</td> <td>2</td> <td>54</td> <td>95</td> </tr> <tr> <td>Hydrogen Sulfide</td> <td>0.00</td> <td>0.0083</td> <td>1.20</td> </tr> </tbody> </table> <p>Methane was detected in varying concentrations over the waste surface with an overall average of 54.5ppm (0.005%) during this reporting period, showing consistency with 54 ppm (0.005%) last reporting period.</p> <p>Identified through surface gas monitoring, areas where higher methane levels were recorded had additional cover material added to maintain the average methane emissions below the threshold concentration in surface gas emission testing of 500 parts per million (0.05%), as per the <i>Environmental Guidelines for Solid Waste Landfills</i> (EPA, 2016).</p> <p>Application of cover material in areas of the void demonstrating settlement cracking, commissioning and rebalancing of gas extraction wells and installing additional gas collection infrastructure were methods used to reduce surface gas emissions. Mulch bio-cover was applied around wells, which has assisted in mitigating odour and reducing surface gas emissions as well as an approved Alternative Daily Cover (ADC).</p> <p>Veolia’s Trigger Action Response Plan and “Special Methodology” for the sampling of Landfill Surface Fugitive Gas Emissions, was added to the EPL under Condition O6.32 and implemented in July 2022.</p>	Parameter (ppm)	Minimum	Average	Maximum	Methane	2	54	95	Hydrogen Sulfide	0.00	0.0083	1.20			
Parameter (ppm)	Minimum	Average	Maximum													
Methane	2	54	95													
Hydrogen Sulfide	0.00	0.0083	1.20													
<p>Landfill Gas Flare</p>	<p>The landfill gas flares are manufactured to a residence time of 0.3 seconds with a destruction efficiency of 98% for methane and non methanogenic organic compounds to meet the requirements of the EPL.</p> <p>Monitoring was continuously performed during this reporting period, an average of which is summarised in Table 1.5.1.4 below.</p> <p style="text-align: center;">Table 1.5.1.4: Landfill Gas Flare Monitoring Results</p> <table border="1" data-bbox="464 1749 1426 1865"> <thead> <tr> <th>Parameter</th> <th>Units</th> <th>Flare 1</th> <th>Flare 2</th> <th>Flare 3</th> </tr> </thead> <tbody> <tr> <td>Temperature</td> <td>°C</td> <td>1,293</td> <td>1,288</td> <td>1,473</td> </tr> <tr> <td>Residence Time</td> <td>Seconds</td> <td>>0.3</td> <td>>0.3</td> <td>>0.3</td> </tr> </tbody> </table> <p>Flares 2 and 3 were added to the EPL under Conditions P1.1 and M2.2 during the reporting period. This will ensure that all flares installed at the premises are operating as intended and achieving the relevant discharge limits.</p>	Parameter	Units	Flare 1	Flare 2	Flare 3	Temperature	°C	1,293	1,288	1,473	Residence Time	Seconds	>0.3	>0.3	>0.3
Parameter	Units	Flare 1	Flare 2	Flare 3												
Temperature	°C	1,293	1,288	1,473												
Residence Time	Seconds	>0.3	>0.3	>0.3												

<p>Landfill Gas Engine Exhaust Point(s)</p>	<p>Monitoring of a landfill gas engine exhaust point was completed during the reporting period. The results are consistent with the previous monitoring period and presented in Tables 4.1 and 4.2 (refer Appendix 4).</p> <p>Concentration limits for each of the following pollutants are stipulated in the EPL, all of which were below the threshold for the exhaust point test within this reporting period and consistent with previously reported levels.</p> <ul style="list-style-type: none"> • Nitrogen Oxides; • Hydrogen Sulphide; • Volatile Organic Compounds; • Sulphuric Acid Mist; and • Sulphur Trioxide. <p style="text-align: center;">Table 1.5.1.5: Landfill Gas Engine Exhaust Point Monitoring</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr style="background-color: #92d050;"> <th>Concentration (mg/m³)</th> <th>Maximum</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td>Hydrogen Sulphide</td> <td>5</td> <td><0.7</td> </tr> <tr> <td>Sulfuric acid mist and sulfur trioxide (as SO₃)</td> <td>100</td> <td>0.87</td> </tr> <tr> <td>Nitrogen Oxides</td> <td>450</td> <td>290</td> </tr> </tbody> </table>	Concentration (mg/m ³)	Maximum	Result	Hydrogen Sulphide	5	<0.7	Sulfuric acid mist and sulfur trioxide (as SO ₃)	100	0.87	Nitrogen Oxides	450	290
Concentration (mg/m ³)	Maximum	Result											
Hydrogen Sulphide	5	<0.7											
Sulfuric acid mist and sulfur trioxide (as SO ₃)	100	0.87											
Nitrogen Oxides	450	290											

1.5.2 Bioreactor Dust Monitoring Results

As required, air quality monitoring was carried out on the site in order to determine whether any of the activities conducted on the site have impacted the ambient air quality. In order to minimize the amount of dust produced by the operation, all activities were conducted so as to minimise dust emissions from the premises.

Dust suppression control measures employed during the reporting period included but was not limited to:

- A water cart is used on access roads to suppress and/or clear dust, as required;
- The wheel wash ensures that trucks travelling from the Bioreactor to the intermodal facility minimise the transport of particulate matter into the surrounds;
- Truck speed and movements on-site are minimised as much as practicable, with speed limits no greater than 40km/h; and
- All trucks entering and leaving the premises carrying loads must be covered at all times, except during loading and unloading.

Sampling and analysis of dust deposition was carried out in accordance with Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method as specified in the Woodlawn Bioreactor's Project Approval.

In accordance with Development Consent (MP10_0012), the criteria for deposited dust at the Woodlawn Bioreactor is assessed as insoluble solids and provided in **Table 1.5.2.1**.

Table 1.5.2.1 Bioreactor Depositional Dust Long Term Criteria

Pollutant	Averaging Period	Maximum Increase	Maximum Total Level
^c Deposited Dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Criteria Notes:

^aTotal impact (i.e. incremental increase in concentrations due to the project plus background concentrations due to other sources);

^b Incremental impact (i.e. incremental increase in concentrations due to the project on its own);

^c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and

^dExcludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed to by the Director-General in consultation with OEH.

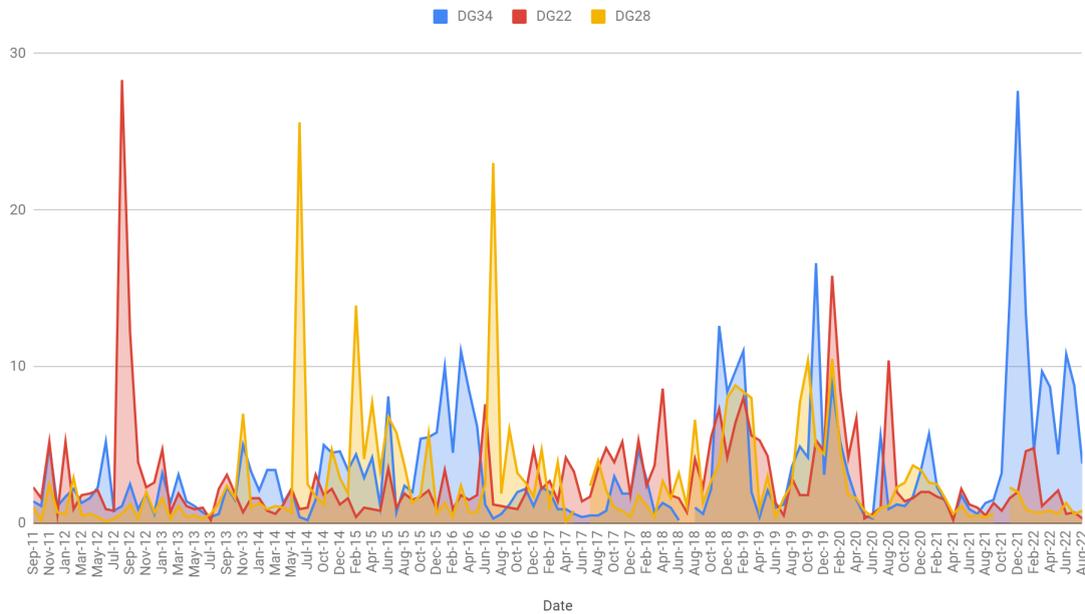
There are currently three dust deposition gauges associated with the Woodlawn operation. DG22 on the eastern side of the void, DG34 behind the core shed, and DG28 located at Pylara. These are sampled each month as shown in **Table 1.5.2.2**.

As reflected in the dust monitoring results below and in **Section 2.4.2** of this report, a period of extremely high pollen impacted on the majority of the insoluble solids concentrations between the months of December 2021 and March 2022. As these were discrete and/or natural events, Veolia does not anticipate any adverse impacts on the environmental and community amenity.

Table 1.5.2.2 Bioreactor Dust Monitoring Results

Parameter	Results/Discussion																			
Particulates/ Dust Monitoring	<p>All twelve monthly monitoring samples were undertaken during the reporting period, with the exception of DG28, where in October 2021 the dust jar was broken in transit to the Laboratory for analysis.</p> <p>The results of total insoluble solids found within the depositional dust samples are summarised for each of the monitoring locations in Table 1.5.2.1 below, with the detailed results tabulated in Table 5.1 (refer Appendix 4).</p> <p style="text-align: center;">Table 1.5.2.1: Dust Monitoring Results</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">Dust Gauge</th> <th colspan="3">Summary Total Insoluble Solids (g/m²/month)</th> </tr> <tr> <th>Minimum</th> <th>Average</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td>DG22</td> <td>0.3</td> <td>1.7</td> <td>4.8</td> </tr> <tr> <td>DG34</td> <td>1.5</td> <td>9.2</td> <td>27.6</td> </tr> <tr> <td>DG28</td> <td>0.6</td> <td>1.0</td> <td>2.3</td> </tr> </tbody> </table> <p>The maximum dust level recorded in this reporting period was 27.6 g/m²/month at DG34 (December 2021) which is located on the West side of the Bioreactor.</p> <p>As mentioned in the Annual Return and previous correspondence with the EPA, higher than usual levels of dust are attributed to a period of extremely high pollen count between December 2021 and March 2022.</p>	Dust Gauge	Summary Total Insoluble Solids (g/m ² /month)			Minimum	Average	Maximum	DG22	0.3	1.7	4.8	DG34	1.5	9.2	27.6	DG28	0.6	1.0	2.3
Dust Gauge	Summary Total Insoluble Solids (g/m ² /month)																			
	Minimum	Average	Maximum																	
DG22	0.3	1.7	4.8																	
DG34	1.5	9.2	27.6																	
DG28	0.6	1.0	2.3																	

Figure 1.5.2.2 Bioreactor Dust Monitoring Results



1.5.3 Bioreactor Surface Water Monitoring Results

A surface water monitoring program has been formulated to detect potential pollution of off-site surface water caused by the leachate from the landfill or sediment from the stormwater runoff. Monitoring points are located upstream and downstream of the site to identify any impacts the Woodlawn operations may be having on surface waters and equally, eliminate impacts to surface waters that are not a result of the landfill operation.

Surface water is currently monitored on a quarterly basis from eleven (11) surface water monitoring locations in accordance with the EPL requirements as shown in **Table 1.4**. The sites consist of four creeks and seven dam locations.

The findings from water quality monitoring of surface water locations required under the EPL is summarised in **Table 1.5.3** below with detailed data provided in **Tables 6.1 - 6.11** (refer **Appendix 4**). Key quality indicators selected to identify likely impacts from the Bioreactor include:

- pH,
- Electrical conductivity (EC),
- Ammonia (NH₃),
- Total organic carbon (TOC),
- Potassium (K)
- Sulphate (SO₄), and
- Zinc (Zn).

These are depicted in the trend graphs (**Figures 1.5.3.1 – 1.5.3.11**) provided in **Appendix 5**.

Table 1.5.3 Bioreactor Surface Water Monitoring Results

Parameter	Results/Discussion
<p>Site 115 – Allianoyonyiga Creek</p>	<p>Site 115 is situated downstream of the evaporation dams. All four quarterly monitoring samples were undertaken in this monitoring period. Based on the results provided in Table 6.1 (refer Appendix 4), the pollutant concentration trends from previous monitoring periods are generally consistent.</p> <ul style="list-style-type: none"> • Mean pH at 7.99 for this location indicates slightly alkaline water; • EC at 1675 $\mu\text{S}/\text{cm}$, indicating fresh to brackish water; • NH_3 at less than 0.1mg/L and TOC at mean of 15 mg/L concentrations recorded in this monitoring period remain consistent with historical monitoring results; • Mineral and heavy metal concentrations are of fairly low magnitude at 2.2 mg/L for K and 0.059mg/L for Zn, indicating no contaminated runoff is impacting surface water at this monitoring location. <p>While the indicator trends for this location indicate some variability over time, this is not uncommon when sampling intermittent streams.</p>
<p>Spring 2</p>	<p>Spring 2 is located upstream of the Bioreactor and adjacent to Crisps Creek. The site therefore provides background water quality information to site operations. The spring naturally overflows to Crisps Creek during rainfall events.</p> <p>4 out of 4 quarterly monitoring events required under the EPL were undertaken in this monitoring period, and have been documented in the Annual Return. Water quality trend in Spring 2, based on the results provided in Table 6.2 (refer Appendix 4), is consistent with water quality from historical monitoring records.</p> <ul style="list-style-type: none"> • pH is consistent with previous years (average 7.06 and reflective of the overall range of 6.06 - 7.43 for this location); • EC (average 1603 $\mu\text{S}/\text{cm}$) for this reporting period is higher than previous; • SO_4 (average 468 mg/L) shows an identical trend to conductivity, again indicating a direct effect on EC; • K (average 5.15 mg/L) and Zn (average 3.51 mg/L) concentrations continue to show slow decline from overall averages with some variability likely due to dilution following wet weather periods and concentration during drier periods; • NH_3 (average 0.1 mg/L) and TOC (average 28 mg/L) concentrations recorded in this monitoring period are consistent with historical monitoring results. <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>
<p>Site 105 – Crisps Creek</p>	<p>Site 105 is located downstream of the Bioreactor and tailings dams. All quarterly monitoring requirements were undertaken in this monitoring period. Water quality trends in Site 105, based on the results provided in Table 6.3 (refer Appendix 4) are consistent with previous monitoring results.</p> <ul style="list-style-type: none"> • pH (7.7) is within the overall range of 7.06 - 7.96 for this location, indicating relatively neutral water; • EC (1660 $\mu\text{S}/\text{cm}$) is consistent with historical results, reflecting brackish water; • TOC (22 mg/L) and NH_3 (0.09 mg/L) were consistent with historical trends;

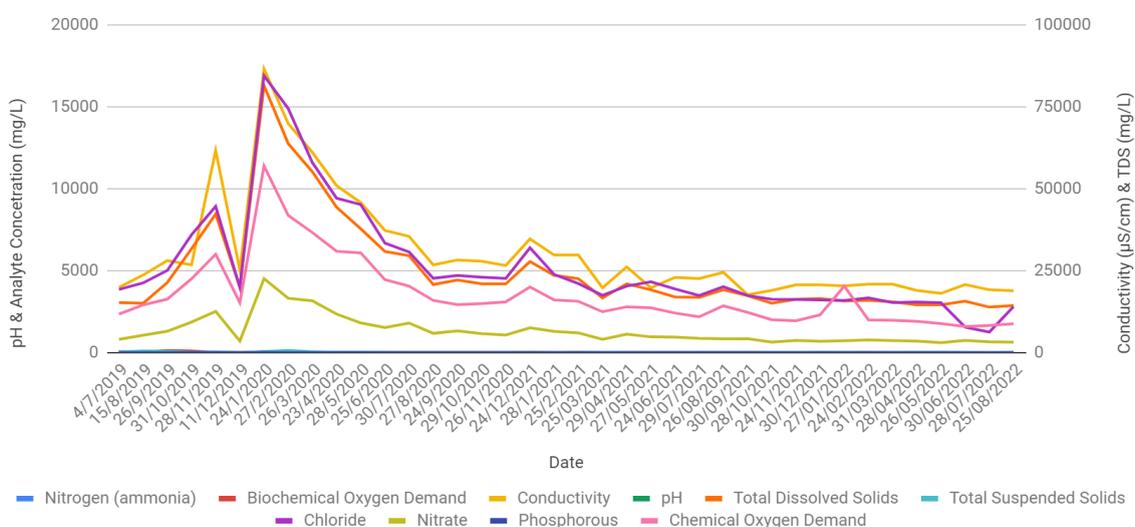
	<ul style="list-style-type: none"> • Zn and K remain consistent averaging 0.15 mg/L and 5.9 mg/L respectively, consistent with historical results. <p>Site 105's water quality fluctuates in response to rainfall and can often contain higher salt content particularly during low flow or following extended dry conditions. During the reporting period Crisps Creek has consistently had water flow due to the above average rainfall experienced across the region.</p>
<p>WM200 - Raw Water Dam</p>	<p>The Raw Water Dam is located to the west of the dolerite stockpile and collects uncontaminated water. Quarterly monitoring events were undertaken in accordance with EPL conditions. Based on the results provided in Table 6.4 (refer Appendix 4), the results for WM200 remain generally consistent with the previous reporting periods.</p> <ul style="list-style-type: none"> • pH (average 7.7) indicates slightly alkaline water; • EC (average 747µS/cm) is slightly lower but overall consistent with historical results; • SO₄ level (average 108 mg/L) is higher than previous reporting period; • Zn level was higher at an average of 1.8 mg/L than previous reporting period; • TOC was an average of 6.7 mg/L in this reporting period which is consistent with historical results. This could be reflective of the presence of organic matter from riparian zone vegetation surrounding the dam; • NH₃ at an average of 0.08 mg/L is consistent with historical results. <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>
<p>WM201 - Entrance Road Culvert</p>	<p>The Entrance Road Culvert collects surface water runoff from the Woodlawn Bioreactor administration office and workshop areas. 4 of 4 monitoring quarters were sampled during the reporting period. Water quality trends for WM201, based on the results provided in Table 6.5 (refer Appendix 4).</p> <ul style="list-style-type: none"> • pH (6.9) is within the overall range of 5.53 – 8.56 for this location, indicating relatively neutral water; • EC (372 µS/cm) is consistent with historical results, reflecting brackish water; • TOC (15.2 mg/L) remains consistent with previous reporting periods; • NH₃ (0.2 mg/L) concentration are consistent with historical trends; • K (average 9 mg/L) is slightly lower than historical levels. <p>Veolia will continue monitoring this location in the next reporting period for any runoff impacts.</p>
<p>ED3SS - Lagoon 5</p>	<p>Evaporation Dam 3 South-South (ED3SS) is a storage point to manage treated leachate by evaporation. Quarterly monitoring events were undertaken in accordance with the EPL. Based on the water quality results provided in Table 6.6 (refer Appendix 4), for ED3SS, the following can be confirmed:</p> <ul style="list-style-type: none"> • pH (average 8.4) appears to be fairly consistent with the existing treated leachate quality; • EC average (16711 µS/cm) indicates a decrease from previous reporting periods;

	<ul style="list-style-type: none"> • SO₄ averages (247.2 mg/L) appears to be fairly consistent with the existing treated leachate quality; • Zn levels (average 1.18 mg/L) lower than previous monitoring periods; • NH₃ concentrations (average 173 mg/L) lower than previous monitoring periods; • TOC (average 2678 mg/L) trends downwards from previous reporting periods. <p>The decreasing trend in EC and TDS evident in monitoring results during this reporting period is directly associated with the dilution of liquid in the Pond due to the extreme wet high rainfall impacting on the site.</p>
<p>WM203 – Evaporation Dam 3 North</p>	<p>Evaporation Dam 3 North (ED3N) is a storage point to manage treated leachate by evaporation. Quarterly monitoring events were undertaken in accordance with the EPL. Based on the water quality results provided in Table 6.7 (refer Appendix 4), for WM203, the following can be confirmed:</p> <ul style="list-style-type: none"> • pH (average 8.2) appears to be generally consistent with previous reporting periods; • EC average (27545 µS/cm) indicates a slight decrease from previous reporting periods; • SO₄ averages (4383 mg/L) is lower than previous reporting periods; • Zn levels (average 73.9 mg/L) is consistent with historical levels; • NH₃ concentrations (average 82.6 mg/L) showing a decrease from previous reporting periods; • TOC average (2598 mg/L) has decreased from the previous reporting period. <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>
<p>Pond 5</p>	<p>Pond 5 is situated on a bench within the landfill void and acts as a transfer point to capture stormwater from the walls of the landfill void to Evaporation Dam 3 South. All quarterly monitoring events required under the EPL were undertaken in this monitoring period, the results of which are tabulated in Table 6.8 (refer Appendix 4). These water quality results are consistent with previous reporting periods.</p> <ul style="list-style-type: none"> • pH average of 4.4 confirms acidic nature of water that comes in contact with the void walls and is lower than previous results; • EC (average 1557 µS/cm) is generally consistent lower than previous results; • SO₄ trends downwards (average 815 mg/L) from the previous reporting period; • K average of 5.83 mg/L is slightly down on previous results; • Zn (average 86.6 mg/L) is generally consistent with previous results; • NH₃ (average 8.33 mg/L) and TOC (average 19 mg/L) both mirror a similar trend which appears quite variable over historical monitoring results. <p>These results and trends are deemed representative of the stormwater quality captured from the walls of the void.</p>

<p>WM202 – ED3S</p>	<p>Evaporation Dam 3 South is a storage point to manage stormwater from the void by evaporation. Quarterly monitoring events were undertaken in accordance with EPL conditions. Water quality results indicated a similar trend to previously reported data as seen in Table 6.9 (refer Appendix 4).</p> <ul style="list-style-type: none"> • pH levels indicate an acidic, yet stable trending result with the average pH of 3.8 appearing to be generally consistent with previous reporting periods; • Zn at an average of 231 mg/L is lower than previous reporting periods; • SO₄ (average 2866 mg/L) is lower than previous reporting periods; • EC (average 3590 µS/cm) is indicating a downward trend. Both SO₄ and EC concentrations reflect the signature for Acid Mine Drainage (AMD) contaminated waters from remnant mining operations stored in Evaporation Dam 3 South; • NH₃ concentrations (average 33.2 mg/L) is also lower than previous reporting periods. <p>The majority of the analytes tested at this location during this monitoring period indicates a downward trend in concentrations in comparison to previous reporting periods.</p>
<p>Evaporation Dam 1 (ED1)</p>	<p>Evaporation Dam 1 (ED1) is a storage point to manage runoff stormwater from its external catchment including dolerite stockpile area. Quarterly monitoring events were undertaken in accordance with the EPL. Based on the water quality results provided in Table 6.10 (refer Appendix 4), for ED1, the following can be confirmed:</p> <ul style="list-style-type: none"> • pH (average 3.06) which is consistent with previous reporting periods; • EC (average 13410 µS/cm) is slightly lower than previous reporting periods; • Zn levels (average 1887 mg/L) is also lower with the previous reporting period; • NH₃ concentrations (average 11.2 mg/L) showed lower than usual results over the reporting period; • TOC averages 48 mg/L and remains consistent with previous reporting periods. <p>Similar to ED3S, ED1 demonstrated a steady decline in concentrations in the majority of the analytes tested at this location during this monitoring period in comparison to previous reporting period, which is reflective of the increased surface water inputs resulting from the rainfall received over the last 2 years.</p>
<p>ED1 Coffe Dam</p>	<p>Evaporation Dam 1 (ED1) coffe dam is a storage point to manage treated leachate from the Leachate Treatment Plant. Monthly monitoring events were undertaken in accordance with the EPL. Based on the water quality results provided in Table 6.11 (refer Appendix 4), for ED1 coffe dam, the following can be confirmed:</p> <ul style="list-style-type: none"> • pH (average 8.7) is consistent with the previous reporting period; • EC (average 19692 µS/cm), BOD (average 4.6 mg/L) and COD (2125 mg/L) results are lower than previous reporting period results; • NH₃ concentrations (average 6.8 mg/L) remained stable over the reporting period;

	<ul style="list-style-type: none"> Chloride averages (2882 mg/L) remained stable however declining over the reporting period. <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period. Figure 1.5.3.1 demonstrates stabilising trends since the commissioning of the LTP.</p>
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Figure 1.5.3.1 ED1 Coffe Dam Monitoring Results



1.5.4 Bioreactor Leachate Monitoring Results

Leachate is currently monitored on a bi-annual basis from two (2) leachate monitoring locations in accordance with the EPL requirements. Effluent quality from the Leachate Treatment Plant is also monitored and sampled.

The findings from this reporting period are summarised in **Table 1.5.4** below with the detailed data provided in **Tables 7.1** and **7.2** (refer **Appendix 4**). The key quality indicators selected to characterize the leachate and identify any migration into groundwater or surface water monitoring locations include:

- pH,
- Electrical Conductivity (EC),
- Sulphate (SO₄),
- Lead (Pb),
- Zinc (Zn),
- Ammonia (NH₃), and
- Total Organic Carbon (TOC).

These are also depicted in the subsequent trend graphs **Figures 1.5.4.1** and **1.5.4.2** (refer **Appendix 5**).

Table 1.5.4 Bioreactor Leachate Monitoring Results

Parameter	Results/Discussion
<p>Leachate Dam</p>	<p>The leachate dam is located at the northwest rim of the landfill void where leachate collected and extracted from the void is treated by aeration to oxidise organic compounds. An annual monitoring round was completed during this reporting period as per the requirements of the EPL. Based on the results provided in Table 7.1 (refer Appendix 4), the characteristics of the leachate are:</p> <ul style="list-style-type: none"> • pH (8.41) and EC (17696 $\mu\text{S}/\text{cm}$) is consistent with the previous reporting period; • SO_4 one of the dominant anions, (400 mg/L) is consistent with previous reporting readings; • Pb (0.057 mg/L) and Zn (16 mg/L) is consistent with the previous reporting period; • NH_3 (770 mg/L) is lower than previous reporting periods; • TOC (2300 mg/L) is consistent with previous reporting. <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>
<p>Leachate Recirculation System</p>	<p>An annual round was completed during this reporting period in accordance with the EPL, the results of which are detailed in Table 7.2 (refer Appendix 4). Based on these results, the leachate collected directly from the recirculation system displays similar characteristics to the leachate pond, with some exceptions as summarised below:</p> <ul style="list-style-type: none"> • pH (8.42) is generally consistent with previous reporting period; • EC (14991 $\mu\text{S}/\text{cm}$) is consistent with the previous reporting period and is generally consistent with the overall annual average for this location; • SO_4 (400 mg/L) is higher than previous reporting period; • Both Pb and Zinc are consistent with the previous reporting period, 0.016 mg/L and 39 mg/L respectively; • TOC (2200mg/L) is lower than historical monitoring results. <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>
<p>Effluent from LTP</p>	<p>The effluent from the Leachate Treatment Plant is located at the ultrafiltration membrane shed at the Leachate treatment Plant. Water quality is tested on the agreed 7 day assessment and provided to the NSW EPA on a monthly basis as part of the Commissioning process. Based on the results provided in Table 8.1 (refer Appendix 4), the water quality at this location can be described as:</p> <ul style="list-style-type: none"> • pH (average 7.93) consistent with throughout reporting period and meets proposed Targets; • EC (average 11218 $\mu\text{S}/\text{cm}$) remains stable, consistent with throughout the reporting period; • NH_3 (average 8.23mg/L) is well below proposed Targets; • BOD (2.87 mg/L) is well below proposed targets; <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>

1.5.5 Bioreactor Groundwater Monitoring Results

Groundwater is currently monitored on a quarterly basis at twenty-two (22) groundwater monitoring locations in accordance with the EPL requirements. The results of which are summarised in **Table 1.5.5** below.

The groundwater monitoring well network allows for an assessment of potential impacts from the waste operations at the Bioreactor, evaporation dams and tailing dams. The key quality indicators selected to detect any pollutants in groundwater samples are the same as those deemed characteristic for leachate and are as follows:

- pH
- Electrical Conductivity (EC),
- Sulphate (SO₄),
- Lead (Pb),
- Zinc (Zn),
- Ammonia (NH₃), and
- Total Organic Carbon (TOC).
- Copper (Cu)

With the exception of MB4, all groundwater metal concentrations in Quarter 3, including the annual extended suite of analysis, were reported by the laboratory in totals rather than dissolved as a result of a COC oversight. This has resulted in slightly higher concentration results than previously reported.

Due to ongoing sampling frequency non-compliances caused by dry, and insufficiently recharged bores, the groundwater monitoring network needs a full adequacy review. A suitably qualified expert will be engaged to undertake this assessment in the next reporting period.

These are depicted in the trend graphs (**Figures 1.5.5.1 to 1.5.5.21**) provided in **Appendix 5**.

Table 1.5.5 Bioreactor Groundwater Monitoring Results

Parameter	Results/Discussion
MB1	<p>MB1 is located down gradient of the landfill void. Based on the results provided in Table 9.1 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 781.9 m RL) was slightly higher than previous reporting periods due to recent rainfall events; • pH (average 7.7) neutral – to slightly alkaline consistent with previous reporting period; • EC (average 1706 µS/cm) is lower than but generally consistent with previous readings representing fresh water; • SO₄ (average 253 mg/L) is generally consistent with previous periods; • Pb and Zn (0.26 mg/L and 0.006mg/L respectively) are generally consistent with previous periods; • NH₃ (average 0.08) is consistent with previous reporting periods;

	<ul style="list-style-type: none"> • TOC (0.05 mg/L) is consistent with the previous reporting period and historical trends. The concentration is indicative of natural conditions. Veolia will continue to monitor this parameter in the future to ensure water quality at this location is preserved. <p>All trends at this location indicate fairly stable concentration and there is no indication of contamination from mining or Bioreactor activities. No significant variations or anomalies were recorded for any analyte tested during this monitoring period.</p>
<p>MB2</p>	<p>MB2 is located upstream of Evaporation Dam 2. Based on the results provided in Table 9.2 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 780.4m RL) was consistent with long term average since 2004; • pH (average 6.8) neutral, consistent with previous reporting period; • EC (average 6570 μS/cm) and SO₄ (average 3795 mg/L) are generally consistent with previous periods; • Pb (0.02 mg/L) indicates a stable trend consistent with the previous reporting period; • Zn (0.154 mg/L) is generally consistent with previous reporting periods; • NH₃ (0.1 mg/L) is consistent with previous monitoring periods of non detection rates; • TOC (3 mg/L) shows a slight increase with previous reporting periods. <p>All trends indicate fairly stable concentration and there is no indication of contamination from mining or Bioreactor activities. No significant variations or anomalies were recorded for any analyte tested during this monitoring period.</p>
<p>MB3</p>	<p>MB3 is located upstream of the Bioreactor and mine site. Based on the results provided in Table 9.3 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 792.7 m RL) was consistent with long term average since 2004; • pH (average 7.1) near neutral is consistent with previous reporting period; • EC (average 1880 μS/cm) is consistent with previous readings representing fresh water; • SO₄ (average 32 mg/L) is stable; • Pb (0.024 mg/L) and Zn (0.2 mg/L) are stable and consistent with previous periods; • NH₃ (0.1 mg/L) is consistent with previous monitoring periods of non detection rates; • TOC (2 mg/L) result is consistent with historical results. The concentration is indicative of natural conditions. Veolia will continue monitoring this parameter in the future to ensure water quality at this location is preserved. <p>All trends indicate fairly stable concentration and provide an indication of background groundwater concentrations.</p>

<p>MB4</p>	<p>MB4 is located to the east of the landfill void and downstream of the Bioreactor. Based on the results provided in Table 9.4 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 776.1 m RL) was consistent with long term average since 2004; • pH (average 5.8) slightly acidic, consistent with previous reporting period; • EC (average 1963 $\mu\text{S}/\text{cm}$) represents fresh water salinity and is consistent with previous period. This trend is reflected in SO_4 (average 183 mg/L) results for this period; • Pb (0.009 mg/L) remains stable while Zn 1.7 mg/L) is seen to fluctuate which appears consistent with historical cyclic trends; • NH_3 (0.1 mg/L) is consistent with previous monitoring periods of non detection rates; • TOC (2 mg/L) result is consistent with historical results. The concentration is indicative of natural conditions. Veolia will continue monitoring this parameter in the future to ensure water quality at this location is preserved. <p>All trends indicate fairly stable concentrations and there is no indication of contamination from mining or Bioreactor activities.</p>
<p>MB6</p>	<p>MB6 is located to the west of the landfill void and downstream of Evaporation Dam 3 and upstream of the Bioreactor. MB06 was observed to be dry at the time of sampling during the reporting period, deeming the long term reliability of this bore for monitoring is uncertain.</p>
<p>MB7</p>	<p>MB7 is located upstream of Evaporation Dam 3. Based on the results provided in Table 9.6 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 788.0 m RL) was consistent with long term average since 2004; • pH (average 7.3) neutral is consistent with the previous reporting period; • EC (average 7073 $\mu\text{S}/\text{cm}$) and SO_4 (average 150.8 mg/L) follow a similar stable trend to previous reporting periods ; • Pb (0.001 mg/L) is consistent throughout the reporting period whilst Zn (0.1 mg/L) shows a fluctuating trend consistent with historical cycles; • NH_3 (0.1 mg/L) is consistent with previous monitoring periods of non detection rates; • TOC (7 mg/L) is fairly consistent with the previous reporting period. The concentration is indicative of natural conditions. Veolia will continue monitoring this parameter in the future to ensure water quality at this location is preserved. <p>All trends indicate fairly stable concentration and there is no indication of contamination from mining or Bioreactor activities.</p>
<p>MB10</p>	<p>MB10 is located adjacent to Evaporation Dam 1. Based on the results provided in Table 9.7 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 782.3m RL) was consistent with previous monitoring periods;

	<ul style="list-style-type: none"> • pH (average 7.3) neutral is consistent with previous reporting periods; • EC (average 6070 $\mu\text{S}/\text{cm}$) is of brackish quality generally consistent with previous readings; • SO_4 (average 3520 mg/L) mirrors EC and is generally consistent with previous periods; • Pb (0.003 mg/L) is stable while Zn (0.3mg/L) and is generally consistent with previous reporting periods; • NH_3 (0.2 mg/L) is consistent with previous monitoring periods of non detection rates; • TOC (4 mg/L) appears consistent with the previous reporting period. The concentration is indicative of natural conditions. Veolia will continue monitoring this parameter in the future to ensure water quality at this location is preserved. <p>All trends indicate fairly stable concentrations and there is no indication of contamination from mining or Bioreactor activities.</p>
<p>ED3B</p>	<p>ED3B is located downstream of Evaporation Dam 3. Based on the results provided in Table 9.8 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 784.5 mRL) was consistent with previous monitoring periods; • pH (average 7.6) is neutral – slightly alkaline and consistent with previous reporting period; • EC (average 6710 $\mu\text{S}/\text{cm}$) indicating brackish water and SO_4 (average 1282 mg/L) follow similar trends consistent with previous periods; • Pb (0.01 mg/L) remains stable while Zn (0.2mg/L) is lower than previous monitoring periods; • NH_3 (0.1 mg/L) is at non detection rates; • TOC (4 mg/L) is lower than previous reporting periods. <p>All trends indicate fairly stable concentrations at this location with no evidence of contamination from mining or Bioreactor activities.</p>
<p>WM1</p>	<p>WM1 is located northeast of the landfill void. Based on the results provided in Table 9.9 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 752.2m RL) is consistent with previous monitoring periods; • pH (average 7) neutral – to slightly alkaline consistent with previous reporting period; • EC (average 2356 $\mu\text{S}/\text{cm}$) represents slightly brackish water, and slightly lower than previous historical records; • SO_4 (average 1513 mg/L) is similar in trend to EC and demonstrating a downward trend; • Both Pb (0.013 mg/L) and Zn (0.3mg/L) remain consistent with previous reporting periods; • NH_3 (average 0.2 mg/L) is close to, or within, non-detection rates;

	<ul style="list-style-type: none"> • TOC (4 mg/L) is consistent with previous monitoring period reflective of natural conditions; <p>All trends indicate fairly stable concentrations at this location with no evidence of contamination from mining or Bioreactor activities.</p>
<p>WM5</p>	<p>WM5 is located to the west of the void near Evaporation Dam 3 South. Based on the results provided in Table 9.10 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 786.3mRL) is consistent with long term averages; • pH (average 7.2) neutral is consistent with the previous period; • EC (average 4610 $\mu\text{S}/\text{cm}$) is representative of saline water and consistent with the previous reporting period; • SO_4 (average 42.4 mg/L) is lower than previous monitoring periods; • Pb average 0.008 mg/L and Zn (0.1 mg/L) can be seen to be fluctuating which appears consistent with historical cyclic trends; • NH_3 (average 0.1 mg/L) is close to non-detection rates; • TOC (10 mg/L) is consistent with previous monitoring periods reflecting natural conditions. <p>No significant variations or anomalies were recorded for any analyte tested in this location during this monitoring period from the data available.</p>
<p>WM6</p>	<p>WM6 is located to the west of the void adjacent to Evaporation Dam 3 North. Based on the results provided in Table 9.11 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 787.2m RL) is consistent with the previous reporting period; • pH (average 6.1) is slightly acidic, but stable and consistent with previous reporting period; • EC (average 10963 $\mu\text{S}/\text{cm}$) represents brackish to slightly saline water, consistent with previous reporting period; • SO_4 (average 296 mg/L) mirrors EC's stable trend; • Pb (0.02 mg/L) and Zn (0.3 mg/L) are both similar to the previous reporting period and generally consistent with historical fluctuations; • NH_3 (average 0.1 mg/L) is close to, or within, non-detection rates; • TOC (4 mg/L) is consistent with previous monitoring periods reflecting natural conditions. <p>All trends are relatively consistent and there is no indication of contamination from mining or Bioreactor activities.</p>
<p>MW8S</p>	<p>MW8S is located on the northern side of ED3N. Based on the results provided in Table 9.12 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 785.7m RL) is consistent with previous reporting periods; • pH (average 5.9) shows a downward trend with previous reporting periods; • EC (average 4056 $\mu\text{S}/\text{cm}$) shows a significant decrease from previous reporting period results;

	<ul style="list-style-type: none"> • SO₄ (average 3192 mg/L) shows a slight increase but is generally consistent with previous periods; • NH₃ (average 0.1 mg/L) is close to, or within, non-detection rates; • Pb (0.5mg/L) and Zn (275mg/L) are slightly increased to the previous reporting period and generally consistent with historical fluctuations. <p>All trends indicate fairly stable concentrations with no evidence of contamination from mining or Bioreactor activities.</p>
MW8D	<p>MW8D is located adjacent to MW8S. Based on the results provided in Table 9.13 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 785.6m RL) was consistent with long term average since 2004; • pH (average 5.2) shows a downward trend with previous reporting periods; • EC (average 5356 µS/cm) represents brackish water showing upward trend; • SO₄ (average 4632 mg/L) mirrors EC consistent with previous periods; • Pb (0.01 mg/L) and Zn 180 mg/L are both higher than with previous periods; • NH₃ (0.6 mg/L) is at non detection rates; • TOC (7 mg/L) is consistent with previous monitoring periods reflecting natural conditions. <p>All trends indicate fairly stable concentrations with no evidence of contamination from mining or Bioreactor activities.</p>
MW9S	<p>MW9S is located on the northwest side of ED3N within the footprint of ED1. This bore was determined to be inaccessible during the reporting period due to the rising volume of water in ED1.</p>
MW10S	<p>MW10S is located on the northeast side of ED3. No sampling of MW10S could be undertaken during the reporting period as this well was continually dry. This has been a consistent observation since the well was commissioned in 2007.</p> <p>No data is available to produce tables or graphs for this monitoring point.</p>
MB28	<p>MB28 is located downstream of ED1. Based on the results provided in Table 9.16 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 780.7m RL) was consistent throughout this reporting period; • pH (average 7.1) is neutral; • EC (average 5466 µS/cm) remains stable, throughout the reporting period; • SO₄ (average 739 mg/L) is consistent; • Pb (0.005 mg/L) and Zn (0.7mg/L) were both generally consistent in this reporting period; • NH₃ (0.1 mg/L) is at non detection rates; • TOC (5 mg/L) reflecting natural conditions is consistent throughout this reporting period. <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>

<p>MB33</p>	<p>MB33 is a 75m deep groundwater monitoring bore to replace a waste covered well (WM4) in the Void.</p> <p>A bailer was used to retrieve the groundwater samples from this bore during the reporting period due to pump limitations resulting from the >35m below ground level (BGL) depth of the standing water level (SWL).</p> <p>Based on the results provided in Table 9.17 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> ● SWL (average 753.4m RL) was consistent throughout this reporting period; ● pH (average 11.5) showing an upward trend; ● EC (average 1842 $\mu\text{S}/\text{cm}$) remains stable, throughout the reporting period; ● SO_4 (average 450 mg/L) is consistent with previous periods; ● Pb (0.03mg/L) and Zn (3.1 mg/L) were both generally consistent in this reporting period; ● NH_3 (0.8 mg/L) is close to, or within, non-detection rates; ● TOC (5 mg/L) reflecting natural conditions is consistent throughout this reporting period. <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>
<p>MB34</p>	<p>MB34 is a deep groundwater monitoring bore installed as part of a groundwater monitoring network review in the vicinity of the landfill void.</p> <p>A bailer was used to retrieve the groundwater samples from this bore during the reporting period due to pump limitations resulting from the >35m below ground level (BGL) depth of the standing water level (SWL).</p> <p>Based on the results provided in Table 9.21 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> ● SWL (average 760.4m RL) was consistent throughout this reporting period; ● pH (average 7.2) showing consistent alkalinity; ● EC (average 1518 $\mu\text{S}/\text{cm}$) remains stable, throughout the reporting period; ● SO_4 (average 248 mg/L) is consistent with previous periods; ● Pb (0.03 mg/L) and Zn (7.7 mg/L) both generally consistent in this reporting period; ● NH_3 (0.2 mg/L) is close to, or within, non-detection rates; ● TOC (5 mg/L) reflecting natural conditions is consistent throughout this reporting period. <p>Whilst baseline concentrations are still being established since the installation on MB34 in 2021, no significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>
<p>MB35</p>	<p>MB35 is a deep groundwater monitoring bore installed as part of a groundwater monitoring network review in the vicinity of the landfill void.</p>

	<p>A bailer was used to retrieve the groundwater samples from this bore during the reporting period due to pump limitations resulting from the >35m below ground level (BGL) depth of the standing water level (SWL).</p> <p>Based on the results provided in Table 9.22 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> ● SWL (average 773.2m RL) was consistent throughout this reporting period; ● pH (average 5.8) showing consistent alkalinity; ● EC (average 9645 μS/cm) remains stable, throughout the reporting period; ● SO₄ (average 7327 mg/L) is consistent with previous periods; ● Pb (0.04 mg/L) and Zn (366 mg/L) both generally consistent in this reporting period; ● NH₃ (6.7 mg/L) is close to non-detection rates; trend will continue to be monitored for increases in the next sampling round. ● TOC 38 mg/L) reflecting natural conditions is consistent throughout this reporting period. <p>Whilst baseline concentrations are still being established since the installation on MB35 in 2021, no significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p> <p>TPH was 0.13mg/L during the reporting period, which will be monitored over the next reporting period to determine if further action is required ie. flushing out any residual pollutants in the monitoring bore as a result of installation drilling.</p>
<p>SP2-MW1</p>	<p>SP2-MW1 is located adjacent to Spring 2. This shallow bore was installed as part of the ED1 and ED2 seepage management scheme. Based on the results provided in Table 9.18 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> ● SWL (average 778.4m); ● pH (average 6.9) being neutral, was consistent throughout the reporting period; ● EC (average 2302 μS/cm) remains stable, consistent with for fresh to brackish water; ● SO₄ (average 136 mg/L) is consistent with the previous reporting period; ● Pb (average 0.0115 mg/L) and Zn (average 0.309 mg/L) were both generally consistent in this reporting period; ● TDS (2008 mg/L) reflecting natural conditions is consistent throughout this reporting period. <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>
<p>MW-FRC1</p>	<p>MW-FRC1 is located adjacent to the farm road culvert. This shallow bore was installed as part of the ED1 and ED2 seepage management scheme. Based on the results provided in Table 9.19 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> ● SWL (average 779.1m);

	<ul style="list-style-type: none"> • pH (average 7.4) consistent throughout this reporting period; • EC (average 4285 $\mu\text{S}/\text{cm}$) remains stable, throughout the reporting period; • SO_4 (average 242 mg/L) is consistent with the previous reporting period; • Pb (average 0.003mg/L) and Zn (average 0.137mg/L) were both generally consistent and reflected low to non-detectable; • TDS (3057 mg/L) reflecting natural conditions is consistent throughout this reporting period. <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>
MB10S	<p>MB10S is located adjacent to MB10 at the toe end of ED1. This shallow bore was installed as part of the ED1 and ED2 seepage management scheme. Based on the results provided in Table 9.20 (refer Appendix 4), the groundwater quality at this location can be described as:</p> <ul style="list-style-type: none"> • SWL (average 782.5m); • pH (average 7) consistent throughout this reporting period; • EC (average 3255 $\mu\text{S}/\text{cm}$) remains stable for fresh to brackish water; • SO_4 (average 1890 mg/L) is consistent with the previous reporting period, however appears to show a steadily increasing trend;; • Pb (average 0.001 mg/L) and Zn (average 1.2 mg/L) were both generally consistent and reflected low to non-detectable; • TDS (3623 mg/L) reflecting natural conditions is consistent throughout this reporting period. <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>

1.5.6 Bioreactor Piezometers Level Monitoring Results

Measurements for groundwater standing water levels (SWL) in the vicinity of the Bioreactor were undertaken at 6 out of 6 piezometers around the landfill void in accordance with the EPL and have been documented in the Annual Return.

The primary purpose is to monitor the groundwater hydraulics in the Void. Each location consists of a shallow (reference A) and deep (reference B) piezometer.

The findings of the monitoring are summarised in **Table 1.5.6** below and detailed quarterly levels are provided in **Tables 10.1 – 10.5** (refer **Appendix 4**)

Table 1.5.6 Bioreactor Piezometers Level Monitoring Results

Parameter	Results/Discussion
P38A & P38B	P38 is located east of the void. Standing water levels are presented in Table 10.1 (refer Appendix 4).

	<ul style="list-style-type: none"> SWL in P38A (shallow aquifer) indicated a stable standing water level ranging from 739.31m RL to 751.21m RL during this reporting period. SWL in P38B (deep) ranged from 777.11m RL to 781.31m RL in this reporting period, consistent with previous reporting periods.
P200A & P200B	<p>P200 is located east of the void. Standing water levels are presented in Table 10.2 (refer Appendix 4).</p> <ul style="list-style-type: none"> SWL in P200A (shallow) showed a range of 797.42m RL to 799.31m RL and is stable. SWL in P200B (deep) showed a range of 799.01m RL to 799.51m RL and is stable.
P58A & P58B	<p>P58 is located west of the void. Standing water levels are presented in Table 10.3 (refer Appendix 4).</p> <ul style="list-style-type: none"> SWL in P58A (shallow) showed a range of 773.26m RL to 775.11m RL and is stable. SWL in P58B (deep) is similar to the previous reporting period, fluctuating between 757.16m RL and 759.81m RL.
P59A & P59B	<p>P59 is located west of the void and to the south of P58. Standing water levels are presented in Table 10.4 (refer Appendix 4).</p> <ul style="list-style-type: none"> SWL in P59A (shallow) ranged from 799.57m RL to 800.81m RL in this reporting period, consistent with previous reporting period. SWL in P59B (deep) ranged between 798.91m RL and 799.11m RL, consistent with previous reporting period.
P100A & P100B	<p>P100 is located northeast of the void. Standing water levels are presented in Table 10.5 (refer Appendix 4).</p> <ul style="list-style-type: none"> SWL in P100A (shallow) ranged from 774.31m RL to 775.71m RL in this reporting period, consistent with previous reporting period. P100B (deep) averaged between 759.04m RL and 760.91m RL.

1.5.7 Bioreactor Evaporation Dam Volume Monitoring Results

Using Lake Bathurst and Woodlawn rainfall data, the graph below illustrates the rarity of the recent consecutive La Nina events in 2020-2021 in comparison to the past 50 years. These weather patterns have had a detrimental impact on the entire east coast of NSW, which includes the Premises.

While storage capacity at the Premises is well equipped to manage a single high rainfall year, the modelling the current storage capacity is based on did not take into account rare concurrent extreme rainfall years.

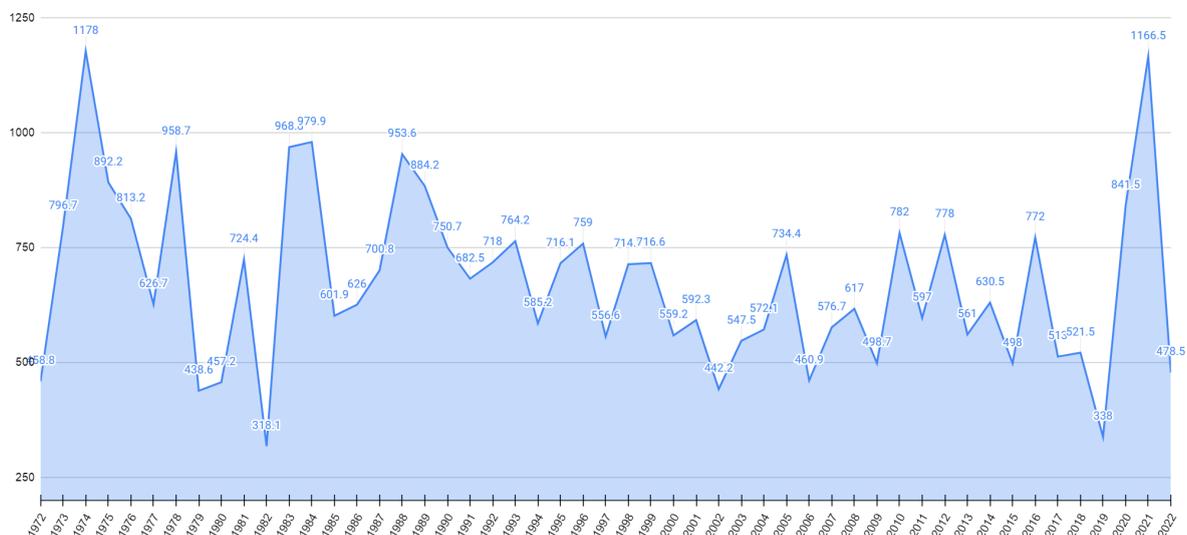


Figure 1.5.7 50 Year Rainfall Pattern

As demonstrated above (refer **Figure 1.5.7**), a total of 1,166.5mm rainfall was recorded in 2021. This was the highest annual rainfall since 1974 (1,178.0mm), and the third highest rainfall since 1950 (1,305.1mm). According to the Woodlawn Weather Station, total rainfall over the reporting period was 1085.5mm, which is approximately 100 mm above the previous 2020/2021 period (983.5mm).

The Evaporation Dam 3 (ED3) system comprises extracted (and treated) leachate from the landfill void and captured stormwater. Water levels are surveyed monthly as detailed in **Table 1.5.7**, which shows the dam levels and required freeboard requirements. Additional monitoring is conducted for other dams managed by Veolia.

Table 1.5.7 Bioreactor Evaporation Dam Volume Monitoring Results (RLs AHD)

Date	ED3 SOUTH		ED3 NORTH				ED1
	ED3S RL	ED3S-S RL	ED3N-1 RL	ED3N-2 RL	ED3N-3 RL	ED3N-4 RL	Coffer Dam RL
06/10/2021	791.27	793.14	Empty	789.80	790.59	790.92	789.67
02/11/2021	791.24	793.01	Empty	789.90	790.61	790.90	789.80
30/11/2021	791.56	793.11	Empty	790.98	790.91	791.08	789.97
20/12/2021	791.84	793.47	Empty	791.18	791.11	791.29	790.11
27/01/2022	791.15	793.78	Empty	791.28	791.39	791.39	790.10
28/02/2022	791.11	793.86	Empty	791.07	791.34	791.35	790.10
29/03/2022	791.18	793.9	Empty	791.22	791.39	791.49	790.24
29/04/2022	791.21	793.79	790.06	791.40	791.45	791.60	790.40
02/06/2022	791.28	793.83	790.47	791.54	791.51	791.70	790.40

27/06/2022	791.25	793.83	790.89	791.25	791.54	791.72	790.29
27/07/2022	791.25	793.83	791.35	791.29	791.45	791.74	790.23
31/08/2022	791.4	793.9	791.55	791.46	791.62	791.83	790.28
Minimum	791.11	793.01	790.06	789.80	790.59	790.90	789.67
Mean	791.31	793.62	790.86	791.03	791.24	791.42	790.13
Maximum	791.84	793.9	791.55	791.54	791.62	791.83	790.40
Max Freeboard levels	791.5	793.6	791.2	791.2	791.2	791.2	789.92

A second coffer dam has been designed and is being constructed in the north-west corner of the ED1 with a capacity of 50,680 m³ at 0.5m freeboard. It is possible that a second dam will be needed in 6-9 months, depending on the weather conditions.

In line with the April 2022 Development Control Order, Veolia will implement short, medium, and long-term water and leachate management strategies for the Premises as soon as possible. This includes a revised water balance model, with a consent modification seeking to implement the necessary changes to the water management system, an update of the reference water balance model for future compliance assessments, and a revised and practical target date(s) for emptying ED3N and Evaporation Dam 1 (ED1).

1.5.8 Bioreactor Meteorological Monitoring Results

Monitoring meteorological data during this reporting period provided an understanding of the ambient air (such as dust and odour) and rainfall conditions at the Bioreactor, which was utilised to manage environmental performance, as well as investigate potential impact to nearby sensitive receivers.

An onsite automated meteorological monitoring station was operated during the reporting period to monitor weather conditions representative of the site. Meteorological data recorded includes (but is not limited to):

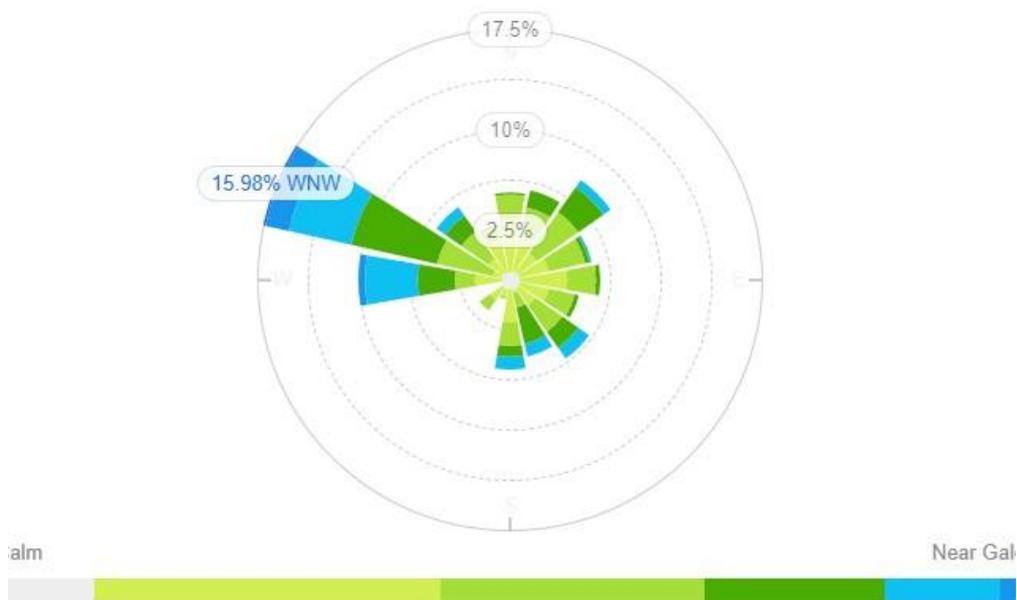
- Wind speed at 10m;
- Wind direction at 10m;
- Temperature at 2m;
- Temperature at 10m;
- Rainfall;
- Solar radiation; and
- Sigma theta at 10m

The wind speed, direction, as well as the sigma theta (which is used to calibrate turbulence) are recorded at 60-minute intervals, which are used to respond to complaints about odours and noises that are received on a daily basis.

Meteorological data is logged in 60 minute and 24 hour intervals and can be made available for the 2021-22 reporting period upon request. Servicing and calibration of the meteorological station is carried out quarterly by Hydrometric Consulting Services.

Figure 1.5.8 below indicates average wind speed and direction during the reporting period.

Figure 1.5.8 Average Wind Speed (km/h) and Direction



Source: <https://www.willyweather.com.au/>

The wind rose above depicts the average wind speed and direction recorded at 10m above ground level from September 2021 to September 2022. Average wind speeds over the reporting period ranged from 0 km/h to 43.3km/h with strong prevailing winds typically from the West North West (WNW) directly toward Tarago and surrounding areas.

An analysis of the correlation between reported reports of odour complaints and meteorological data such as wind speed, wind direction, and temperature at the time and place when the alleged odour emission occurred confirms the validity of this model.

According to the Woodlawn Weather Station, total rainfall over the reporting period was 1085.5mm, which is approximately 100 mm above the previous 2020/2021 period (983.5mm).

1.6 Pollution Studies and Reduction Programs

1.6.1 U1 Long Term Leachate Treatment Solution

Veolia continues to work towards fully implementing the longterm leachate management solution detailed in the report titled "Longterm Leachate Treatment Solution Submission Report", in accordance

with U1.1. As outlined in the monthly reports, the Leachate Treatment Plant (LTP) remains in a process proving phase.

In accordance with U1.2 the LTP has been consistently treating 4 L/s since August 2021, therefore is considered to now be meeting its throughput targets.

In accordance with the requirement of EPL Condition U1.3, reports providing updates of progress of the long term leachate treatment solutions continue to be submitted to the EPA on a monthly basis.

In compliance with EPL Condition U1.4, Veolia informed the EPA on 30 June 2022 that an additional membrane ultrafiltration train had been installed and commissioned at the Leachate Treatment Plant. By doing so, we will ensure the ability to meet ongoing throughput targets and build additional resilience into the leachate treatment system.

In accordance with EPL Condition U1.5 and U1.6, Earth2Water Pty Ltd was contracted to assess leachate extraction from the Bioreactor to better understand the leachate assessment and potential backlog of extraction rates. The final report and Veolia's Leachate Management Action Plan were submitted to the EPA on 15 October 2021.

In consultation with the EPA, Veolia developed and implemented a Leachate Management Improvement Plan (including a leachate extraction procedure, leachate level monitoring program and Trigger Action Response Plan) based on and leachate level trigger values, and has made the following improvements to stormwater accumulation in the Landfill void, and to landfill leachate extraction:

- Improved capture of uncontrolled runoff derived from rock benches/slopes by assessing current sub catchment areas, identifying gaps and installing infrastructure to continue to improve stormwater collection;
- Researched and investigated potential changes to the waste surface profile at each waste lift;
- Researching waste surface catchment management techniques with the aim of continuously improving waste surface catchment management techniques;
- Consulted with the EPA and obtained approval to transfer contaminated stormwater from the void directly to ED3S-S;
- Researched techniques and methods that allow for the most accurate comparison between well leachate levels, waste mass leachate levels and leachate extraction requirements; and
- Continue to remove leachate at a rate of at least 3 L/sec from the waste until identified otherwise by the monitoring programme.

On this basis, Conditions U1.5 and U1.6 were considered complete and removed from the EPL in July 2022.

1.6.2 U2 Investigation and Impact Assessment of Hydrogen Sulfide Gas Emissions

In accordance with EPL Condition U2.1, Epic Environmental Pty Ltd was engaged to carry out an investigation of hydrogen sulfide (H₂S) gas emissions and to identify feasible measures to reduce H₂S emissions at the Woodlawn Bioreactor.

Based on EPL Condition U2.2, the final report submitted to the EPA in December 2021 recommended that continued monitoring of H₂S concentrations at nominated offsite receptor sites should be carried out using a H₂S ppb meter, under different weather and wind conditions, so that the overall effect of offsite H₂S concentrations (if any) on odour can be determined.

As a result, the EPA determined that the installation of an additional meteorological station and new hydrogen sulfide monitoring station in the township of Tarago will assist with the investigation and analysis of reports of odours alleged to occur from the premises and inform possible remedial strategies.

The installation of the additional meteorological station and new hydrogen sulfide monitoring station in the township of Tarago was added to the EPL as a Pollution Reduction Program (PRP) in July 2022 (refer **Section 1.6.3** below).

1.6.3 U3 Monitoring station for meteorology and hydrogen sulfide

This PRP includes upgrading the existing meteorological station to reflect parameters required on the new station, with the intention that the data collected from these stations will assist in understanding the effects of changes in atmospheric barometric pressure on fugitive gas emissions, as well as aid the investigation of reported odour incidents.

In accordance with EPL Condition U3.1, Veolia submitted to the EPA a written plan for the installation, commission, and operation of a new meteorological and air quality monitoring station in Tarago township and an upgrade to existing EPA Monitoring Point 9 on 31 August 2022. The plan was prepared in consultation with The Odour Unit Pty Ltd, and Hydrometric Services in accordance with U3.2, U3.3 and U3.4, and takes into account the guidance material and monitoring requirements as specified by the EPA.

Two locations that are representative, both spatially and temporally, were identified by Veolia and submitted to the EPA for approval, in which the Tarago Recreation Area was approved. Discussions are now underway in relation to developing a written agreement that needs to be entered into between Veolia and the relevant landowner to enable the stations to be built.

Consultation is ongoing with the EPA in regards to the publication of data from the existing and new meteorological station and hydrogen sulfide monitoring station in real or near-real time and on Veolia's website. Veolia continues to work towards a timely installation and upgrade of the new and existing stations.

1.7 Waste Input Volumes

In May 2022, the Goulburn Mulwaree Council (GMC) provided interim approval to reduce waste tonnage through Tarago Road from 45,000t to 15,000t, allowing 125,000t of waste from the southern Area to be received via Bungendore Road. As a condition of this interim approval, the following points must be met:

- Survey the Tarago road between the Crisps Creek IMF and Collector Road;

- Develop a detailed concept plan for a potential climbing lane;
- Determine costing for the construction of a climbing lane;
- Seek assessment and feedback by Veolia senior management; and
- Meet with the Council to discuss the outcome.

A meeting between Veolia and the GMC has taken place in accordance with the requirements of the interim approval, and a consultation process is being carried out in order to determine whether the need for a climbing lane is necessary.

The Bioreactor EPL condition L3.3 provides the maximum annual landfill input rates as broken down in **Table 1.7**.

Table 1.7 Maximum annual landfill input rates

Putrescible waste received by rail from Sydney	Received as residual waste from Woodlawn AWT	Putrescible regional waste received by road
900,000 TPA	100,000 TPA	90,000 TPA

The data provided by SAP is used to track and monitor the amount of incoming waste in accordance with the limits of the Bioreactor EPL. **Table 1.8** indicates that the Woodlawn Bioreactor has remained within the annual waste limit stipulated within the Bioreactor PA of 1.13Mtpa.

Waste received at the Bioreactor during the reporting period is provided in **Table 1.8** and itemised into categories set out in Condition L3.3 of EPL 11436 (**Table 1.7**).

Table 1.8 Incoming waste tonnage during 2021-22 reporting period

Putrescible waste received by rail from Sydney	Received as residual waste from Woodlawn AWT	Putrescible regional waste received by road
638,948.997	56,666.104	72,331.790

1.8 Non-Compliance with EPL 11436

Condition	Non-Compliance	Further Details	Corrective Action
L6.1	There must be no offensive odour emitted from the premises, in accordance with Section 129 of the Protection of the Environment Operations Act 1997, nor emissions to the atmosphere from the landfill that may adversely affect the health or amenity of the community.	292 Odour complaints were received and investigated during the reporting period.	Veolia is working with EPA to develop and implement strategies to improve odour management. This includes improvements to gas capture and bioreactor management through the identification and management of other potential odour sources onsite.
M2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1.	<p>1 air quality monitoring (Point 10) was broken in transit to the Laboratory, therefore analysis was unable to be obtained.</p> <p>2 groundwater locations (Points 30 and 58) did not allow sampling to be undertaken, as the bores were insufficiently recharged.</p> <p>1 groundwater locations (Point 57) could not be sampled due to inability to access the bore.</p>	Veolia has improved the packing method for transportation of dust jars to the laboratory, and will engage a suitably qualified expert to undertake an adequacy review of the groundwater monitoring network due to ongoing sampling frequency non-compliances caused by dry, and insufficiently recharged bores.
O5.2	Stormwater in the landfill void must only be discharged into Evaporation Dam 3 or used for operational purposes within the landfill such as bioreactor water and dust suppression as approved in writing by the EPA.	On 7 January 2022, Veolia commenced diverting of stormwater from ED3S to ED1; to reduce ED3S volume to 0.5m freeboard limit, wet weather conditions and associated operational constraints, in order to ensure the site remains a zero discharge site.	Veolia is in the process of implementing measures to increase the liquid storage capacity at the Premises, as a result of the unprecedented level of rainfall received at the Premises in recent times. These are being undertaken with regular and ongoing liaison with the EPA and DPE.
O6.28	Treated leachate from the Leachate Treatment Plant (LTP) must not be discharged	Treated leachate from the Leachate Treatment Plan (LTP) was diverted from Coffey Dam 1 into the section of ED1	Veolia is appropriately implementing its strategy for the management of waters and leachate on the Site,

	to any part of ED1, other than the lined coffer dam.	outside of the coffer dam (outer ED1) as an emergency contingency measure.	particularly in light of recent significant rainfall events.
O6.4	All dams used for the storage of treated leachate must be maintained with a minimum freeboard of 0.5m.	Both leachate dams have exceeded 0.5m freeboard during this reporting period.	Veolia is in the process of implementing short-terms and long term measures to increase the liquid storage capacity at the Premises, as a result of the unprecedented level of rainfall received at the Premises in recent times.
R4.2	Within 24 hours of receipt of an odour complaint, the Licensee must provide the EPA with a written report.	Odour complaint reports were not provided to the EPA within the required 24-hour timeframe.	In consultation with the EPA, an improved process for reporting odour complaints. As requested by the EPA, a suggested template for reporting was submitted to the EPA on 5 October 2022 and is awaiting EPA feedback.

Part 2 EPL 11455 Crisps Creek Intermodal Facility

2.1 Crisps Creek IMF Operations

Veolia operates the Crisps Creek Intermodal Facility (IMF), which is comprised of a rail siding, container storage hardstand and mobile infrastructure located adjacent to the regional Bombala railway line network (approximately 1 km south of Tarago train station and 8 km from the Bioreactor), to enable transfer of containerised waste received by rail from Sydney onto road trucks and subsequently to the Bioreactor for disposal.

2.2 Crisps Creek IMF Licence Conditions

The IMF is operated under EPL 11455 which details the operating conditions and environmental monitoring requirements as noted in **Table 2.2**.

Table 2.2 IMF Licence Conditions

Condition	Compliance with Condition
1. Administrative conditions	Noted
2. Discharges to air and water and application to land	<p>P1. Location of monitoring/discharge points and areas These monitoring points have been documented in a monitoring location plan (Appendix 3) and a program is in place for sampling as required.</p>
3. Limit conditions	<p>L1. Pollution of Waters All clean surface and storm water collected at the IMF was diverted to the onsite retention system for storage, as part of the first flush stormwater management system, in this reporting period. Following rainfall events, surface water monitoring was undertaken to assess the water quality prior to discharge.</p> <p>L2. Waste All waste received at the IMF during this reporting period was in accordance with the waste types permitted in the EPL, received via rail from the Clyde and Banksmeadow Transfer Terminals in Sydney. One non-compliance relating to Condition L2.2 of the EPL occurred during the reporting year. This is noted in Section 2.5 of this report.</p> <p>L3. Noise Limits</p>

	<p>No noise complaints were received during this reporting period indicating that noise from operational activities at the IMF was likely maintained within the 35 dB(A) LAeq (15 minute) criteria at the most affected residential receiver.</p> <p>Similarly, it can be inferred that noise from freight trains did not exceed 45 dB(A) LAeq (15 minute and 50 dB(A) LAeq (15 minute before and after 7:00 am respectively). Noise monitoring will be undertaken by Veolia on the receipt of any such complaints.</p> <p>L4. Hours of Operation All operational activities at the IMF including haulage of waste to the Bioreactor and MBT facility were undertaken between 6:00 am and 10:00 pm, Monday to Saturday during this reporting period as permitted under the DA.</p> <p>One non-compliance relating to Condition L4.1 of the EPL occurred during the reporting year. This is noted in Section 2.5 of this report.</p> <p>L5. Potentially Offensive Odour No odour complaints were received for the IMF during this reporting period.</p>
<p>4. Operating conditions</p>	<p>O1. Activities Carried out in a Competent Manner All licenced activities undertaken at the IMF in this reporting period were carried out in a competent manner and under a high standard of environmental management for which Veolia is certified under ISO 14001.</p> <p>O2. Maintenance of Plant and Equipment The maintenance and operation of all plant and equipment on the premises associated with the licenced activities was undertaken in a proper and efficient condition as required by qualified technicians.</p> <p>All major plant and equipment at the site is stored in a computerised maintenance management system in order to schedule and complete the required maintenance. All Veolia operators hold the appropriate qualifications and licenses to operate plant and equipment used as part of IMF operations.</p> <p>O3. Dust Control All operations and activities were carried out at the IMF in a manner to minimise dust at the boundary of the premises. These included operating on a hardstand site with fully paved access roads to the site.</p> <p>All haulage of waste to the Bioreactor and MBT facility occurred within enclosed containers. Monitoring for the presence and quantity of depositional dust is undertaken monthly to verify the performance.</p> <p>O4. Emergency Response All Veolia operators are trained in handling emergency situations, which include fire fighting in accordance with the Woodlawn Eco-Precinct ERP (MAN-6297 WL - Eco-Precinct Emergency Response Plan).</p> <p>Fire extinguishers and a 20,000 litre water tank were maintained onsite during this reporting period to enable effective fire fighting capabilities. In addition, Crisps Creek and Mulwaree River are located adjacent to the IMF, which are</p>

	<p>approved and readily available water sources for fire fighting. The Tarago Fire Brigade is also located approximately 4 km from the IMF, which enables fast mobilisation to the site.</p>
	<p>O5. Waste Management As all waste container unloading and movements occurred within enclosed containers on a hardstand site, tracking of waste from the IMF did not occur during this reporting period. No opening of containers was required to be undertaken at the IMF during this reporting period.</p>
	<p>O6. Other operating conditions The first flush stormwater management system was operated effectively in this reporting period in accordance with the EPL requirements to capture all the clean storm and surface water from the paved and sealed areas of the IMF. No sewage was removed from the IMF in this reporting period. Uncontaminated stormwater is permitted under the EPL to be utilised in vegetated areas of the IMF, as required. One non-compliance relating to Condition O6.5 of the EPL occurred during the reporting year. This is noted in Section 2.5 of this report.</p>
5. Monitoring and recording conditions	Noted, all compliance monitoring was carried out in this reporting period in accordance with EPL requirements, the results of which are detailed in Section 2.5 .
6. Reporting conditions	Noted and addressed in this Report and the annual return documents, where relevant. Notifications to the EPA were undertaken in a timely fashion.
7. General conditions	Noted.

2.3 Crisps Creek IMF Environmental Monitoring Requirements

Veolia is required to monitor environmental performance of the IMF. The current environmental monitoring regime at the IMF is considered sufficient to detect potential impacts to surface water and ambient air from the site operations. The monitoring regime is detailed in the EPL and is summarised in the below.

Table 2.3 details the EPA ID, Veolia monitoring point identification, frequency and the type of monitoring undertaken at each licensed point. A monitoring location plan is included in **Appendix 3**.

Table 2.3 IMF Licensed Monitoring Points

EPA ID	Veolia ID	Frequency	Type of Monitoring
1	Site 110 - Upstream	Quarterly	Surface Water
2	Site 150 - Downstream		

3	IMF First Flush		
4	DG18 IMF	Monthly / Continuous	Dust / Particulates

2.4 Crisps Creek IMF Monitoring Results

2.4.1 IMF Surface Water Monitoring Results

Upstream and downstream monitoring is undertaken at nearby surface water bodies to identify any degradation of water quality caused by landfilling operations.

Surface water quality monitoring at 3 monitoring locations was undertaken as required by the EPL, the findings of which are summarised in **Table 2.4.1**. Detailed quality results are provided in **Tables 11.1 to 11.3** (refer **Appendix 4**). The key quality indicators selected to identify any contamination in the receiving surface waters from site operations include:

- pH,
- Electrical Conductivity (EC),
- Sulphate (SO₄),
- Zinc (Zn),
- Ammonia (NH₃), and
- Total Organic Carbon (TOC).

These are depicted in trend graphs (**Figures 2.4.1.1 to 2.4.1.3**) provided in **Appendix 5**.

Table 2.4.1 IMF Surface Water Monitoring Results

Parameter	Results/Discussion
Site 110 Upstream	<p>Site 110 is located upstream of the IMF in Crisps Creek. It is approximately 8 km downstream of the Bioreactor. Four out of four quarterly monitoring requirements were fulfilled this reporting period. Results provided in Table 11.1 (refer Appendix 4) indicate the following trends:</p> <ul style="list-style-type: none"> • pH is close to neutral (average 7.91, consistent with previous reporting periods); • EC (average 719 µS/cm) is consistent with the historical data and representative of fresh water salinity; • SO₄ (average 45 mg/L) shows a downward trend from previous reporting periods; • Fe and Zn, average .615 mg/L and 0.167 mg/L are generally consistent with the previous period but reflective of fluctuating cycles. • NH₃ an average of (0.08 mg/L) is also consistent with previous reporting period; • TOC (average 20 mg/L) which is consistent with previous reporting periods.

	<p>While the indicator trends for this location indicate some variability over time, this is not uncommon when sampling intermittent streams.</p> <p>Veolia will continue to endeavour to obtain samples when flow occurs during a rainfall event for low flow surface water points.</p>
<p>Site 150 – Mulwaree River</p>	<p>Site 150 is located 2 km downstream of the IMF on the Mulwaree River, which is also downstream of a railway bridge and Braidwood Road. Four out of four quarterly monitoring requirements were fulfilled this reporting period. Results provided in Table 11.2 (refer Appendix 4) indicate the following trends:</p> <ul style="list-style-type: none"> ● pH (average 7.57) is consistent with the previous reporting period; ● EC (average 572 $\mu\text{S}/\text{cm}$) shows a fluctuating trend and is generally consistent with previous periods and fresh water salinity; ● SO_4 (average 35 mg/L) reflecting EC trend, is generally consistent with previous reporting periods; ● Fe and Zn, average 0.77 mg/L and 0.235mg/L are generally consistent with the previous period but reflective of fluctuating cycles. ● NH_3 an average of (0.1 mg/L) is also is consistent with previous reporting period; ● TOC (average 21 mg/L) which is consistent with previous reporting periods. <p>These results are consistent with the trends for Site 110.</p>
<p>First Flush Stormwater Outlet</p>	<p>The IMF First Flush is located at the surface water outlet point of the site, prior to runoff into Crisps Creek. Results provided in Table 11.3 (refer Appendix 4) indicate the following trends:</p> <ul style="list-style-type: none"> ● pH (average 7.79) is close to neutral, consistent with the previous reporting period; ● EC (average 319 $\mu\text{S}/\text{cm}$) shows a slight downward trend but is generally consistent with the previous period and representative of fresh water salinity; ● SO_4 (average 7 mg/L) is consistent with previous reporting periods; ● Fe and Zn, average 0.842 mg/L and 0.051 mg/L are generally consistent with the previous period but reflective of fluctuating cycles. ● NH_3 an average of (0.1 mg/L) is also is consistent with previous reporting period; ● TOC (average 8.75 mg/L) which is consistent with previous reporting periods. <p>No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.</p>

2.4.2 IMF Dust Monitoring Results

Air quality monitoring was carried out as required to determine whether activities conducted at the site impacted ambient air quality. All operations were carried out in a manner that would minimise emissions of dust from the premises.

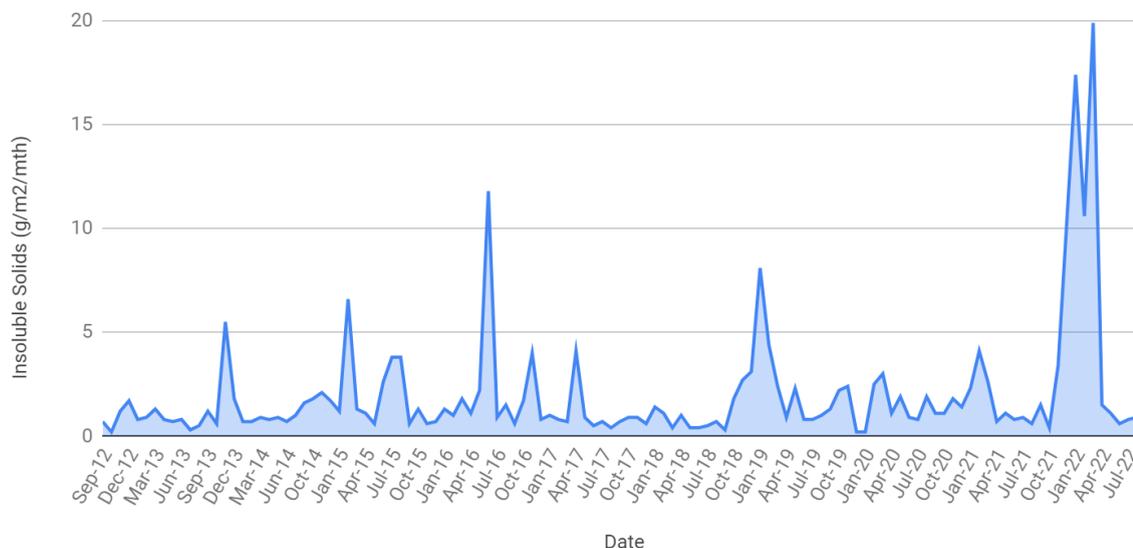
Dust monitoring is undertaken monthly at 1 location at the IMF in accordance with the EPL. A summary of this reporting period is provided in **Table 2.4.2** and detailed in **Table 12.1** (refer **Appendix 4**).

Table 2.4.2 Dust Monitoring Results

Dust Gauge	Summary Total Insoluble Solids (g/m ² /month)		
	Minimum	Average	Maximum
DG18	0.4	5.7	19.9

The results at DG18 indicate an average level of total insoluble solid matter is 5.7 g/m²/month, which is consistent with historical trends as seen in the subsequent graph in **Figure 2.4.2.1**, with the exception of between December 2021 and March 2022 where elevated insoluble solids were consistently detected at all dust monitoring locations at the Crisps Creek IMF, and Woodlawn Bioreactor due to a period of extremely high pollen in the air.

Figure 2.4.2.1 Crisps Creek IMF Depositional Dust Levels



The handling of waste and associated operational activities at the IMF are undertaken in a manner to ensure minimal emissions of dust. This includes no opening of containerised waste on unloading, and operating on a hardstand which aids in the mitigation of dust emissions due to the sealed surface.

2.5 Non-Compliance with EPL 11455

Condition	Non-Compliance	Further Details	Corrective Action
L2.2	There must be no storage of waste on site, including sludges and containers of waste, except with the written approval of the EPA if such storage is required by the Police and/or because the operation, personnel or equipment are endangered.	Storage of waste laden containers overnight at the Crisps Creek IMF on 20 March 2022. Veolia advised the EPA that storage of waste laden containers overnight was caused by an issue with late trains, staff safety and fatigue management concerns.	Veolia will assess and advise on the likelihood of waste storage when seeking written approval to operate the Crisp Creek intermodal facility outside of normal operation times, as a precautionary measure for all future instances.
L4.1	All operational activities at the premises including road haulage may only be conducted between 6:00 am to 10:00 pm on Mondays to Saturdays. There must be no activities on Sundays or public holidays.	Site was in operation on Queen's memorial day (public holiday) without EPA approval.	Site intends to seek EPL variation of this condition so that it is consistent with condition L5.1 of the bioreactor EPL: "All operational activities at the premises may only be conducted between 6:00 am to 10:00 pm on Mondays to Saturdays. There must be no activities on Sundays, Good Friday or Christmas Day." to allow for operation on some public holidays.
O6.5	All sewage generated on the premises must be disposed of into the sewerage system at the Woodlawn Bioreactor Facility (Environment Protection Licence No. 11436).	Sewage is not required to be disposed of at Woodlawn Bioreactor Facility as the site currently utilises a composting toilet.	Veolia is reviewing all applicable approvals to confirm use of composting toilets on site or use of contractors for disposal at any licensed offsite facility if required, and will submit an EPL variation request to allow for composting toilets if required.

Part 3 Environmental Performance

3.1 Independent Environmental Audits

Two (2) independent audits were carried in accordance with the requirements of the Development Consent (MP10_0012) during the reporting period.

3.1.1 Independent Leachate and Water Management System Audit

In accordance with Schedule 4, Condition 18R of State Significant Development (SSD) Project Approval (MP10_0012), the annual Independent Leachate and Water Management System (LWMS) Audit was undertaken at the Woodlawn Bioreactor during this reporting period. A number of recommendations were developed as a result and discussed in **Table 3.4.1**.

Table 3.4.1 2022 Independent LWMS Audit Recommendations

Item	Observation/Recommendation	Implemented/Proposed Action
1.	Actual inputs into dams were substantially more than predicted in the 2017 water balance model due to excessive wet conditions during the audit period 16 March 2021 to 15 March 2022.	Veolia will seek to implement the leachate and water management strategy as required under the April 2022 Development Control Order to be completed in 2022 as a priority. This includes a revised water balance model, with a consent modification seeking to implement the required changes to the water management system, update of the reference water balance model for future compliance assessments, and revised and practical target date(s) for emptying of ED3N lagoons and ED1.
2.	Actual mechanical evaporation losses from each dam is substantially less than predicted in the 2017 water balance model due in part to overestimation of mechanical evaporation in combination with unfavorable climatic conditions during the audit period 16 March 2021 to 15 March 2022.	In the last 24 months Woodlawn has experienced twice the annual average rainfall. Recent climatic conditions have prevented Veolia from achieving the performance targets set out within the 2017 water balance. The abovementioned revised water balance will consider unfavorable climatic conditions with potential to impact on mechanical evaporation, based on recent weather events.

3.	Actual rainfall was substantially higher and evaporation was substantially lower than the wettest year predictions in the 2017 water balance model, due to extreme climatic conditions during the audit period 16 March 2021 to 15 March 2022.	In the last 24 months Woodlawn has experienced twice the annual average rainfall. Recent climatic conditions have prevented Veolia from achieving the performance targets set out within the 2017 water balance. The abovementioned revised water balance will consider worst case scenarios rainfall and evaporatory conditions, based on recent weather events.
4.	Actual inputs into the treated leachate dams has been substantially more than predicted in the 2017 water balance model due to excessive wet conditions during the audit period 16 March 2021 to 15 March 2022.	In the last 24 months Woodlawn has experienced twice the annual average rainfall. Recent climatic conditions have prevented Veolia from achieving the performance targets set out within the 2017 water balance. The abovementioned revised water balance will consider worst case scenarios rainfall and excessively wet conditions, based on recent weather events.
5.	Effluent quality is considered to meet EPA license limits, however there was a single exceedance of ammonia and TSS during the audit period. As a result, the plant did not fully achieve effluent quality targets across the audit period.	Recent odour audits suggest that effluent quality is still within acceptable parameters, therefore Veolia is reviewing its current targets, to ensure control of odour potential, and maximise throughput. Veolia will continue to improve and optimise the LTP operation to minimise target exceedances.
6.	The LTP achieved an average throughput of 3.4 L/sec during the audit period, less than the target of 4 L/sec.	A third Ultra Filtration (UF) train has been installed as planned in order to maintain design throughput. Once fully commissioned, this will enable additional processing capacity.
7.	The system is not achieving its objectives. The volume of water stored within the unlined ED3N dams have grown significantly instead of being drawn down. At the same time ED1 Cofferdam is also nearly full. This will substantially delay the installation of any new liners with ED3N dams. Dams are being operated above the 80% freeboard limit set.	Unprecedented storm events experienced over the last 2 years has had a detrimental impact on water storage capacity at the Premises. Veolia has commenced construction of an additional ED1 Cofferdam#2, capable of holding approximately 50ML of liquid.
8.	Actual rainfall was substantially higher and evaporation was substantially lower than the wettest year predictions in the 2017 water balance model, due to extreme climatic conditions during the audit period 16 March 2021 to 15 March 2022.	Veolia will seek to implement the leachate and water management strategy as required under the April 2022 Development Control Order to be completed in 2022 as a priority. This includes a revised water balance model, with a consent modification seeking to implement the required changes to the water management system, update of the reference

		water balance model for future compliance assessments, and revised and practical target date(s) for emptying of ED3N lagoons and ED1.
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3.1.2 Independent Odour Audit

In accordance with Schedule 4, Condition 7 of State Significant Development (SSD) Project Approval (MP10_0012), the annual Independent Odour Audit was undertaken at the Woodlawn Bioreactor during this reporting period. A number of recommendations were developed as a result and discussed in **Table 3.4.2**.

Table 3.4.2 2022 Independent Odour Audit Recommendations

Item	Observation/Recommendation	Implemented/Proposed Action
1.	Veolia should prepare a site-specific odour management plan for the Bioreactor and MBT operations with the key objective to find a balance between continuous improvement, operational excellence and the ability to control air emissions.	A draft version of the Odour Management Plan was submitted to the EPA for review during the reporting period however further amendments in accordance with the Audit's recommendations will be incorporated prior to finalising and submitting to the Department of Planning and Industry for approval.
2.	Veolia should continue to manage fugitive landfill gas pathways from the landfill surface using the existing toolkit such as biocover material. The Woodlawn Infrastructure Plan (WIP) outlines a comprehensive plan that is being implemented to increase gas capture. As such, the Audit endorses this strategy as the primary measure to reduce odour emissions from the Void and recommends that Veolia continues the implementation of the gas systems detailed in the WIP.	Veolia notes that whilst fugitive emissions from the Void surface was a key operational challenge from an odour management perspective during the Audit period (March 2021-March 2022), more recent improvements in gas and leachate monitoring in the Void has resulted in the highest gas capture on record. Veolia will continue to manage fugitive landfill gas emissions in accordance with the techniques outlined in its WIP.
3.	The Audit continues to support the development of a strategy and engineering design that focuses on reducing leachate generation by diverting and extracting stormwater. This is a more effective and achievable goal compared with increasing leachate extraction rates through the LMS, especially during high rainfall or frequency storm events. As outlined in the Leachate	The Leachate Treatment Dam (LTD) and Leachate Treatment Plant (LTP) operate simultaneously, improving liquid management from the Void, especially during high rainfall events. Veolia has implemented a number of the short to medium and long term leachate and water management strategies developed as part of the Development Control Order

	Assessment, a leachate management strategy comprising high flow extraction of stormwater/slightly impacted stormwater, flexible leachate extraction rates, and maximising extractions during summer months for evaporation dams will be beneficial for managing leachate levels in the Bioreactor.	issued by the Department of Planning and Industry on 1 April 2022.
4.	Veolia should continue to adequately maintain, manage, monitor the upgraded LMS to ensure it is operating in an optimum state and meeting the leachate quality monitoring targets as outlined in the Leachate Treatment Operation Manual and recommended by Veolia Water.	According to the Audit, Veolia's Leachate Management System (LMS) operates under low odour emission conditions therefore is unlikely to have a significant impact on odours beyond Woodlawn's boundary. Veolia will continue to manage its LMS in order to achieve optimum operation.
5.	Veolia should continue to develop strategies for the minimising of the exposed active tipping face surface area. It should also proceed and continue with the details in the WIP 2020. The Audit notes that changes to the tipping profile to maximise stormwater capture and removal has increased the footprint of the ATF.	Veolia is progressively moving to a gable shape from the current pyramid design. Following the completion of the gable profile, consideration will be given to an east to west slope to allow stormwater removal as suggested in the Audit.
6.	Veolia should continue with its community engagement and liaison process. Furthermore, in view of the limited efficacy of ambient H2S monitoring with existing sensory technology, the Audit recommends calibration and training of Veolia staff in the undertaking of field ambient odour assessment surveillance surveys to provide an additional tool in the TARP in lieu of the odour diary program.	Veolia will continue with its community engagement and liaison process.
7.	The Audit has reviewed the retrieved data from the collected diaries and it is not considered a suitable community feedback tool in its current form to provide valuable data. As such, the odour diagram program should be discontinued unless participating community members are professionally trained on its use and data entry protocols.	Veolia supports the removal of the Odour Diaries, and will progress with the formal training and calibrating of staff for the undertaking of period, and triggered odour surveys.
8.	A landfill gas composition analysis should be completed to provide technical feedback on the gas analytes present of the landfill gas released to the ambient environment from	As the audit did not consider H2S to be the predominant or major problem in the community, Veolia has engaged a suitably qualified expert for the undertaking of this analysis and will utilise the gas composition

	uncontrolled gas emission release points from the surface of the Void at the Woodlawn Facility.	data to refine its ambient monitoring objectives and targets.
9.	To extract further meaning and facilitate in sound data interpretation, the H2S data collected as part of the NSW EPA monitoring program should be contextualised with prevailing wind conditions, date and time of detection between different locations, and correlated with landfill gas extraction and leachate extraction rates to facilitate in the interpretation of this data.	The recommended contextualisation of the EPAs H2S monitoring data will be completed as part of a separate study to the Audit, and completed by March 2023 and before the next IOA.

3.1 Evaporation Dam 1 Seepage Management Strategy

In September 2018, Veolia submitted a detailed management plan that outlined the proposed preventative and remedial measures to be implemented in order to prevent seepage from ED1 and ED2 and to rectify any pollution that may have occurred as a result of seepage from those dams.

As noted in previous correspondence, the management and monitoring schedule of ED2 remains the responsibility of Develop, whereas Veolia is responsible for the management, investigation, and remediation of ED1. A summary of the groundwater Management Strategies derived from the 2018 ED1 management plan is presented in **Table 3.1.1**.

Table 3.1.1 ED1 Management Actions

Dams	Action	Progress
ED1	Installation of Evaporators	Complete
	Empty ED1 through evaporators and site wide water balance by 2023	Ongoing
	Installation of 300mm Clay, and HDPE liner at ED1 Cofferdam	Complete
	<i>Phase 1: Groundwater and Surface Water Assessment</i> Monitoring of Natural Attenuation (MNA) Install two shallow bores ; one next to Spring 2 and one next to MB10	Complete
	<i>Phase 2: Develop Trigger Values & Control Measures (as required)</i> Dependent on monitoring data and trends to determine remedial works	Ongoing

3.1.1 Groundwater Monitoring

As recommended in the E2W Management Strategy Report, three shallow monitoring bores were installed. These are known as SP2-MW1, MW-FRC and MB10S.

Trigger values and water quality trends such as significant increases in heavy metal concentrations (eg. Zn, Cu, Pb) and EC are monitored to determine if additional control measures and/or remedial works are required.

Groundwater monitoring results show that heavy metal concentrations remain fairly low with no significant changes in historically reported results. A downward trend in Zinc and Copper was observed during the reporting period, despite Quarter 3 results being measured in total as opposed to dissolved concentrations. These are summarised in **Table 3.1.2**.

Table 3.1.2 Groundwater Heavy Metal Concentrations 2021-22

Average Heavy Metal Concentrations (mg/L)			
Pollutant	SP2-MW1	MW-FRC	MB10S
Copper	0.007	0.006	0.006
Lead	<0.0115	<0.002	<0.0009
Zinc	0.136	0.136	1.218

To support the investigation, groundwater monitoring results for the EPL bores can be found in **Section 1.5.5** and depicted in the trend graphs (**Figures 1.5.5.17 – 1.5.5.19**) provided in **Appendix 5**.

Veolia also undertakes additional ground water quality monitoring of 6 additional monitoring bores, 5 of which are not included in the EPL. These sampling points are used to augment licensed monitoring points and will be assessed on a 6 monthly basis to compare against baseline data established in 2018.

Ground water monitoring results show that heavy metal concentrations, with copper being of particular interest, remain fairly low with no significant changes in historically reported results. These are summarised in **Table 3.1.2**

Table 3.1.2 Additional Groundwater Heavy Metal Concentrations 2021-22

Average Heavy Metal Concentrations (mg/L)						
Pollutant	MB26S	MB27D	MB28	MB29	MB30	MB31
Copper	0.006	0.007	0.008	0.382	0.005	0.004
Lead	0.0006	0.0004	0.003	0.001	<0.0002	0.0002
Zinc	0.070	0.005	0.81	11.06	0.222	0.067

3.1.2 Surface Water Monitoring

The surface water monitoring points selected as part of the ongoing monitoring program results show that heavy metal concentrations, with zinc being of particular interest, remain fairly low with no significant changes in historically reported results. These are summarised in **Table 3.1.2**

Table 3.1.2 Surface water Heavy Metal Concentrations 2021-22

Average Heavy Metal Concentrations (mg/L)			
Pollutant	Site 105	Site 115	Spring 2
Copper	0.01	0.001	0.07
Lead	0.0008	0.0003	0.003
Zinc	0.155	0.059	3.51

Overall, the concentration of heavy metals remains consistently low indicating that ED1 is not causing measurable impacts on the groundwater or surface water system.

Wet conditions continue to affect the Premises. This has severely impacted on the ability to reduce the volume of water ED1 to no more than 10ML by December 2023 by the use of natural and mechanical evaporation in accordance with the above strategy.

Considering the above challenges, Veolia has developed and submitted to the Department for approval, a number of short to long term leachate and water management strategies including the engagement of a suitably qualified professional to conduct an in-depth seepage assessment of ED1. In accordance with the Development Control Order issued to Veolia on 1 April 2022, Earth2Water Pty Ltd (E2W) has begun work on completing this assessment.

Part 4 Conclusion

Based on the results of environmental monitoring undertaken at both the Bioreactor and IMF sites during the reporting period, the overall performance of the Woodlawn Eco-Precinct can be considered to be well managed, with a few compliance matters to be addressed.

As a result of La Nina, rainfall in the last 3 years has been almost twice as much as the annual rainfall for 3 years in a row. In spite of the challenges, Veolia has done its best to manage the excess liquid on-site, which has required moving liquids around the site to maintain its zero-discharge commitment. Once the weather patterns return to normal, this issue will be addressed as soon as practicable.

4.1 Proposed Improvements

In efforts to advance the Woodlawn Eco-Precinct’s overall performance, Veolia ikey objectives are:

- To maximise landfill gas (LFG) capture and renewable energy generation;
- To effectively manage leachate generated within Bioreactor Void;
- To minimise odour emissions;
- To implement effective infrastructure and/or improve existing infrastructure;
- To effectively manage liquid storage by reducing volumes and maintaining dam integrity; and
- To strive for operational excellence through continuous improvement.

In line with Veolia’s commitment to operational excellence through continuous improvement, recently implemented improvements and future opportunities are outlined below.

During this reporting period, Veolia implemented the recommendations for environmental and operational improvements identified in the 2020-21 Annual Performance Report as discussed in **Table 4.1.1**.

Table 4.1.1 2021/2022 Improvement Recommendations

Item.	Improvement	Implemented Action
1.	Install and optimise additional infrastructure for dam evaporation.	Additional evaporation systems have been installed in ED1, ED1 Coffe Dam #1, ED3N1 & ED3SS.
2.	Improve stormwater management efficiencies for periods of high rainfall.	A contingency plan for the management of periods of high rainfall and optimisation of stormwater diversion from the void and from the waste surface has been developed.

3.	Develop and implement throughput contingency for the Leachate Treatment Plant.	An additional UF train at the LTP was installed and commissioned to optimise the throughput of the plant during the reporting period.
4.	Develop and implement an Odour Management Plan that includes the use of MWOO as alternate daily cover.	An Odour Management Plan was developed and incorporated into the Woodlawn Air Quality and Greenhouse Gases Management Plan (AQGGMP) in line with EPL Condition O6.31.
5.	Increase the landfill gas extraction infrastructure.	An additional manifold was installed on the waste surface in the south west corner in order to improve gas extraction within the void. Additional extractions wells have been installed.
6.	Effectively manage contingency storage for contaminated stormwaters within the void.	A procedure for the transfer of contaminated stormwater from the Void to ED3S-S was developed and approved in consultation with the EPA. This has provided additional storage capacity for stormwater.

Improvements proposed for the next reporting period at the Bioreactor and the IMF are as follows in **Table 4.1.2.**

Table 4.1.2 2022/2023 Improvement Recommendations

Item	Improvement	Proposed Action
1.	Investigate ways of upgrading the SCADA system to allow for improved management of the infrastructure, therefore maintaining capture efficiency of generated LFG.	Veolia will investigate the update of the system to provide real time information about the landfill operation, including LFG capture, electrical systems and liquid movement.
2.	Execute all requirements of the Development Control Order (DCO) within expected timeframes and deadlines.	implement short, medium, and long-term water and leachate management strategies for the Premises as soon as practicably possible. and in line with deadlines.
3.	Actively seek to reduce the volume stored in all leachate dams.	Develop technology to enable the reduction of stored liquid volumes on site. Including thermal evaporation, reverse osmosis treatment and irrigation options.
4.	Update mechanical evaporation systems to improve efficiency.	Investigate ways to improve utilisation of mechanical evaporators by increasing capacity and improving portability, operating parameters and positioning to optimise

		evaporation while maintaining containment of liquid and managing drift.
5.	Due to ongoing sampling frequency non-compliances caused by dry, and insufficiently recharged bores, the groundwater monitoring network should be reviewed.	Engage a suitably qualified expert to undertake an adequacy review and assessment of the groundwater monitoring network.

Reference and Related Documents

Document Name
Earth2Water (2020) Woodlawn Bioreactor - Review of Groundwater Network in the Void, 30 April 2020
Earth2Water (2018) Woodlawn Bioreactor - EMP for ED1 & ED2, 27 September 2018
Niche (2018) Woodlawn Evaporation dams ED1 and ED2, June 2018
DPE (2022) Development Control Order for the Woodlawn Expansion Project, April 2022
The Odour Unit (2022) Woodlawn Bioreactor Expansion Project Independent Odour Audit #10, October 2022
Jackson Environment Pty Ltd (2022) Independent Audit Leachate and Water Management System, May 2022
EPA (2014) Waste Classification Guidelines: Part 1 Classifying Waste, November 2014
EPA (2016) Environmental Guidelines: Solid Waste Landfills Second Edition, 2016, April 2016
Veolia (2021) Annual Environmental Performance Report - Woodlawn Bioreactor and Crisps Creek Intermodal Facility, November 2021
Veolia (2018) MAN-13298 WL - Bioreactor Landfill Environmental Management Plan (LEMP), 30 August 2018
Veolia (2020) MAN-6297 WL - Eco-Precinct Emergency Response Plan (ERP), 26 June 2020

Appendices

Appendix 1 Site Location Map

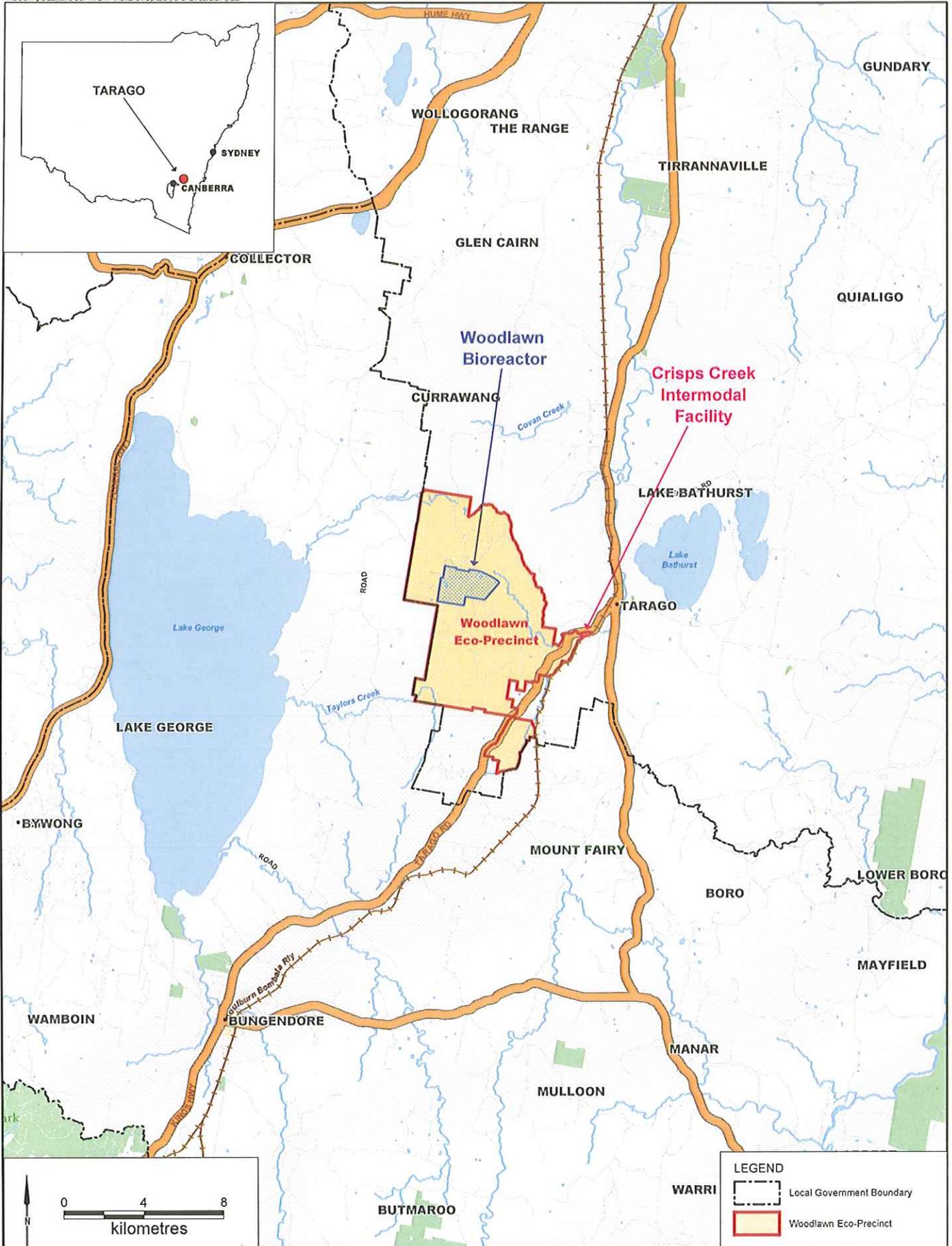
Appendix 2 EPL Boundary Map

Appendix 3 EPL Monitoring Point Maps

Appendix 4 Tabulated Monitoring Results

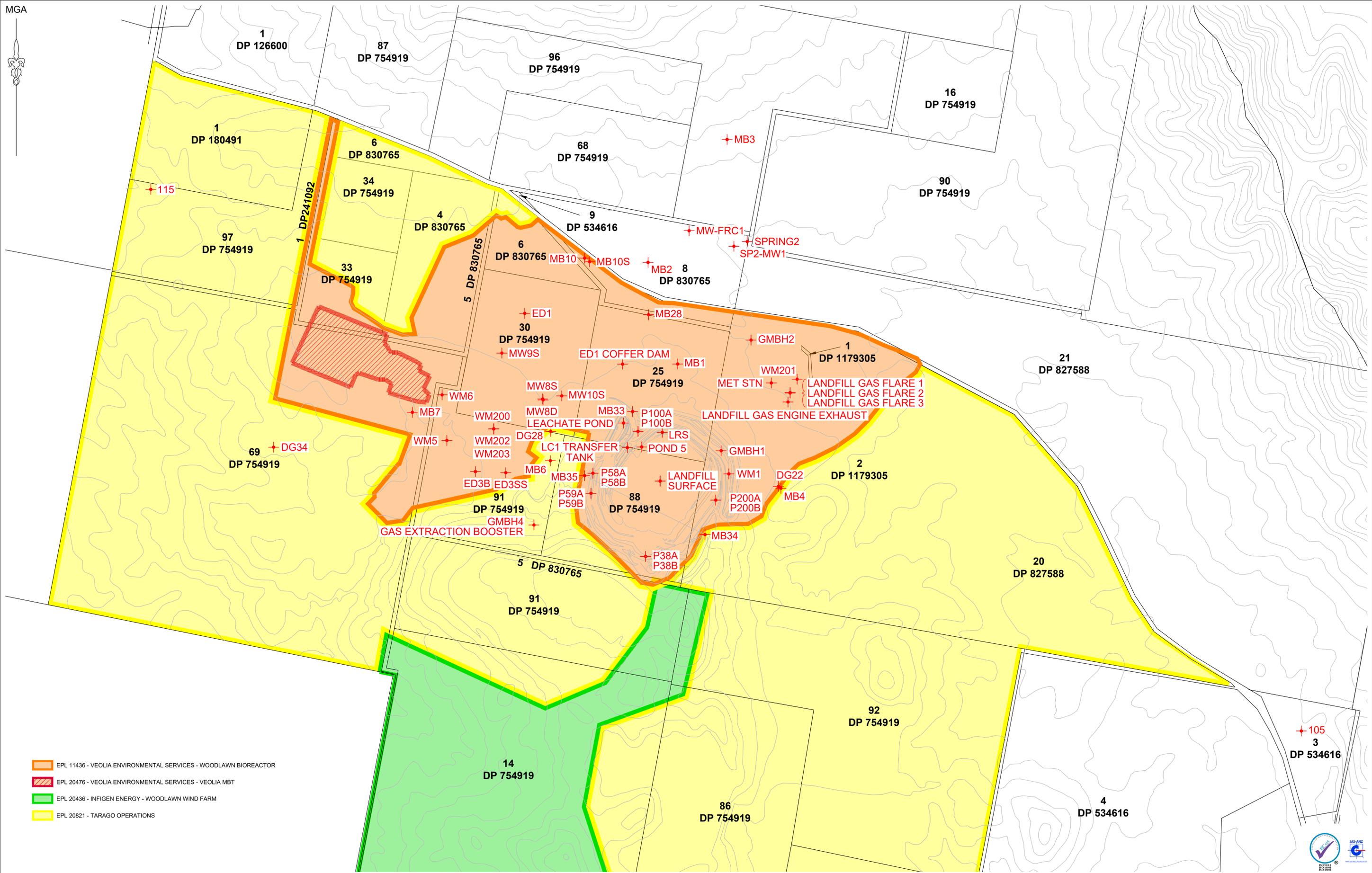
Appendix 5 Monitoring Trend Graphs

Appendix 6 Odour Complaints Register

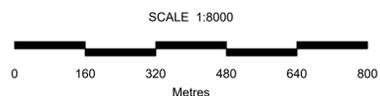


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<p>Client</p> <p>VEOLIA ENVIRONMENTAL SERVICES PTY LTD</p>	<p>Project</p> <p>WOODLAWN EXPANSION PROJECT</p>	<p>Title</p> <p>WOODLAWN ECO-PRECINCT LOCATION</p>
	<p>Drawn: SB Approved: LO Date: 06/08/2010</p> <p>Job No: 4317703 File No: 4317703.018.wor</p>	<p>Figure: 1.1</p>



- EPL 11436 - VEOLIA ENVIRONMENTAL SERVICES - WOODLAWN BIOREACTOR
- EPL 20476 - VEOLIA ENVIRONMENTAL SERVICES - VEOLIA MBT
- EPL 20436 - INFIGEN ENERGY - WOODLAWN WIND FARM
- EPL 20821 - TARAGO OPERATIONS



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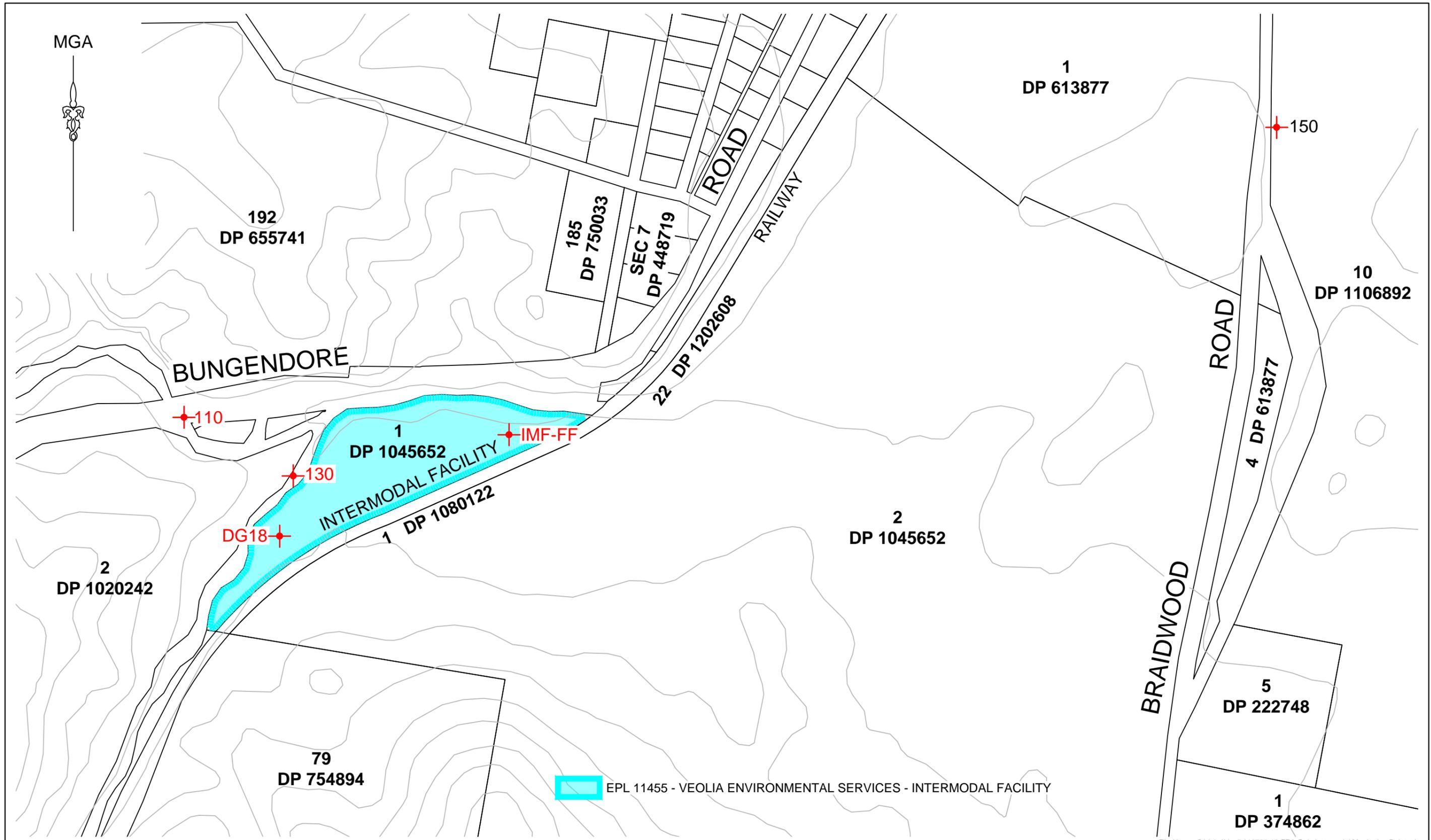
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B	MB34 (VOID EAST WALL) & MB35 (VOID WEST WALL) ADDED	MK	21/04/2021
C	LANDFILL GAS FLARE 2 & 3 ADDED	MK	24/05/2022

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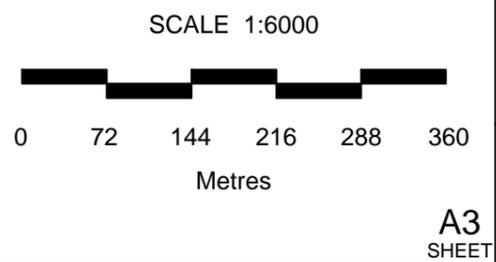
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DATUM	AHD	CONTOUR INTERVAL	10m	DATE
				24/05/2022
DESIGNED: N/A DRAWN: MK CHECKED: JK DRAWING No.				ISSUE C
				16800-225





File Name: C:\Jobs\Veolia\16735-16 EPA Only Intermodal Monitoring Points.dwg

ISSUE	AMENDMENT	DATE
A	INITIAL ISSUE	15/04/2020



VEOLIA
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VEOLIA ENVIRONMENTAL SERVICES		DATE: 15/04/2020
ENVIRONMENTAL PROTECTION LICENCE SITE MONITORING LOCATIONS VEOLIA INTERMODAL FACILITY BUNGENDORE ROAD, TARAGO		SURVEYED: N/A
		ISSUE
DRAWING No.		A
DRAWING No.		16735-16
DATUM	AHD	CONTOUR INTERVAL 10m

Figure 1.5.3.1 Site 115 - Allianoyonyiga Creek

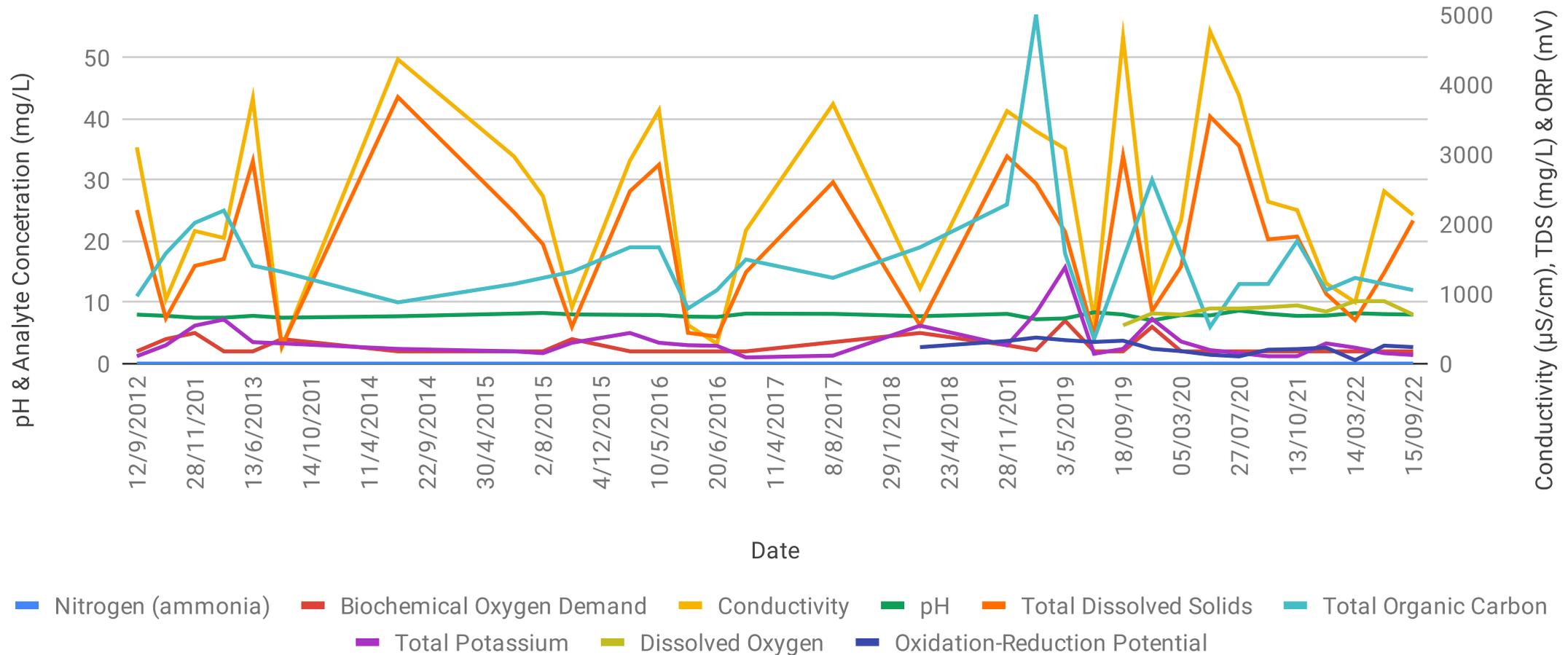


Figure 1.5.3.2 Spring 2

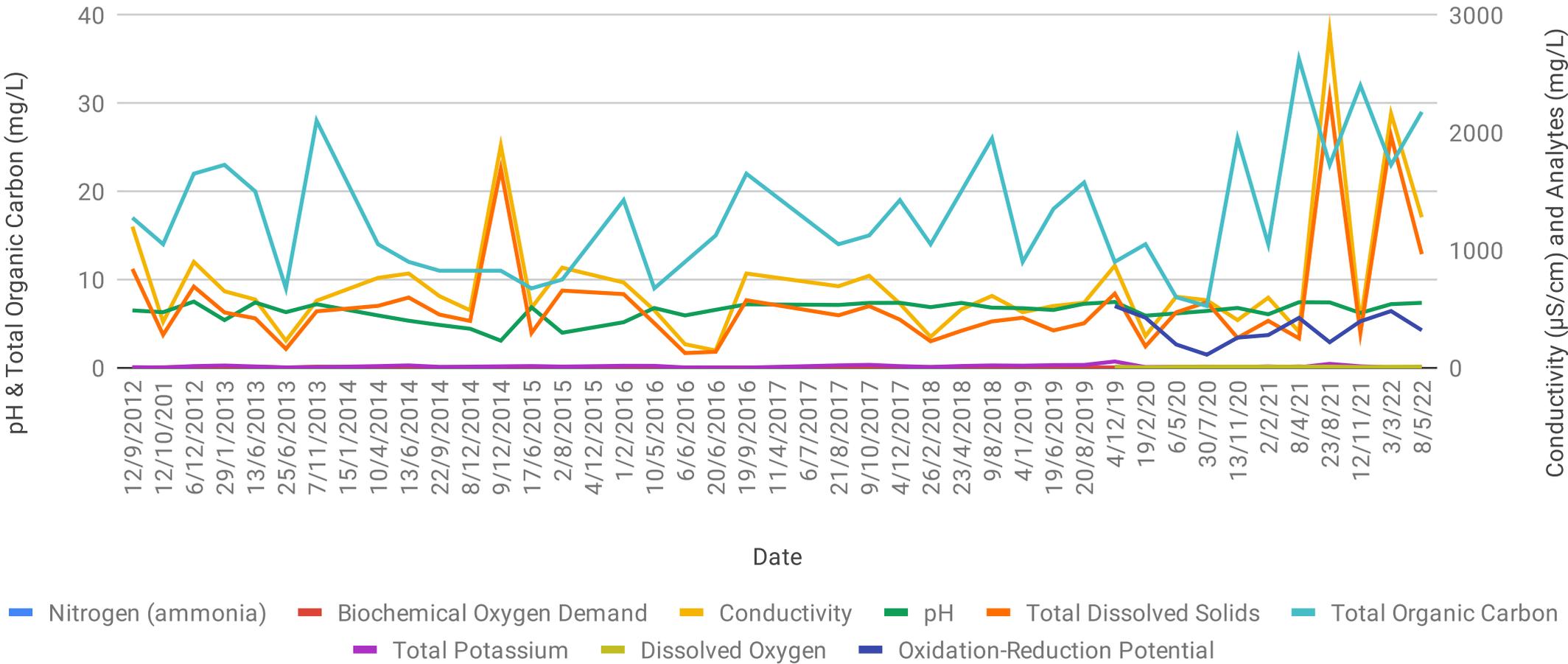


Figure 1.5.3.3 Site 105 - Crisps Creek

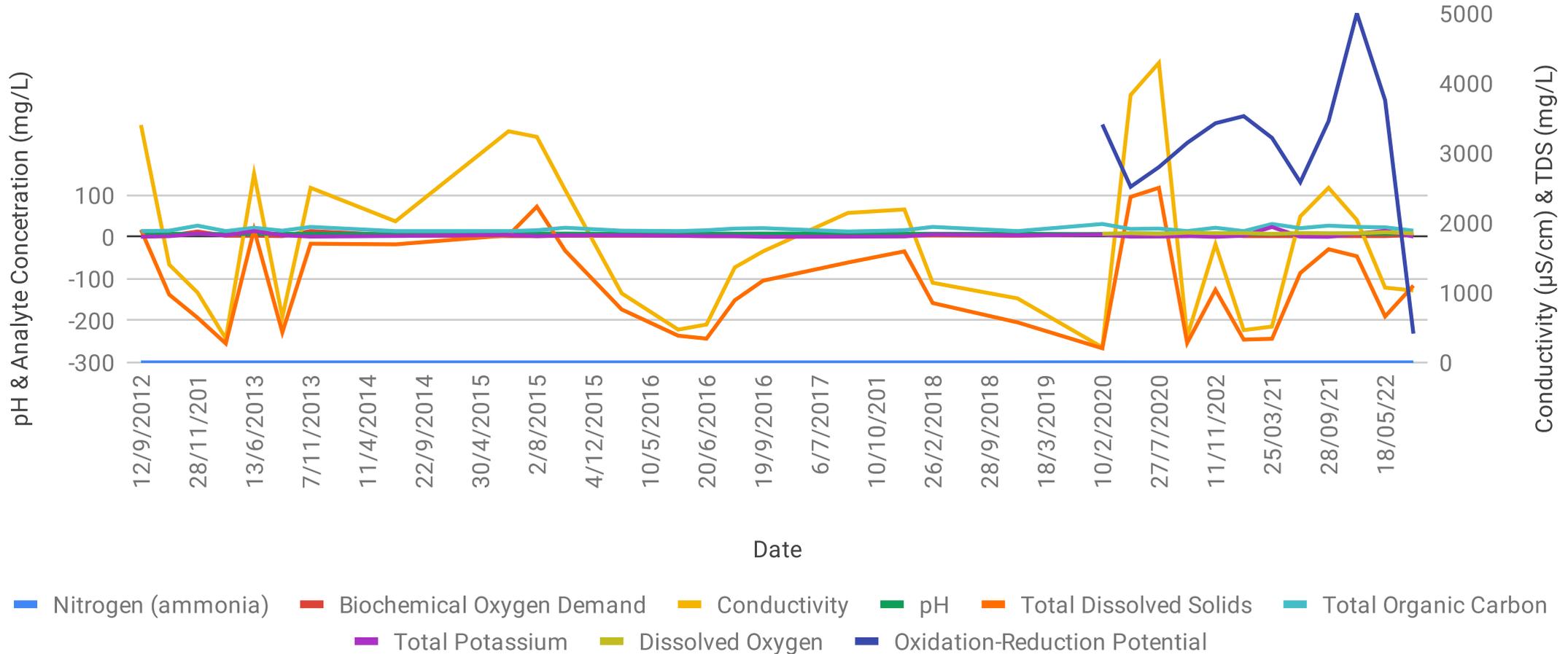


Figure 1.5.3.4 WM200 - Raw Water Dam

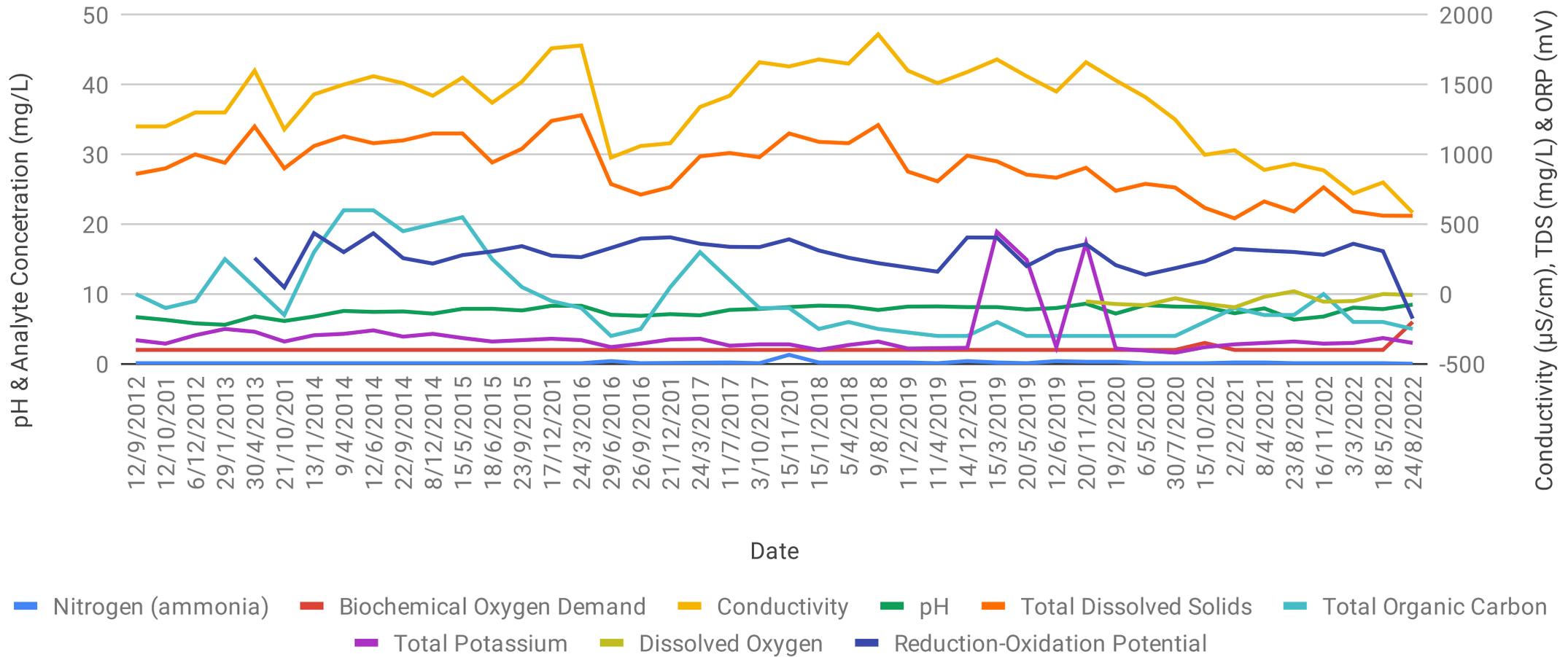


Figure 1.5.3.5 WM201 - Entrance Road Culvert

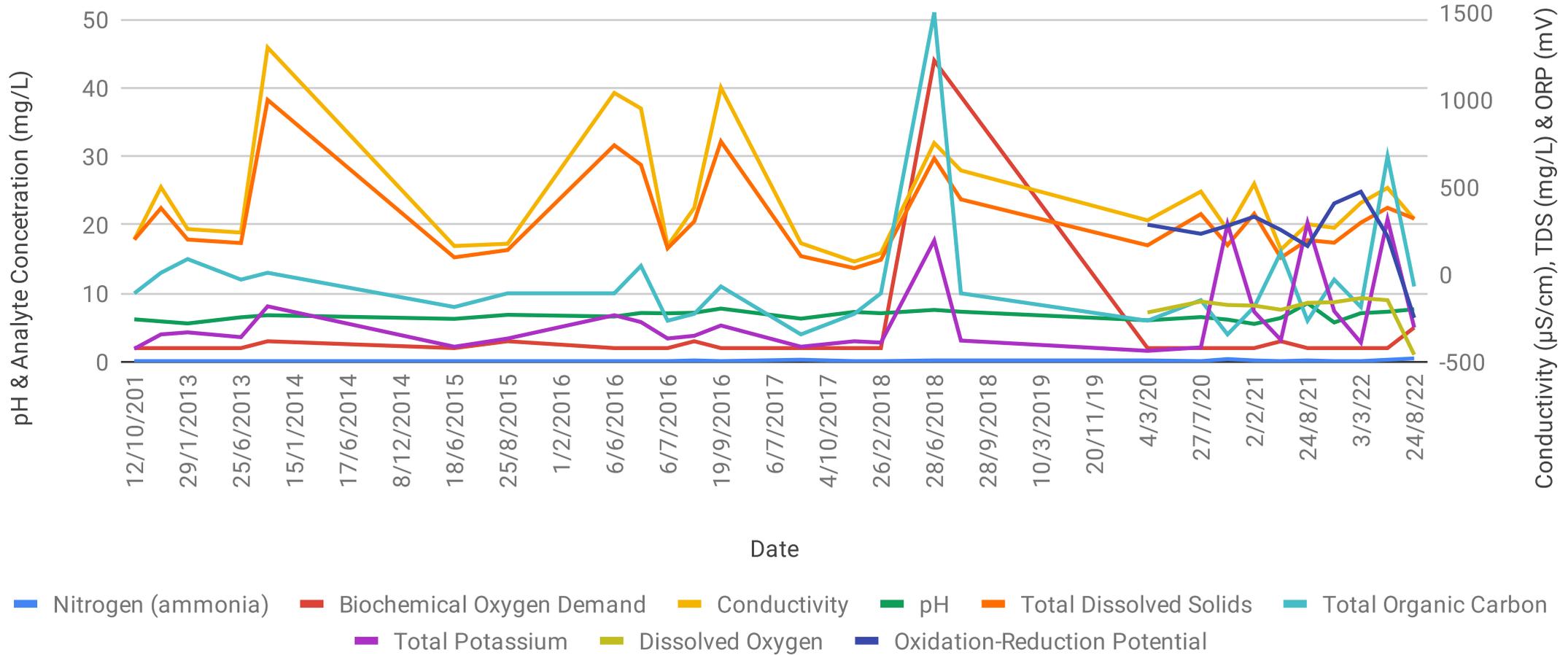


Figure 1.5.3.6 ED3SS - Lagoon 5

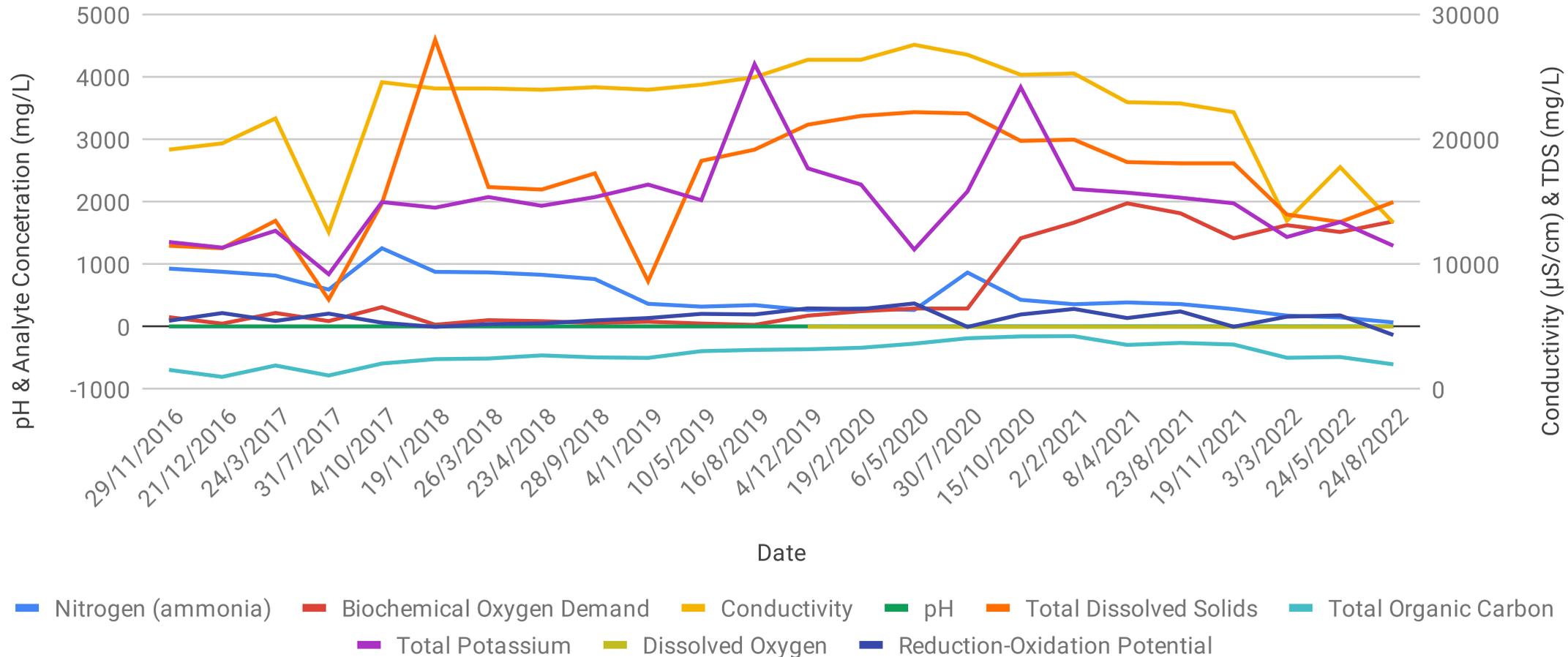


Figure 1.5.3.7 WM203 - ED3N

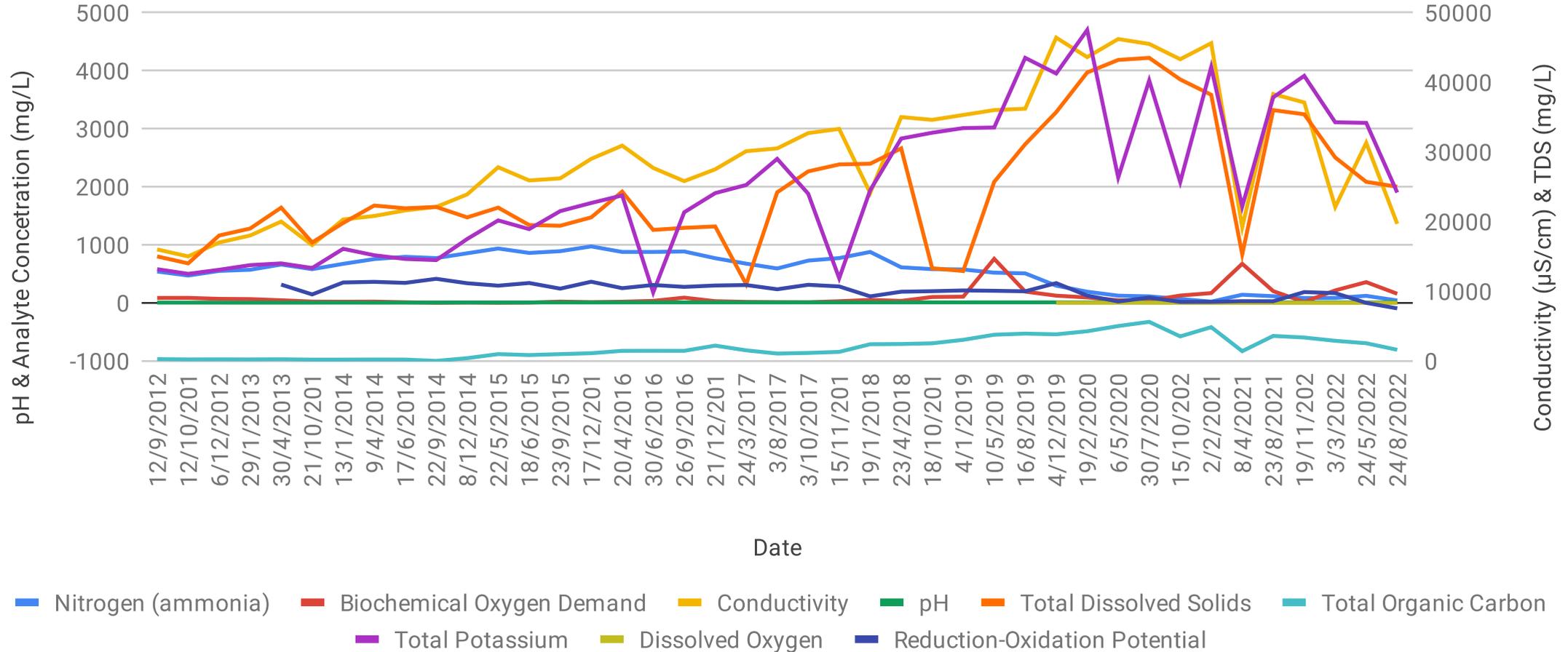


Figure 1.5.3.8 Pond 5

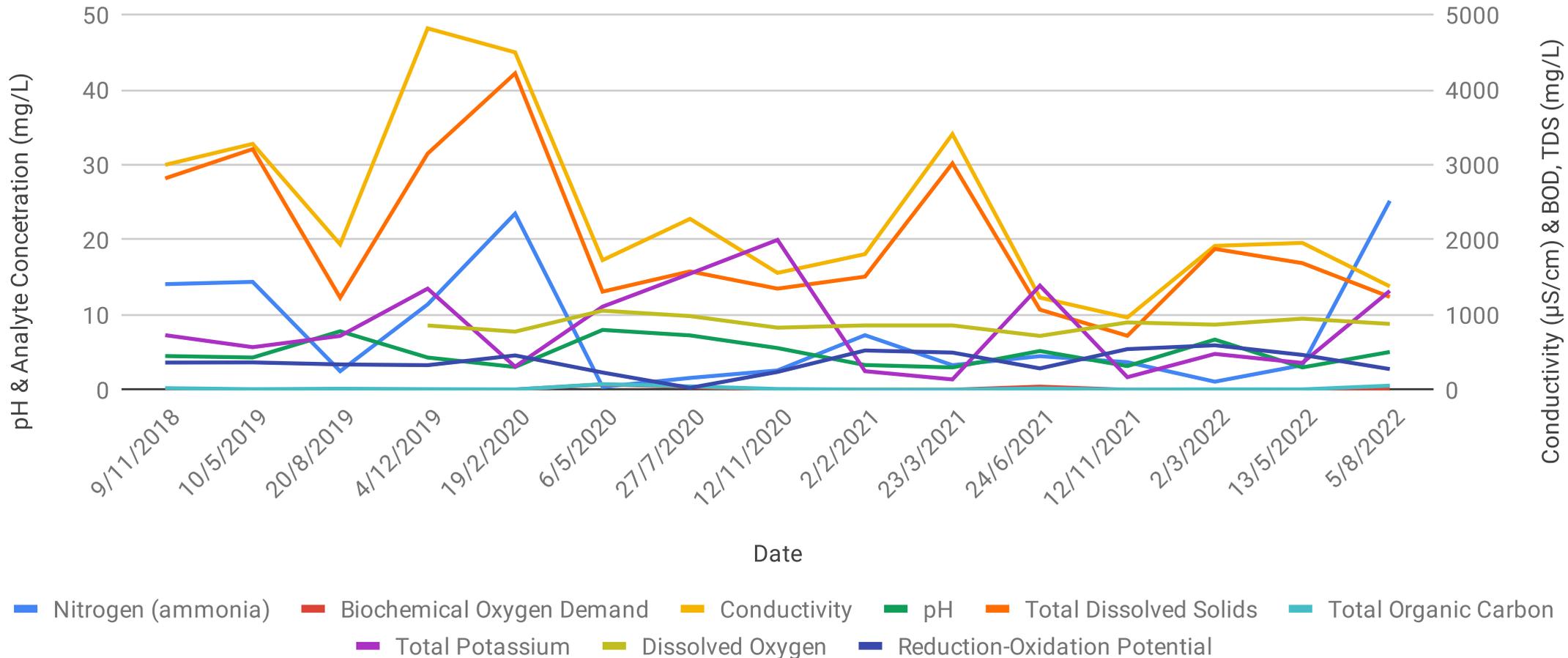


Figure 1.5.3.9 WM202 - ED3S

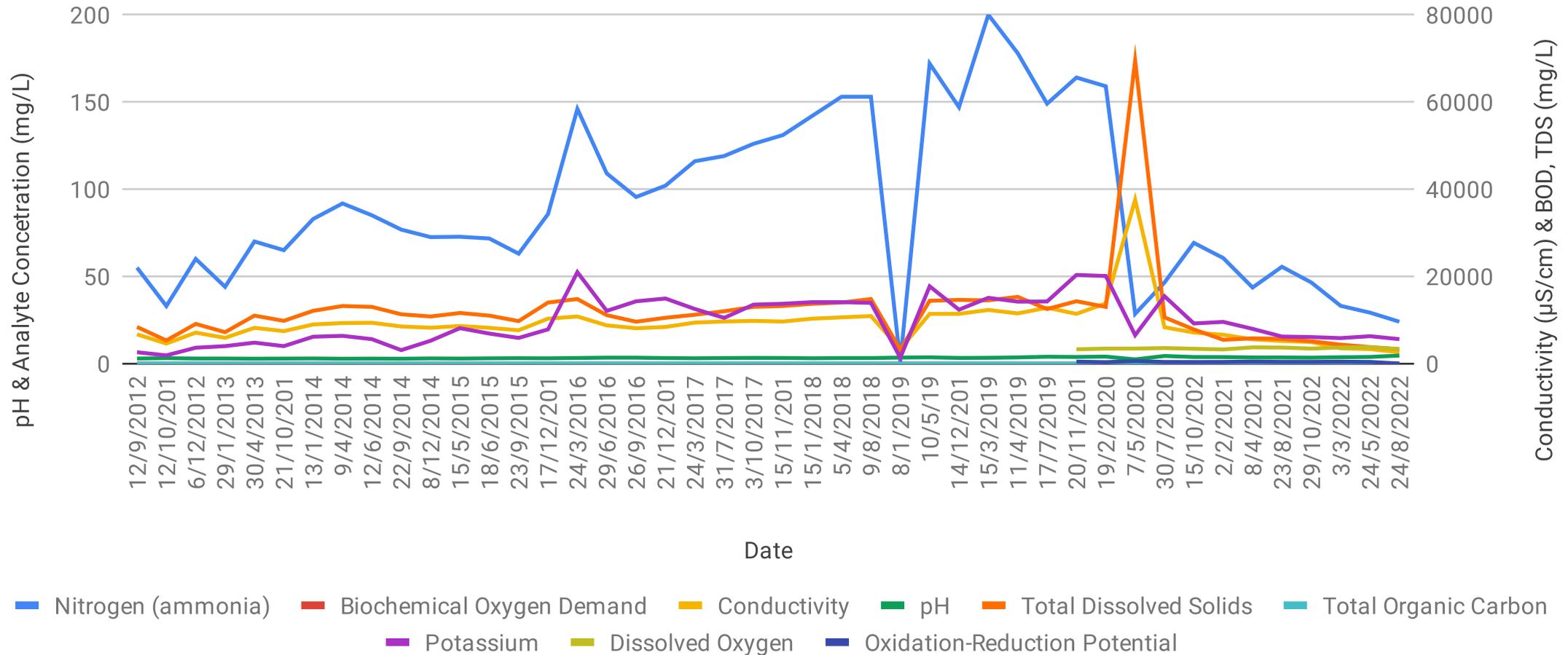


Figure 1.5.3.10 ED1

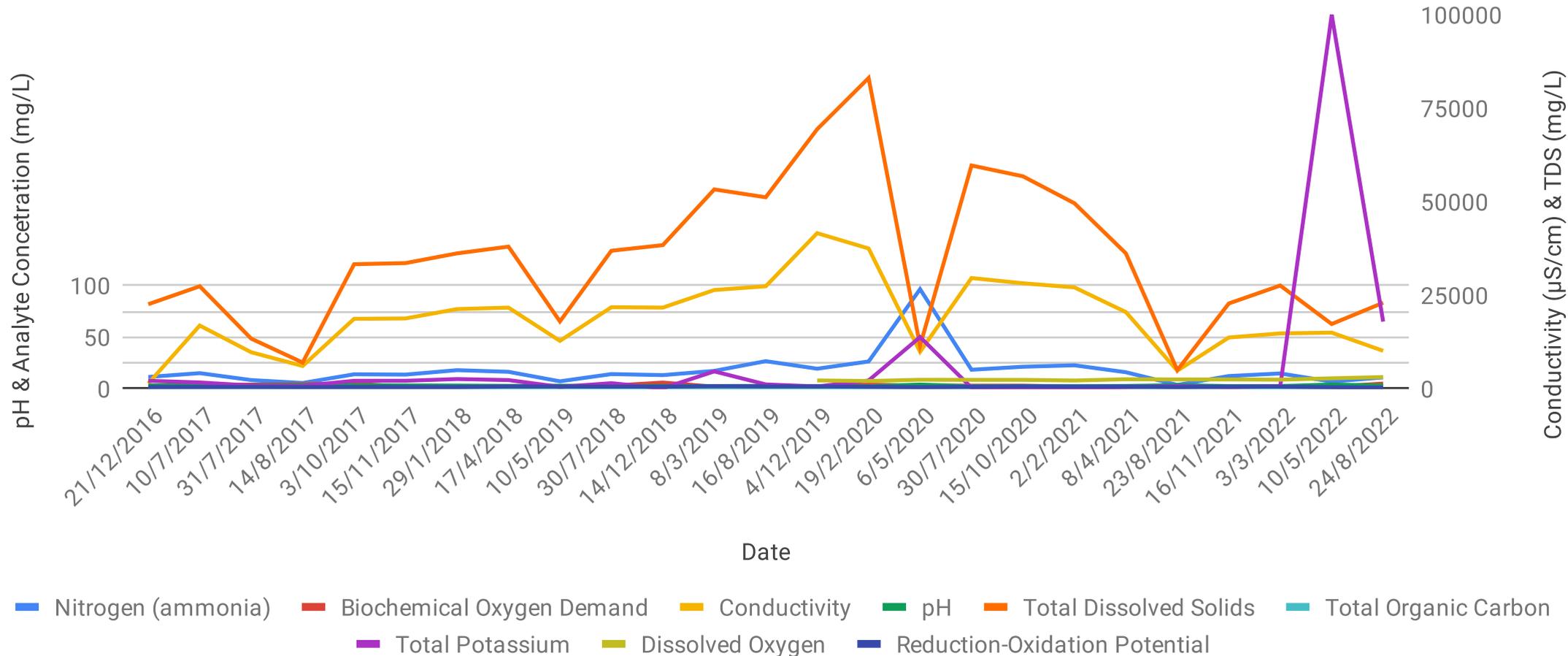
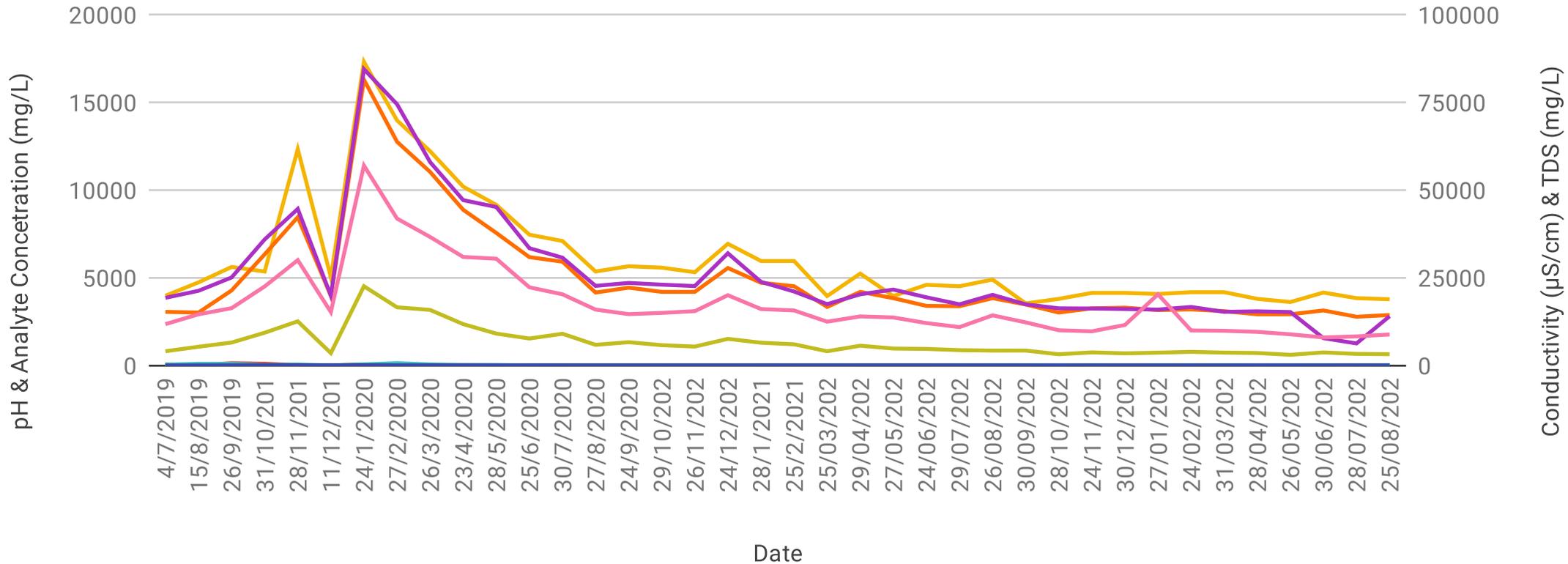
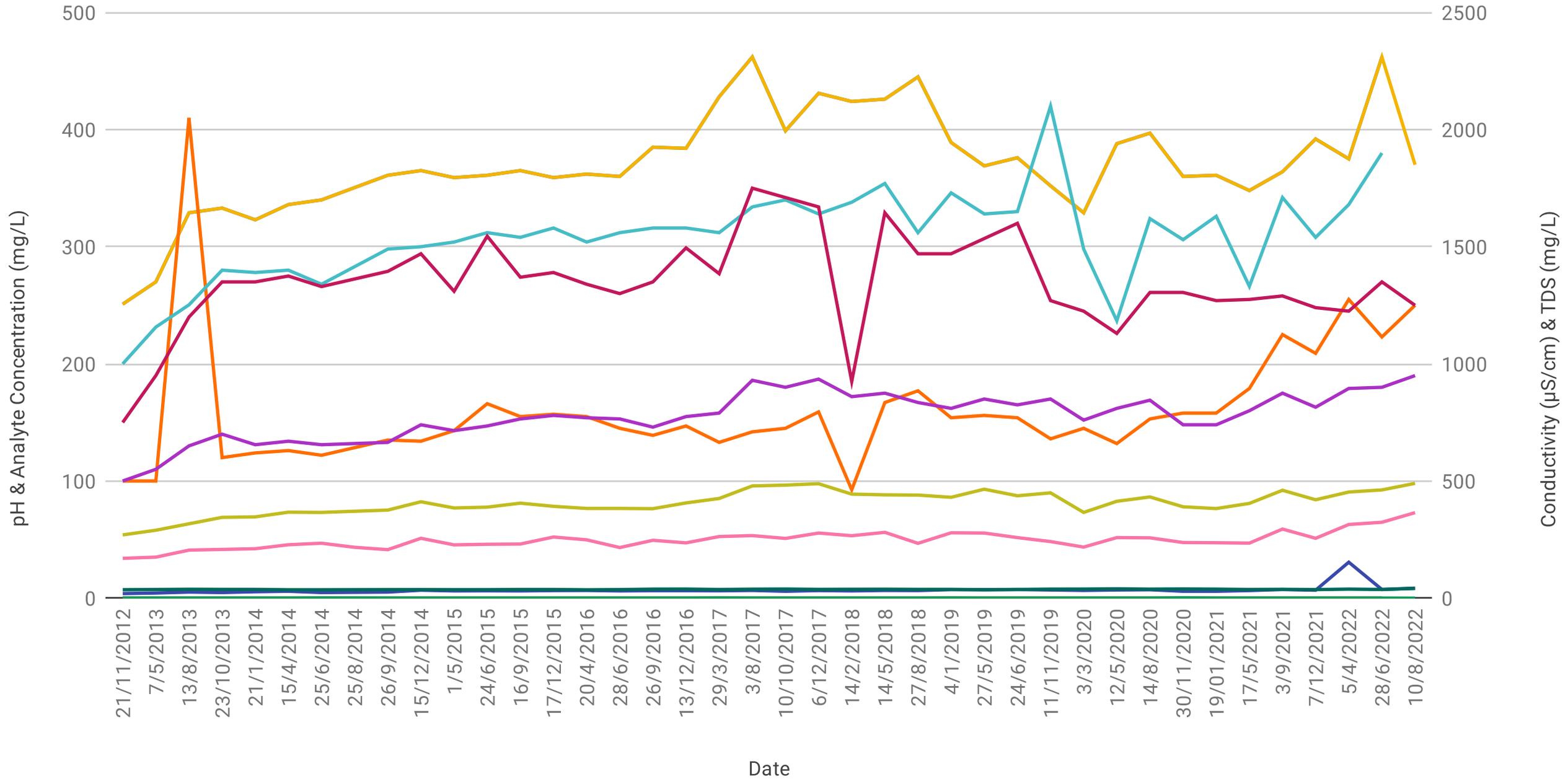


Figure 1.5.3.11 ED1 Coffer Dam



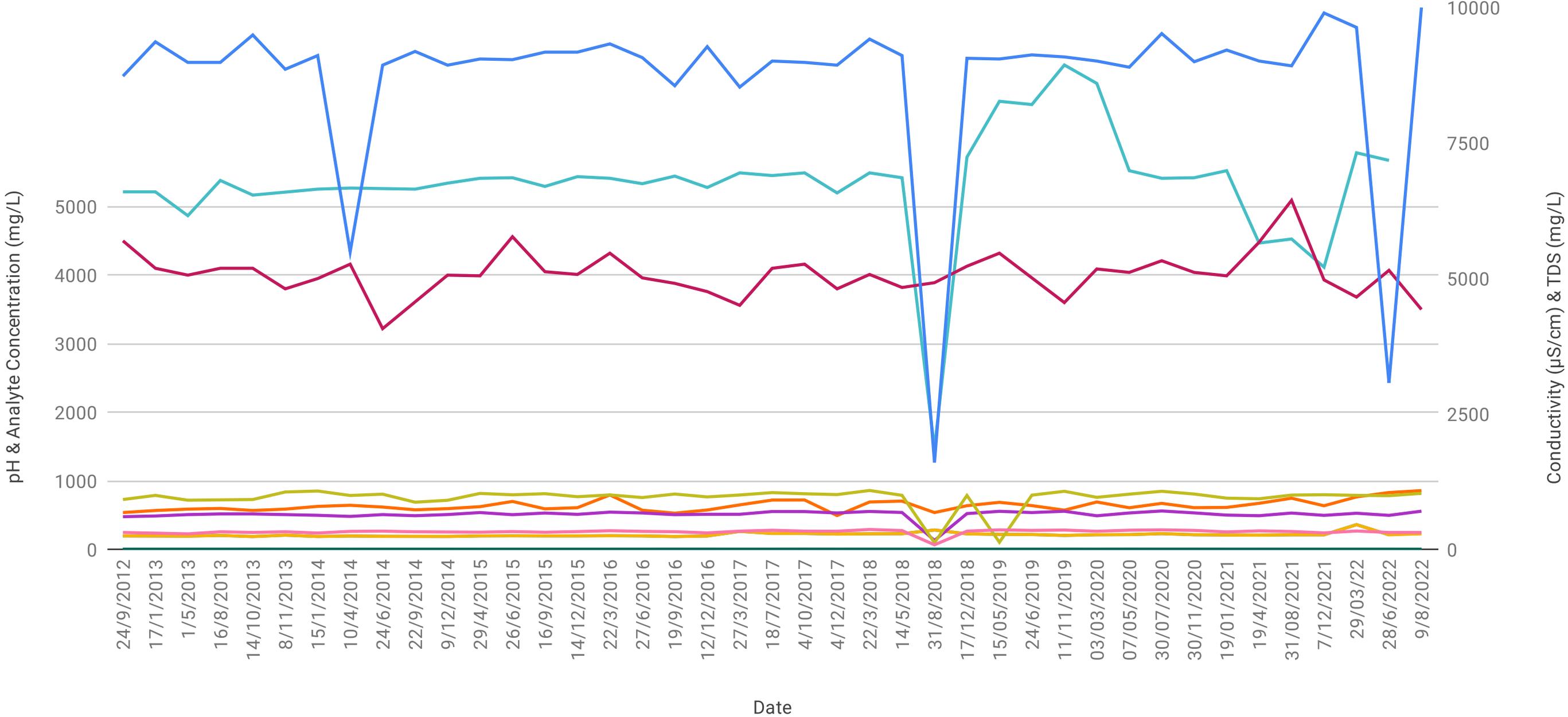
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- Biochemical Oxygen Demand
- Conductivity
- pH
- Total Dissolved Solids
- Total Suspended Solids
- Chloride
- Nitrate
- Phosphorous
- Chemical Oxygen Demand

Figure 1.5.5.1 MB1



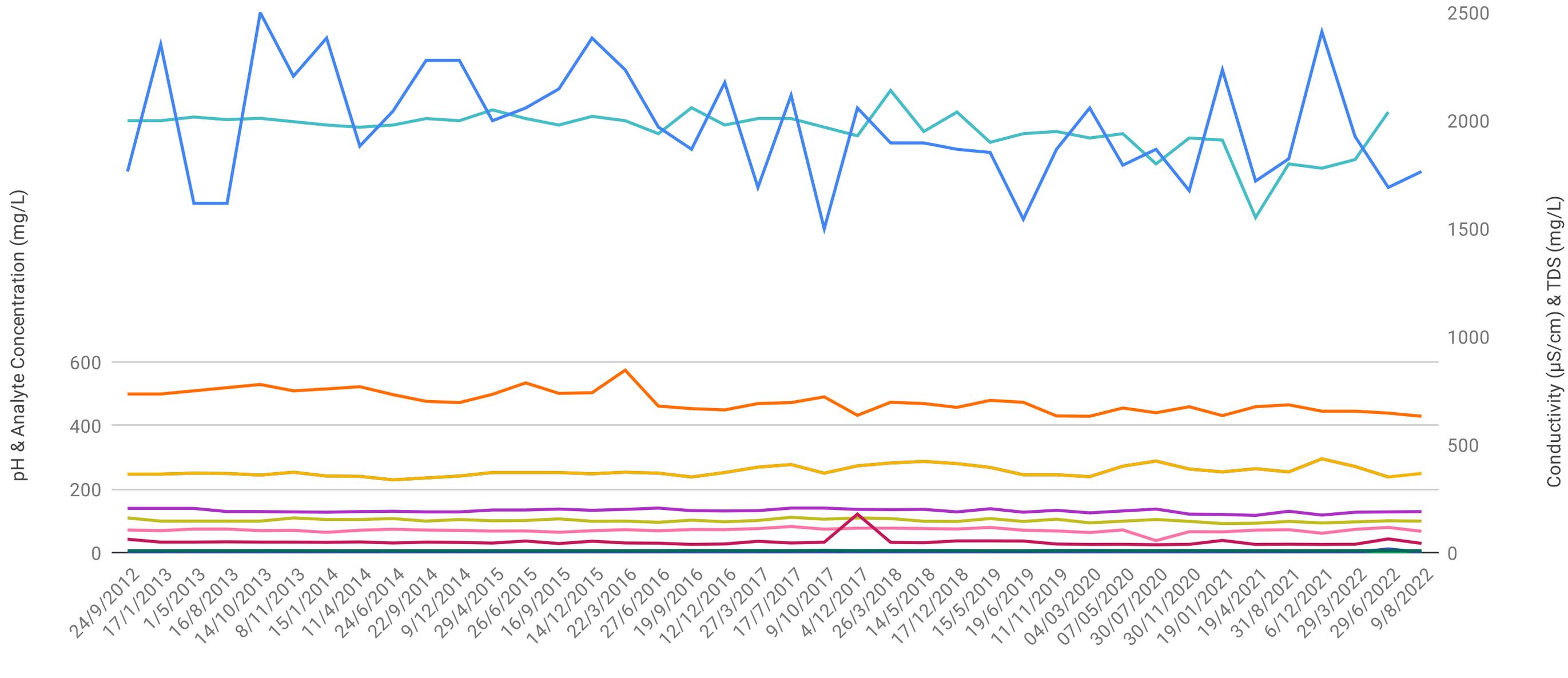
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- Nitrogen (ammonia)
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- Sodium
- pH
- Sulphate
- Total Dissolved Solids

Figure 1.5.5.2 MB2



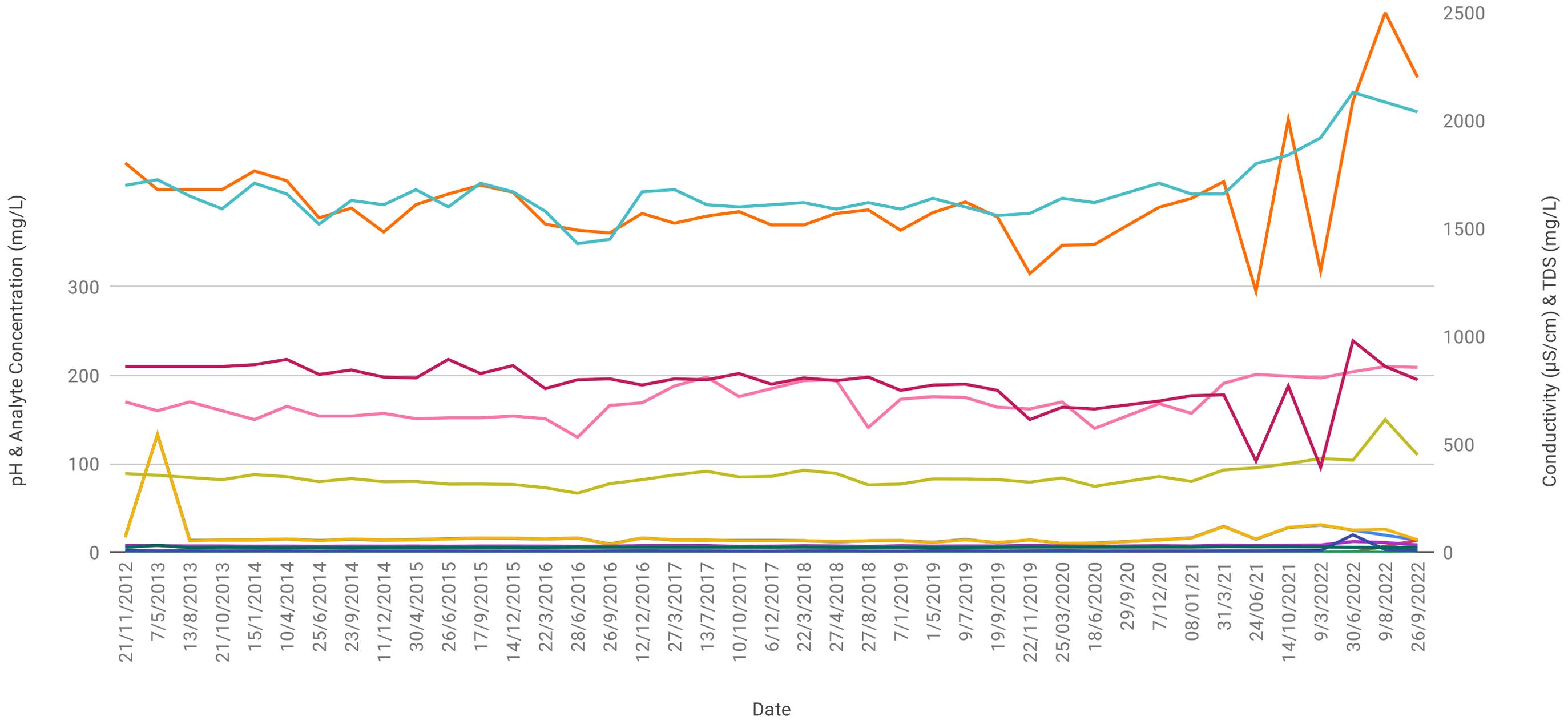
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- Carbonate
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- Nitrogen (ammonia)
- Chloride
- Conductivity
- Calcium
- Magnesium
- Potassium
- Sodium
- pH
- Sulphate
- Total Dissolved Solids

Figure 1.5.5.3 MB3



- Bicarbonate
- Carbonate
- Alkalinity (as CaCO3)
- Nitrogen (ammonia)
- Chloride
- Conductivity
- Calcium
- Magnesium
- Potassium
- Sodium
- pH
- Sulphate
- Total Dissolved Solids

Figure 1.5.5.4 MB4



- Bicarbonate
- Carbonate
- Alkalinity (as CaCO3)
- Nitrogen (ammonia)
- Chloride
- Conductivity
- Calcium
- Magnesium
- Potassium
- Sodium
- pH
- Sulphate

Figure 1.5.5.5 MB6

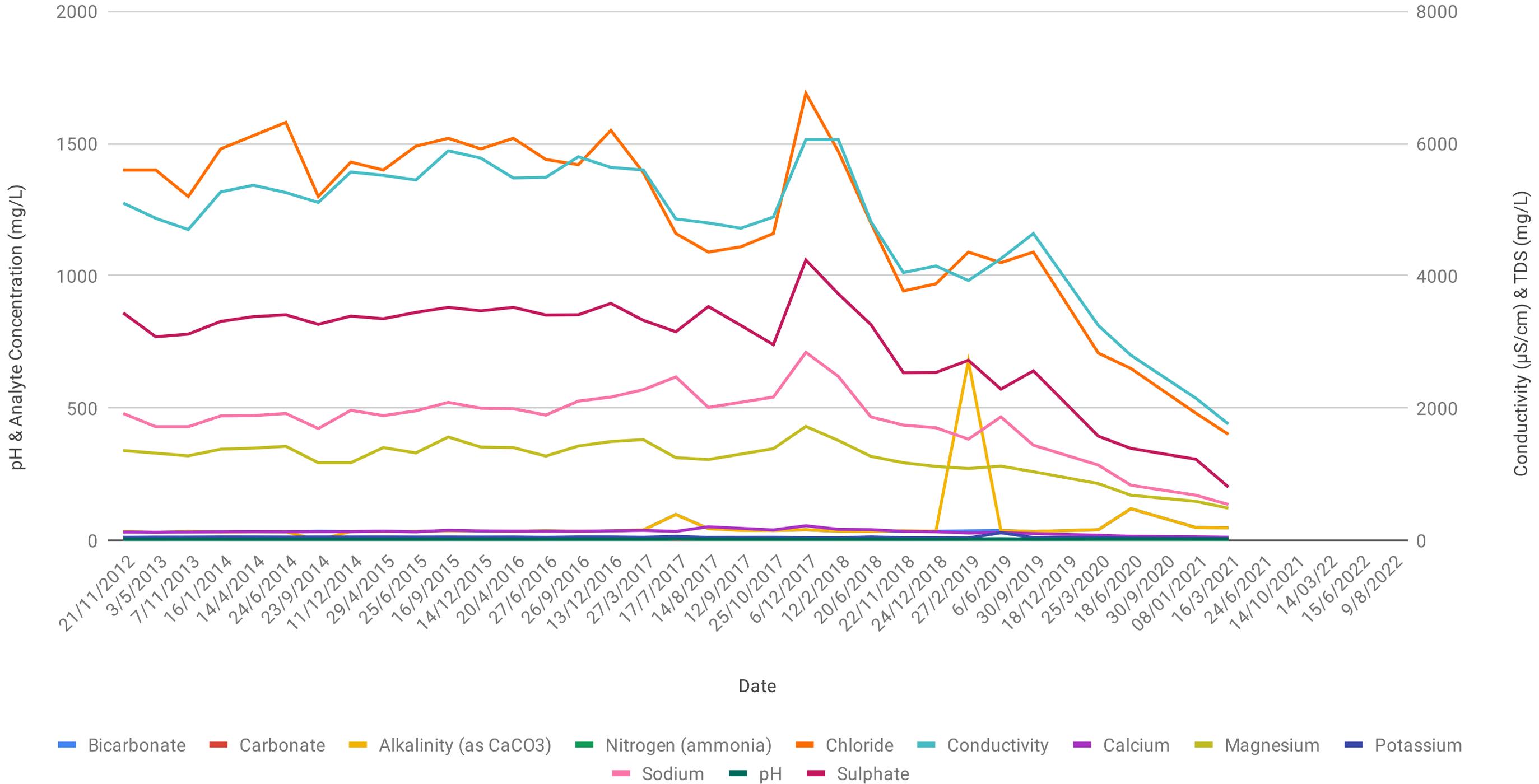


Figure 1.5.5.6 MB7

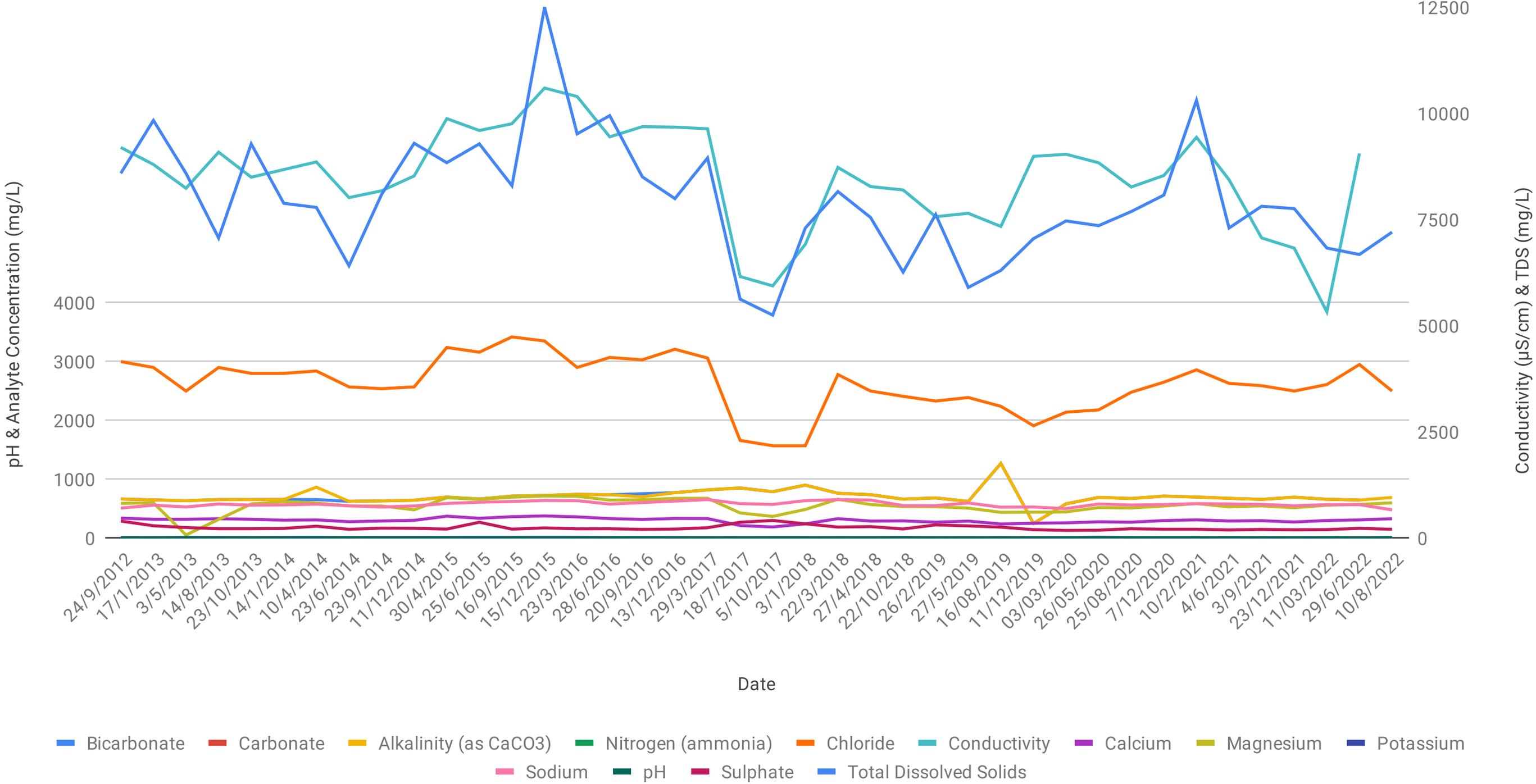


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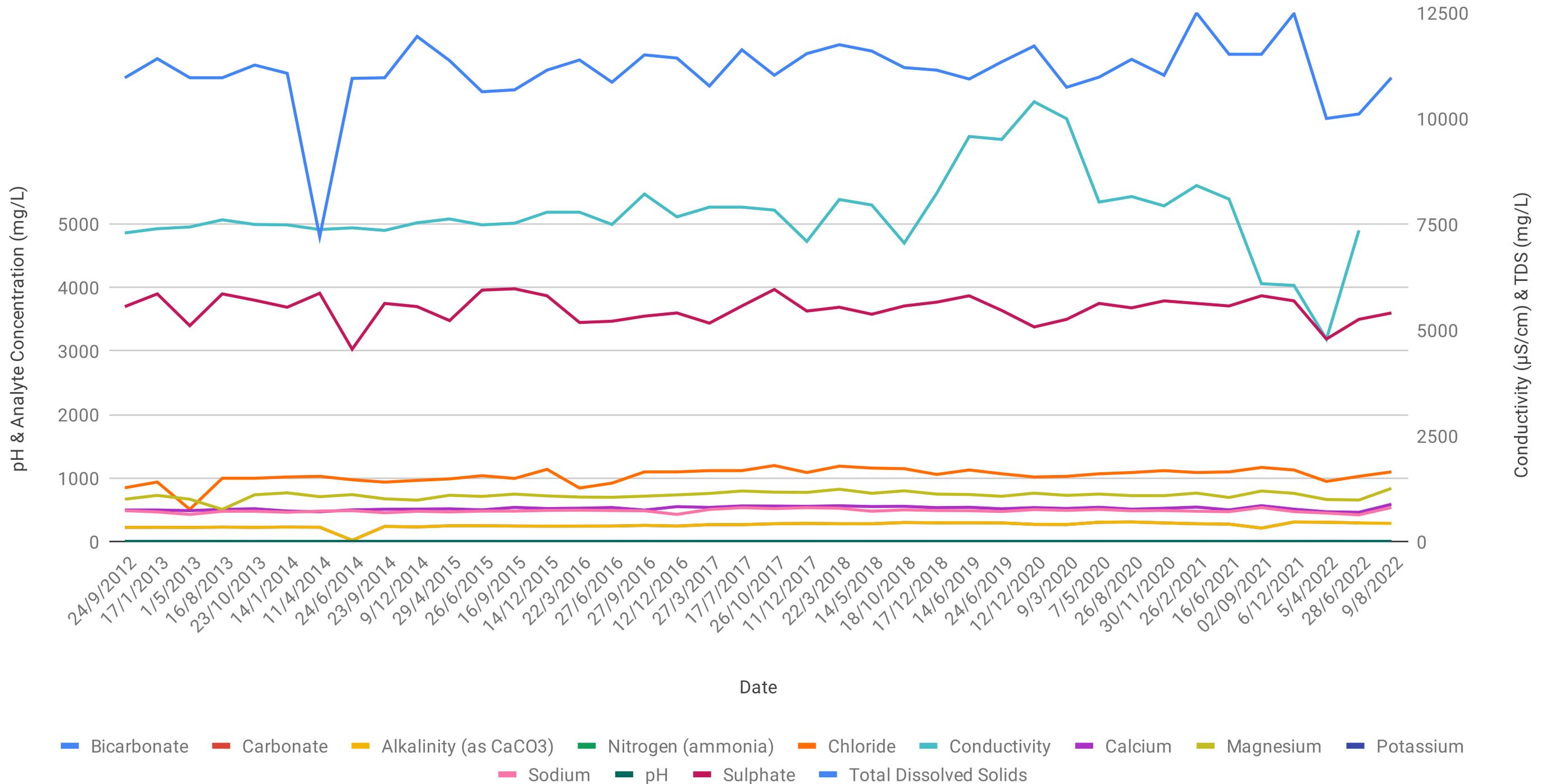
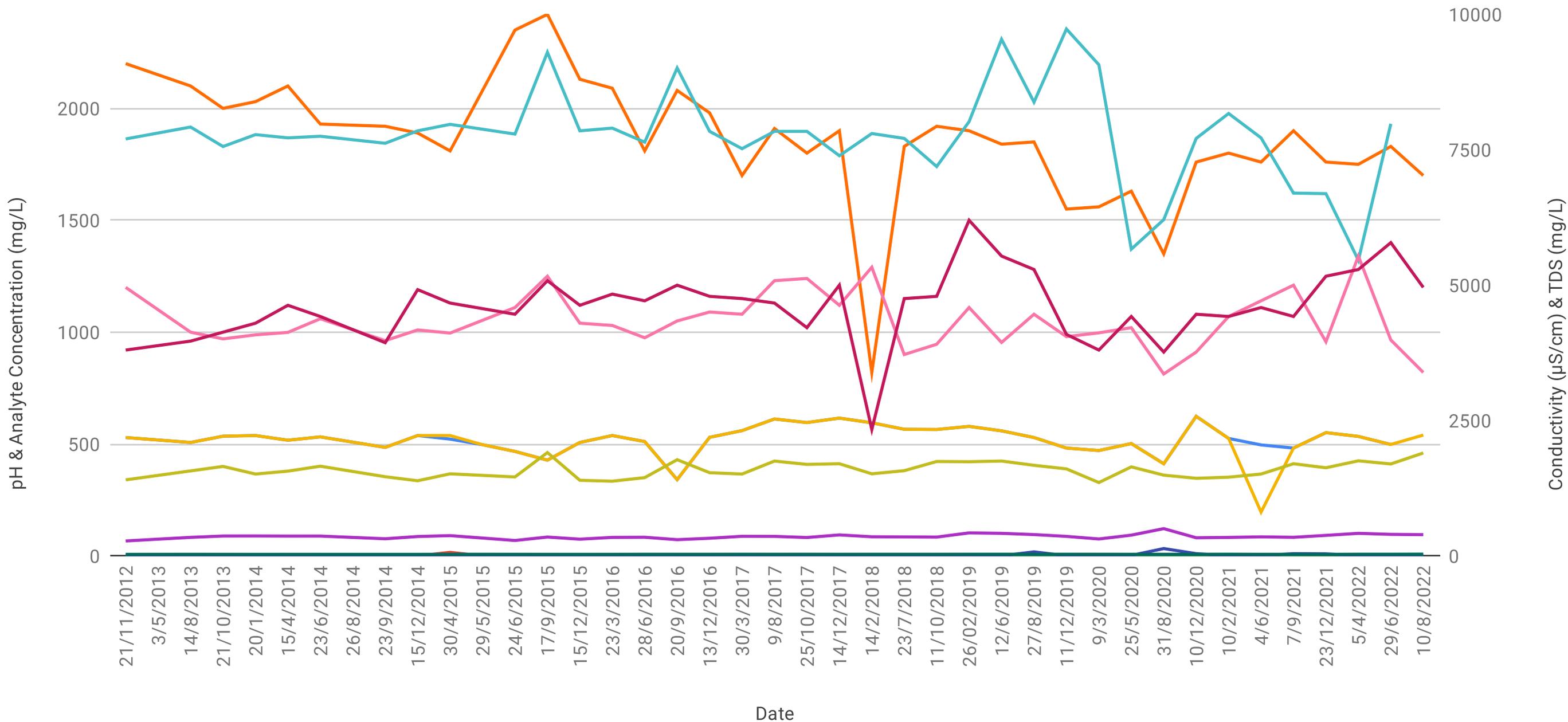
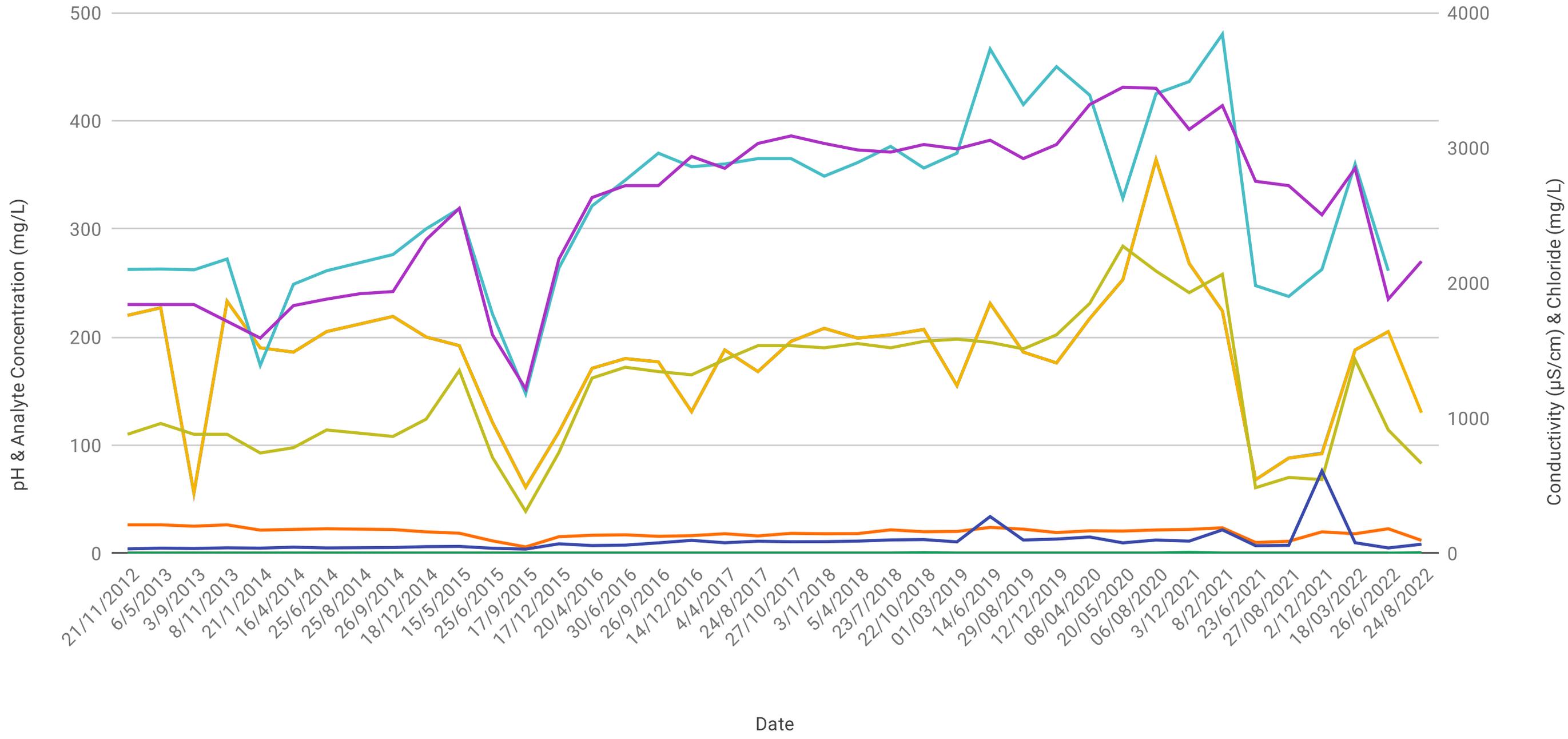


Figure 1.5.5.8 ED3B



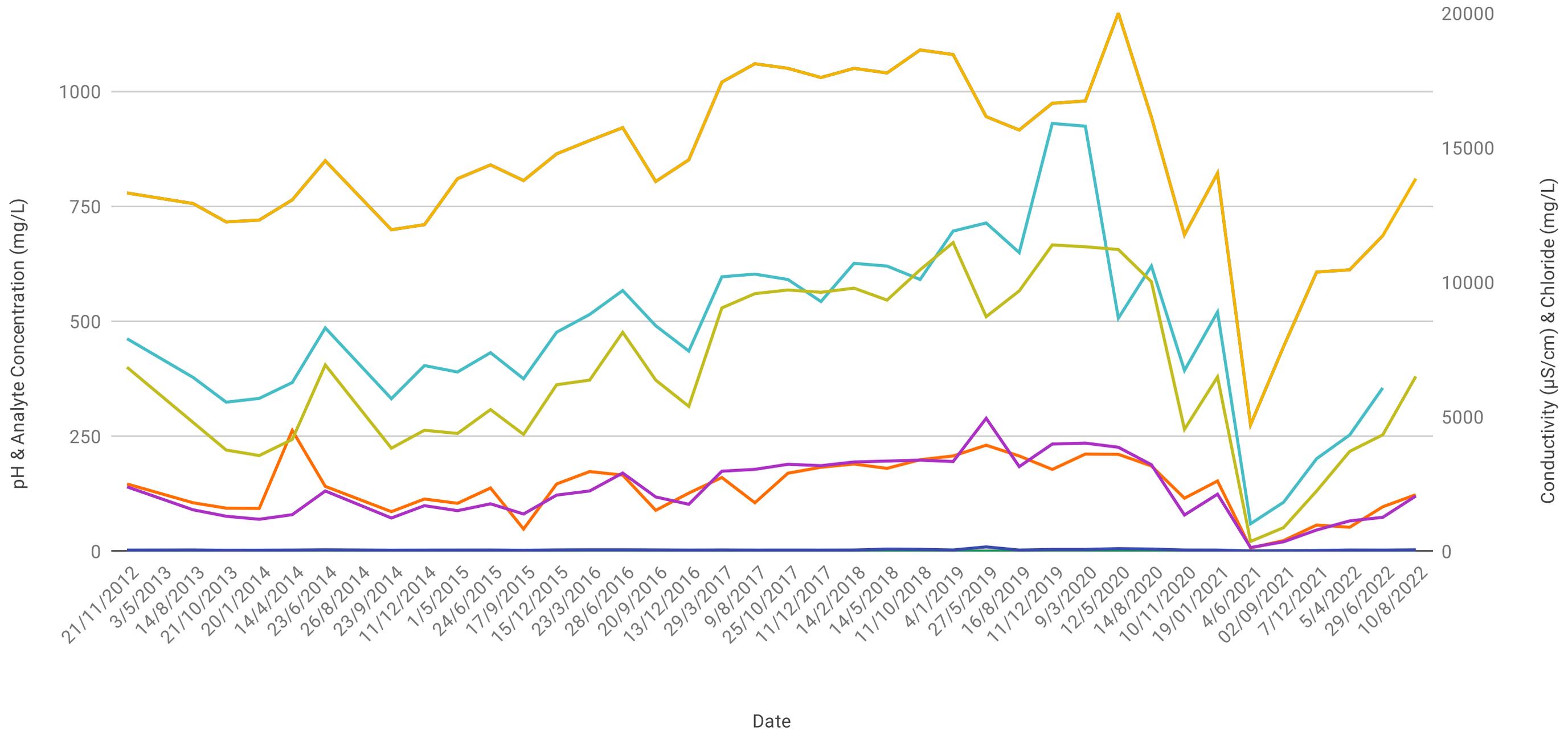
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- Sodium
- pH
- Sulphate

Figure 1.5.5.9 WM1



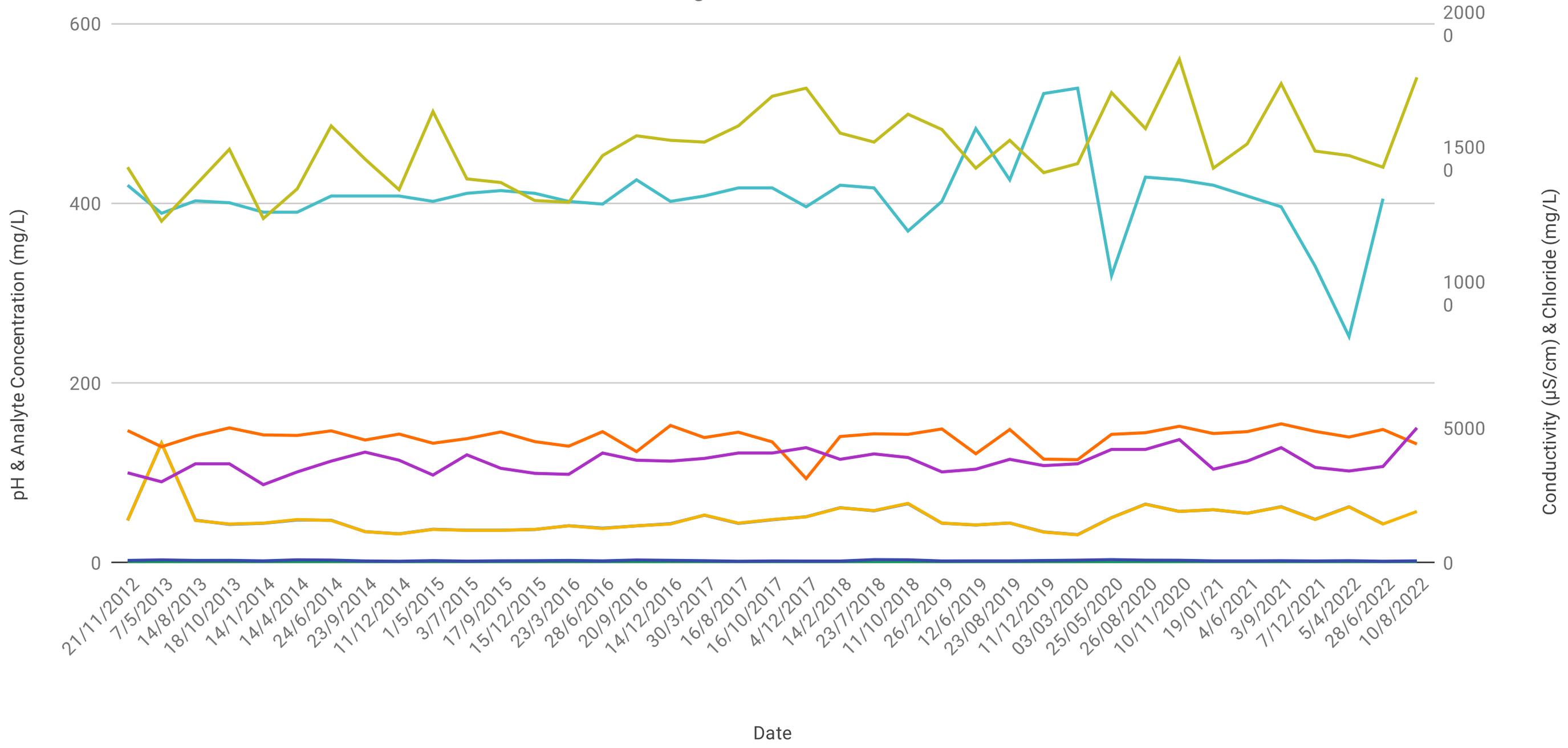
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Figure 1.5.5.10 WM5



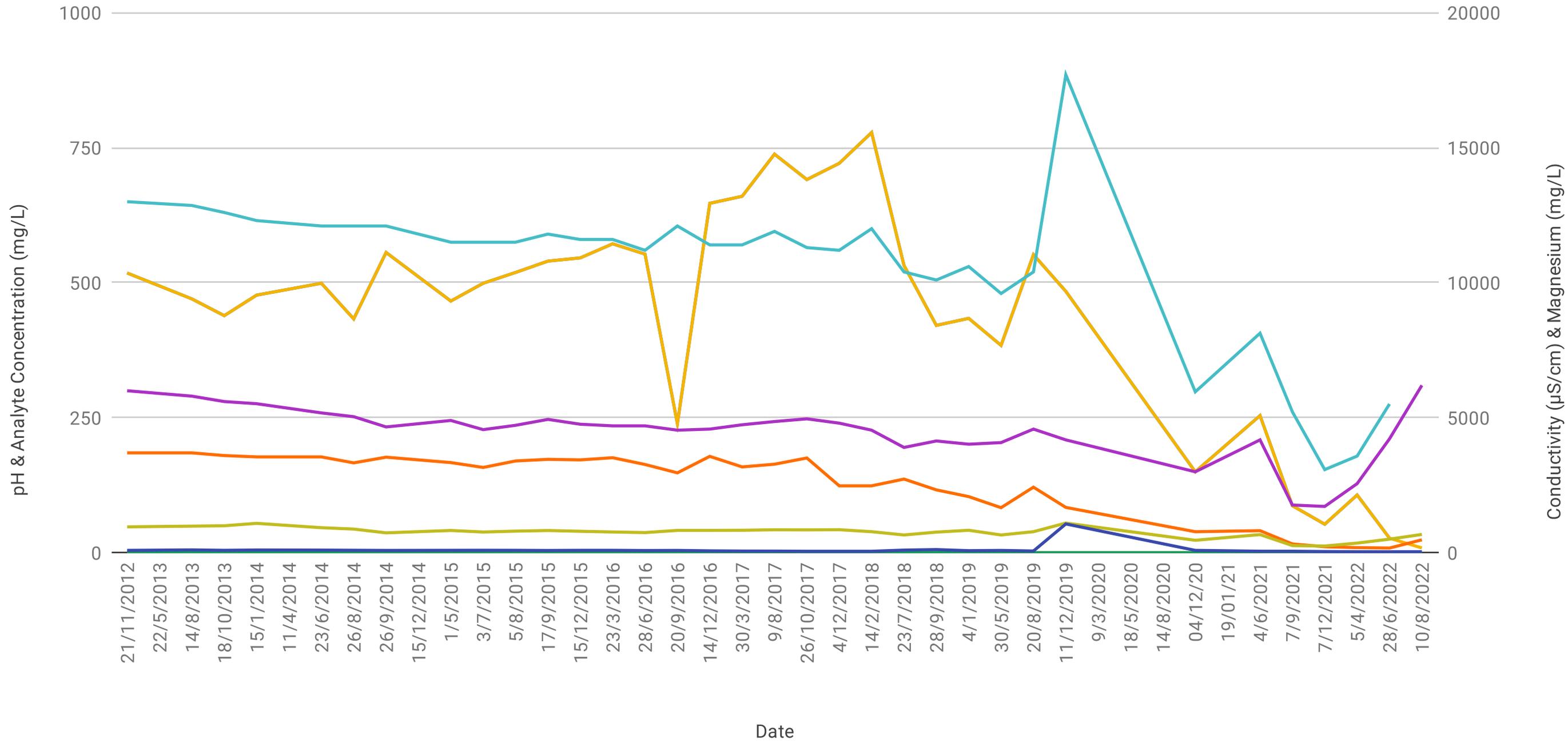
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Figure 1.5.5.11 WM6



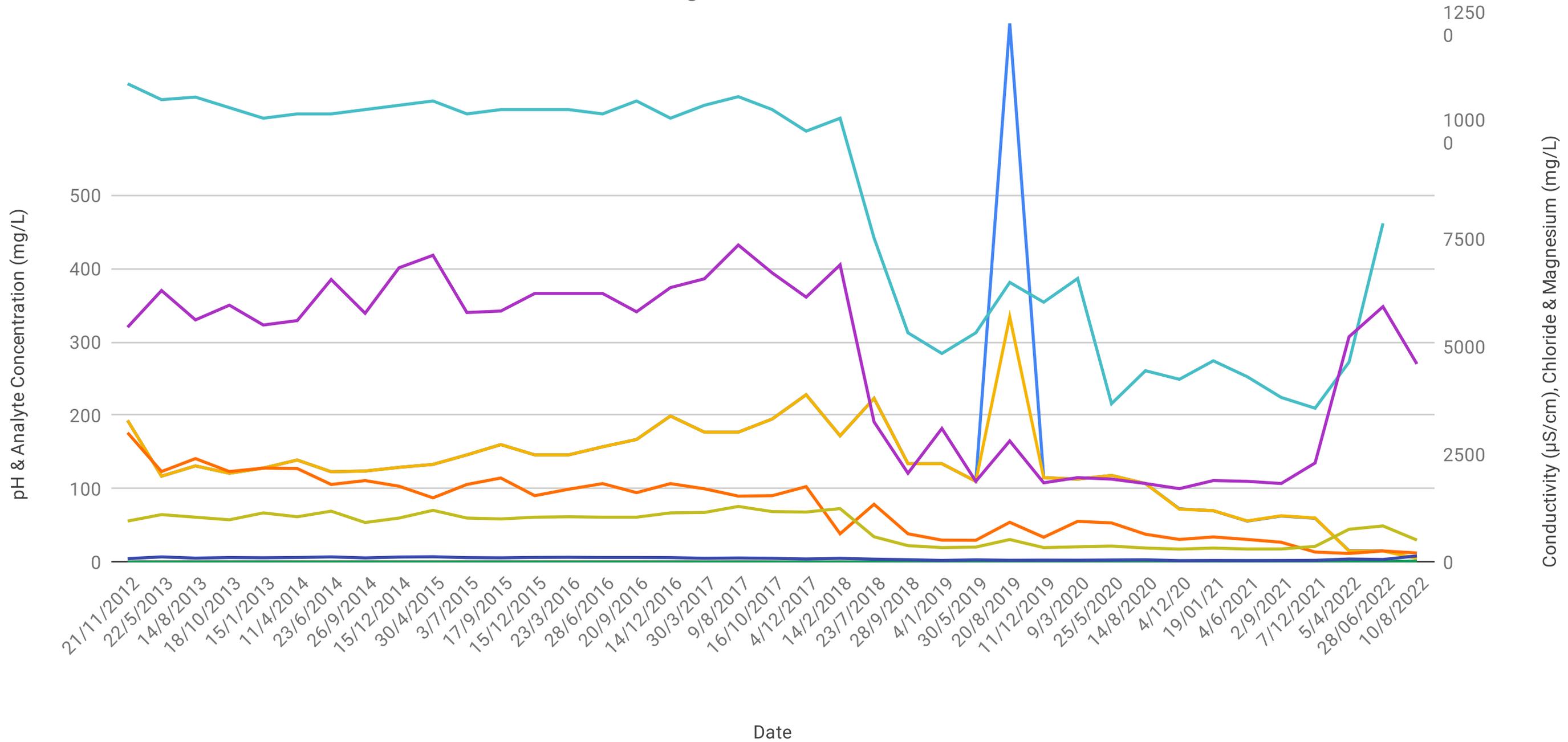
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Figure 1.5.5.12 MW8S



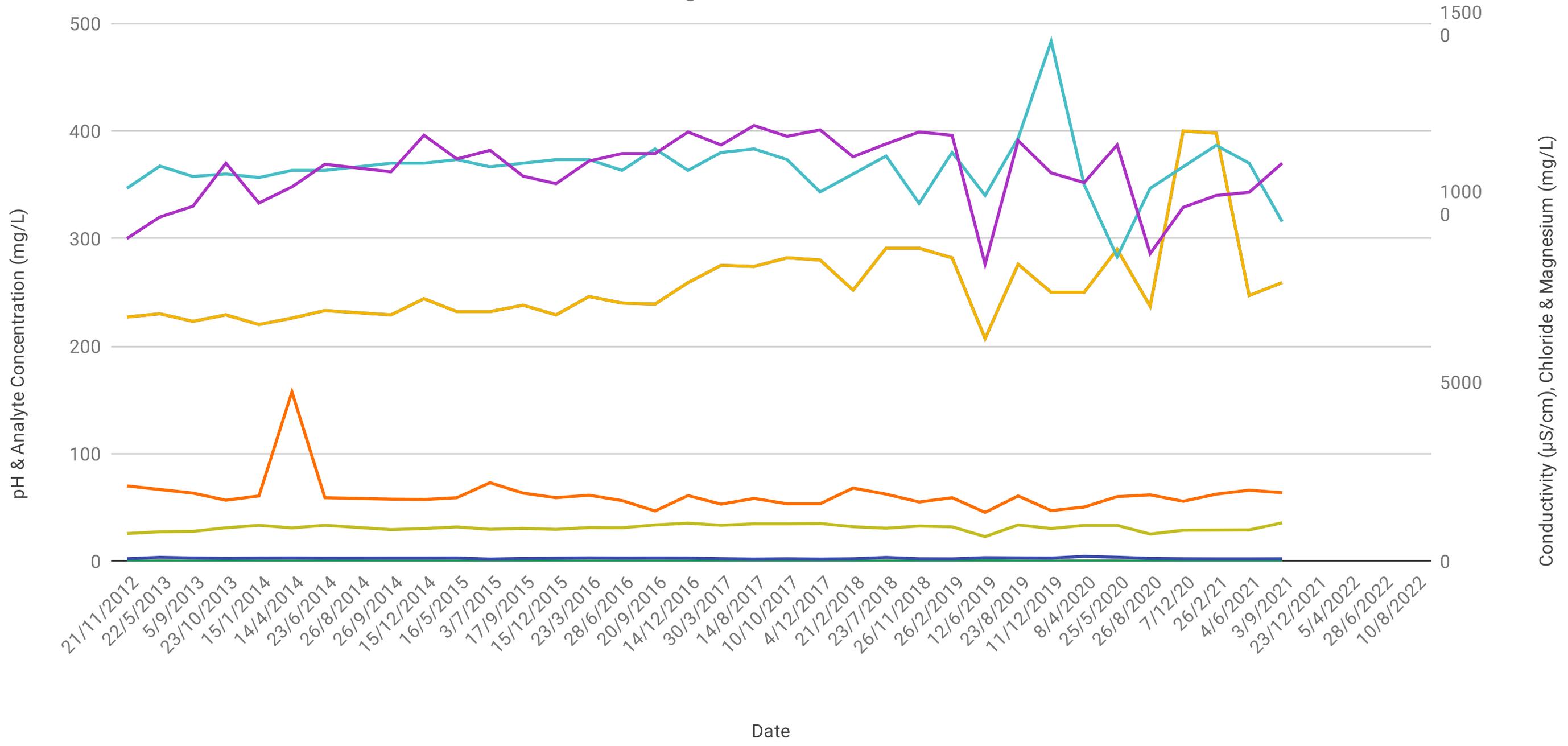
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Figure 1.5.5.13 MW8D



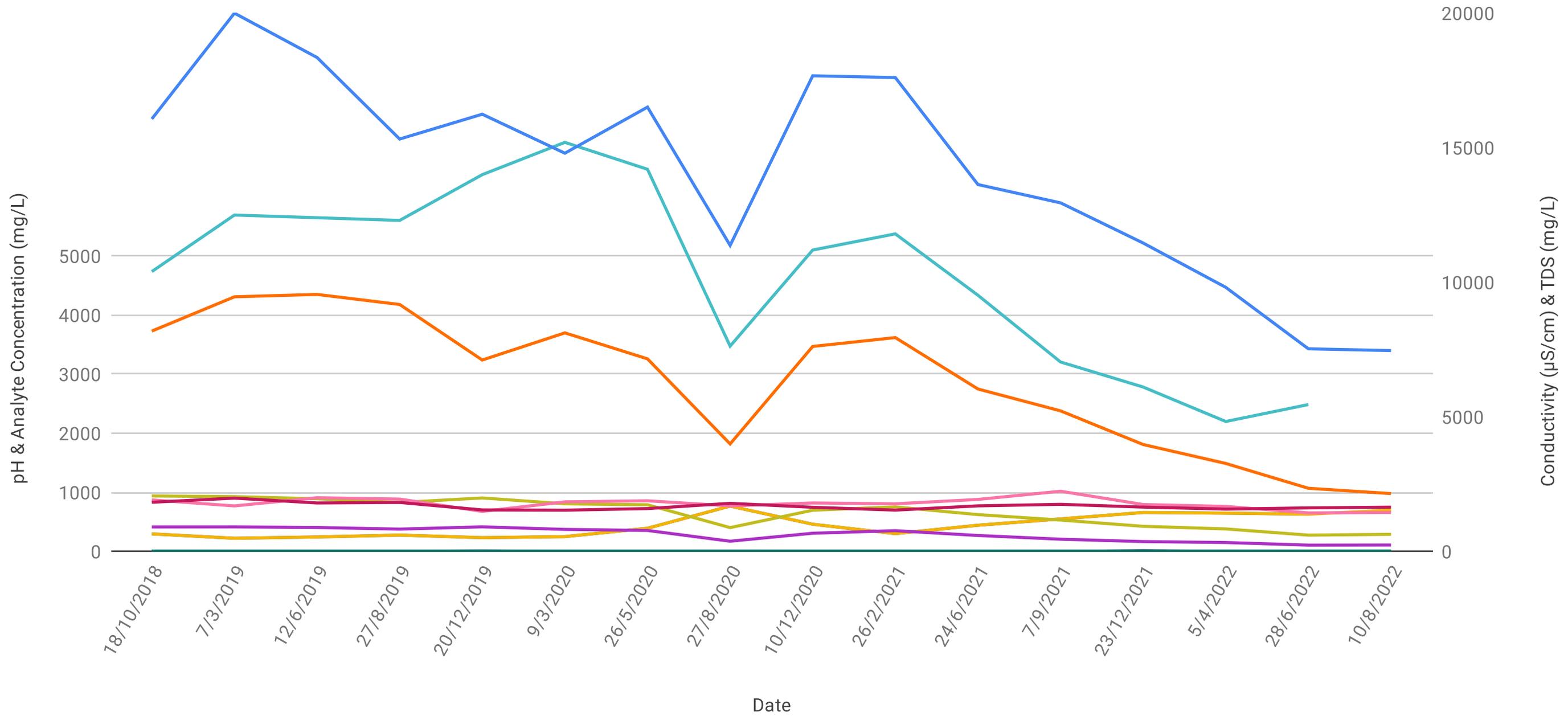
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Figure 1.5.5.14 MW9S



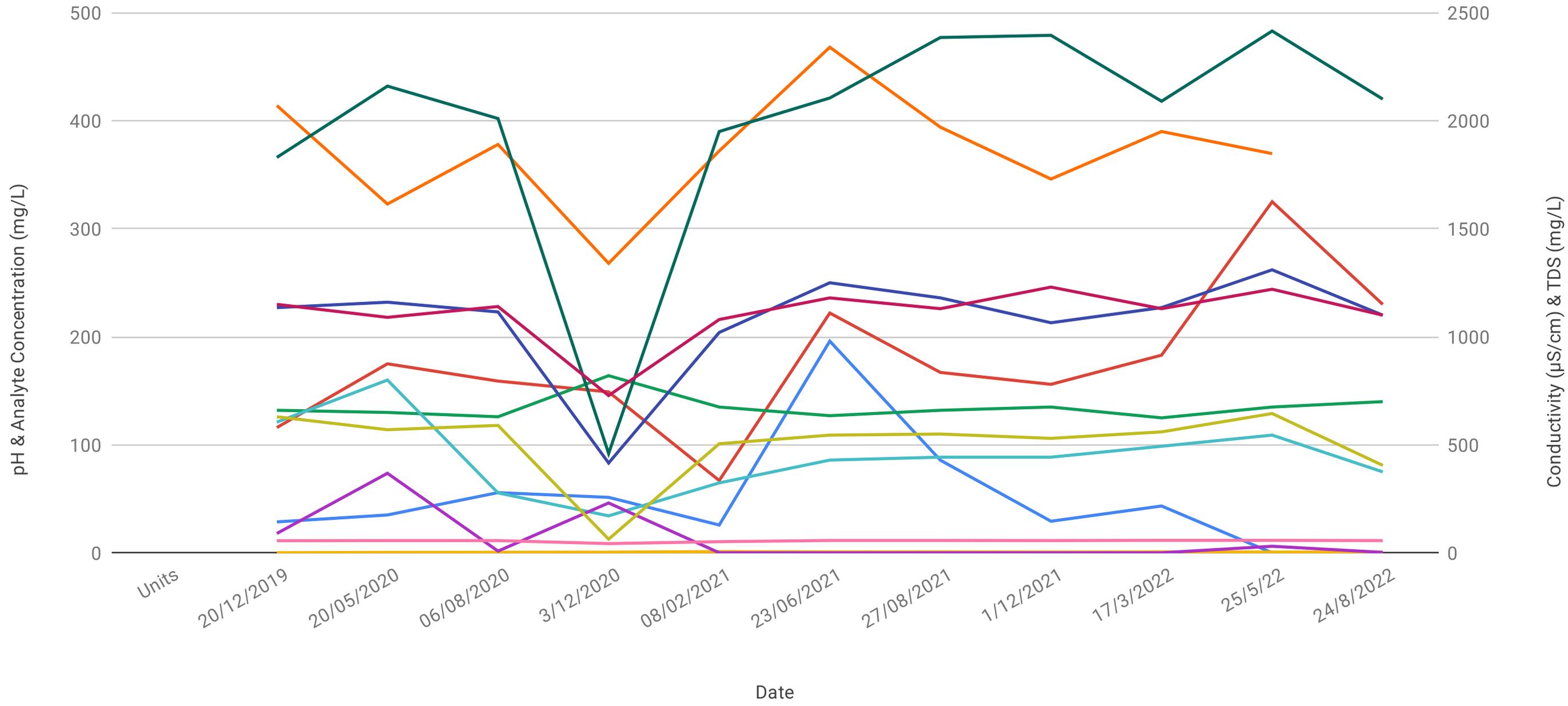
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- Carbonate
- Alkalinity (as CaCO3)
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- Conductivity
- Calcium
- Magnesium
- Potassium

Figure 1.5.5.15 MB28



■ Bicarbonate
 ■ Carbonate
 ■ Alkalinity (as CaCO3)
 ■ Nitrogen (ammonia)
 ■ Chloride
 ■ Conductivity
 ■ Calcium
 ■ Magnesium
 ■ Potassium
■ Sodium
■ pH
■ Sulphate
■ Total Dissolved Solids

Figure 1.5.5.16 MB33



- Carbonate
- Alkalinity (as CaCO3)
- Nitrogen (ammonia)
- Chloride
- Conductivity
- Calcium
- Magnesium
- Potassium
- Sodium
- pH
- Sulphate
- Total Dissolved Solids

Figure 1.5.5.17 SP2-MW1

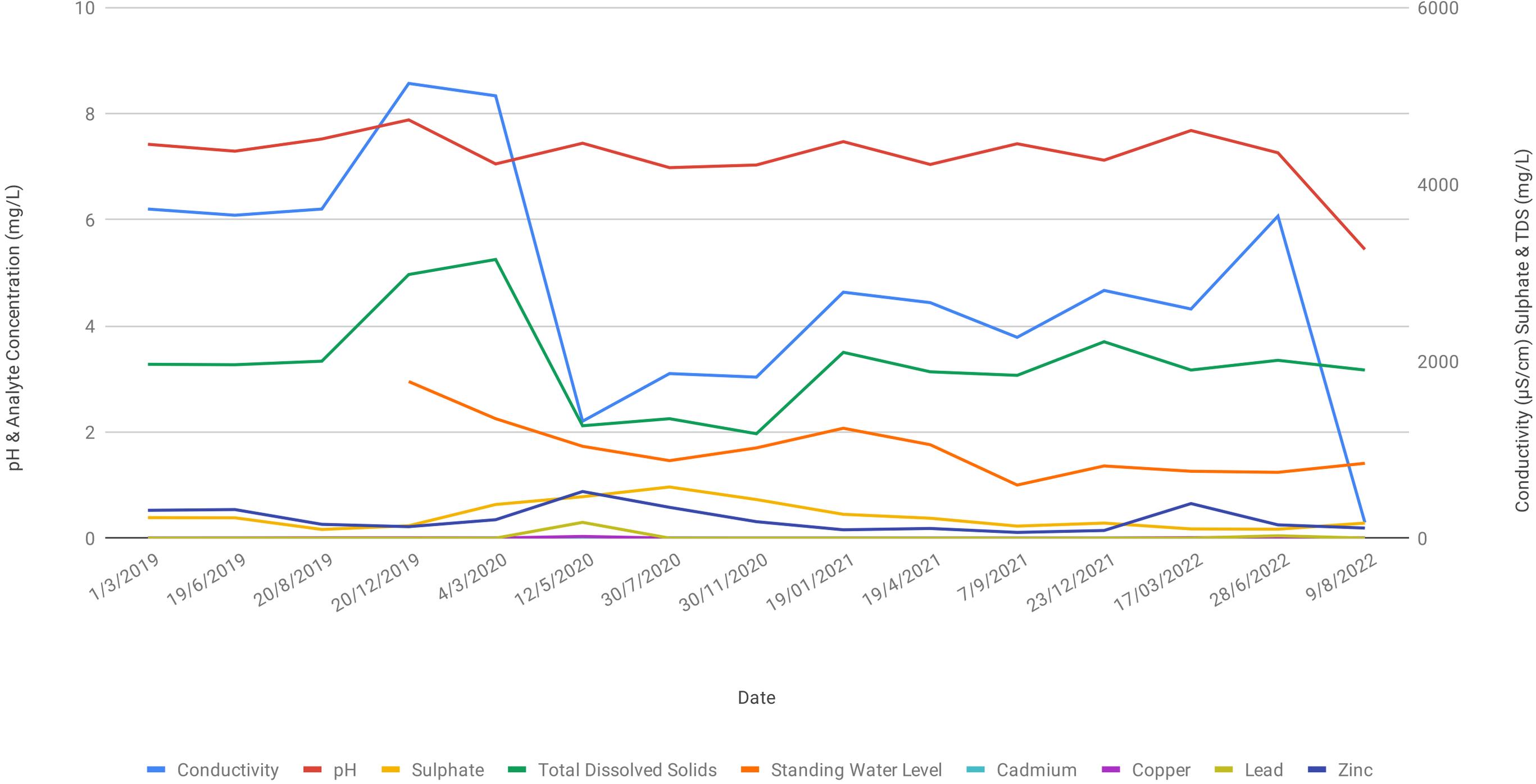
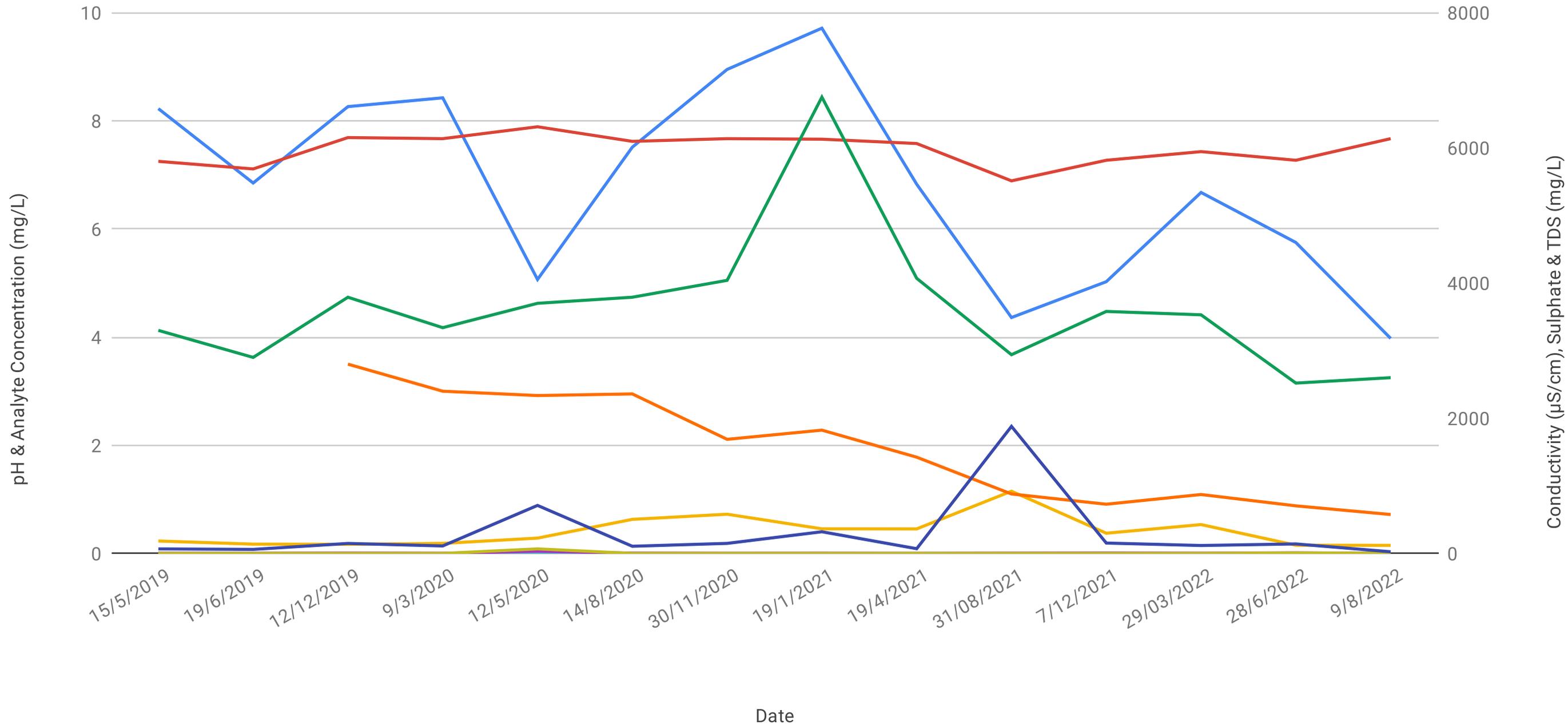


Figure 1.5.5.18 MW FRC-1



- Conductivity
- pH
- Sulphate
- Total Dissolved Solids
- Standing Water Level
- Cadmium
- Copper
- Lead
- Zinc

Figure 1.5.5.19 MB10S

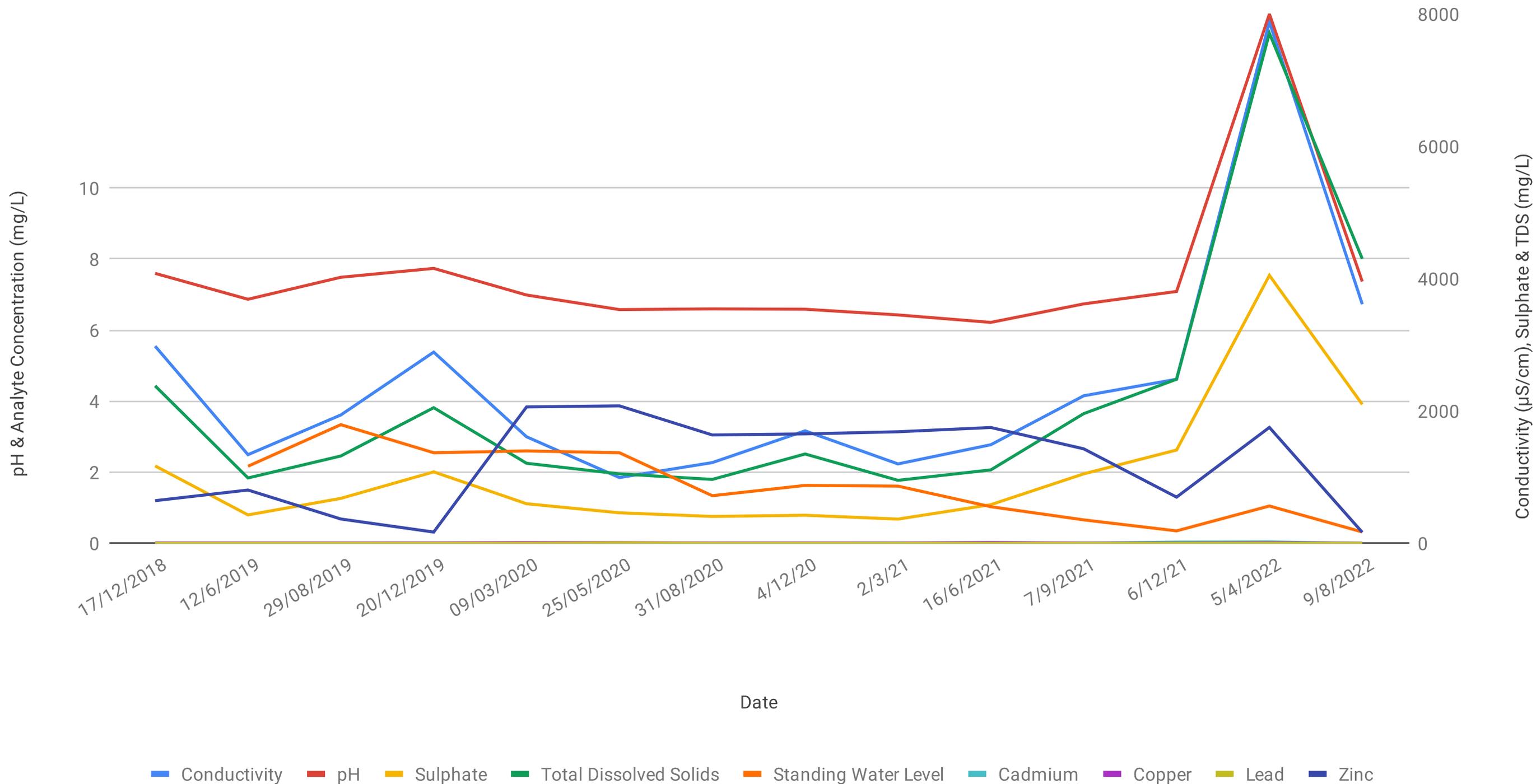
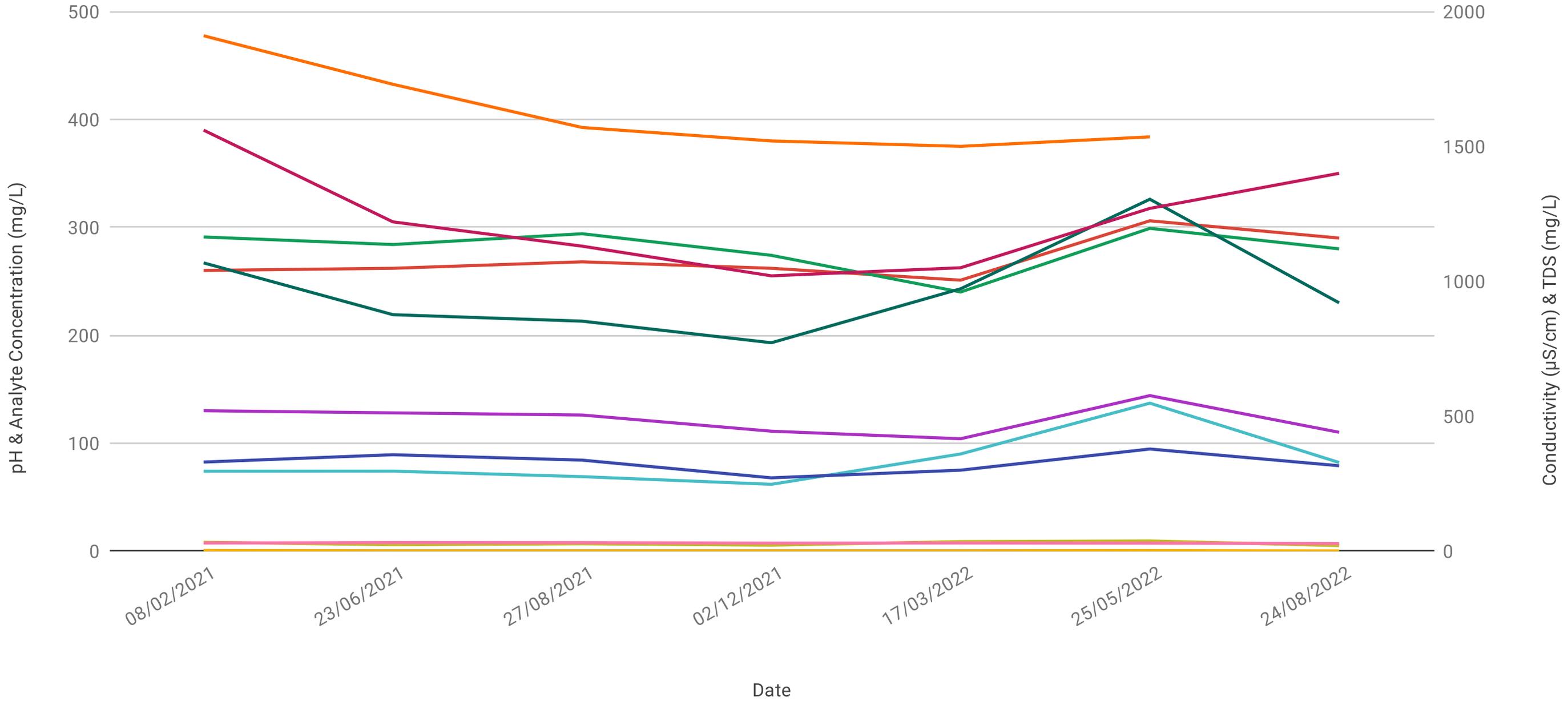


Figure 1.5.5.20 MB34



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- Calcium
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- Potassium
- Sodium
- pH
- Sulphate
- Total Dissolved Solids

Figure 1.5.5.21 MB35

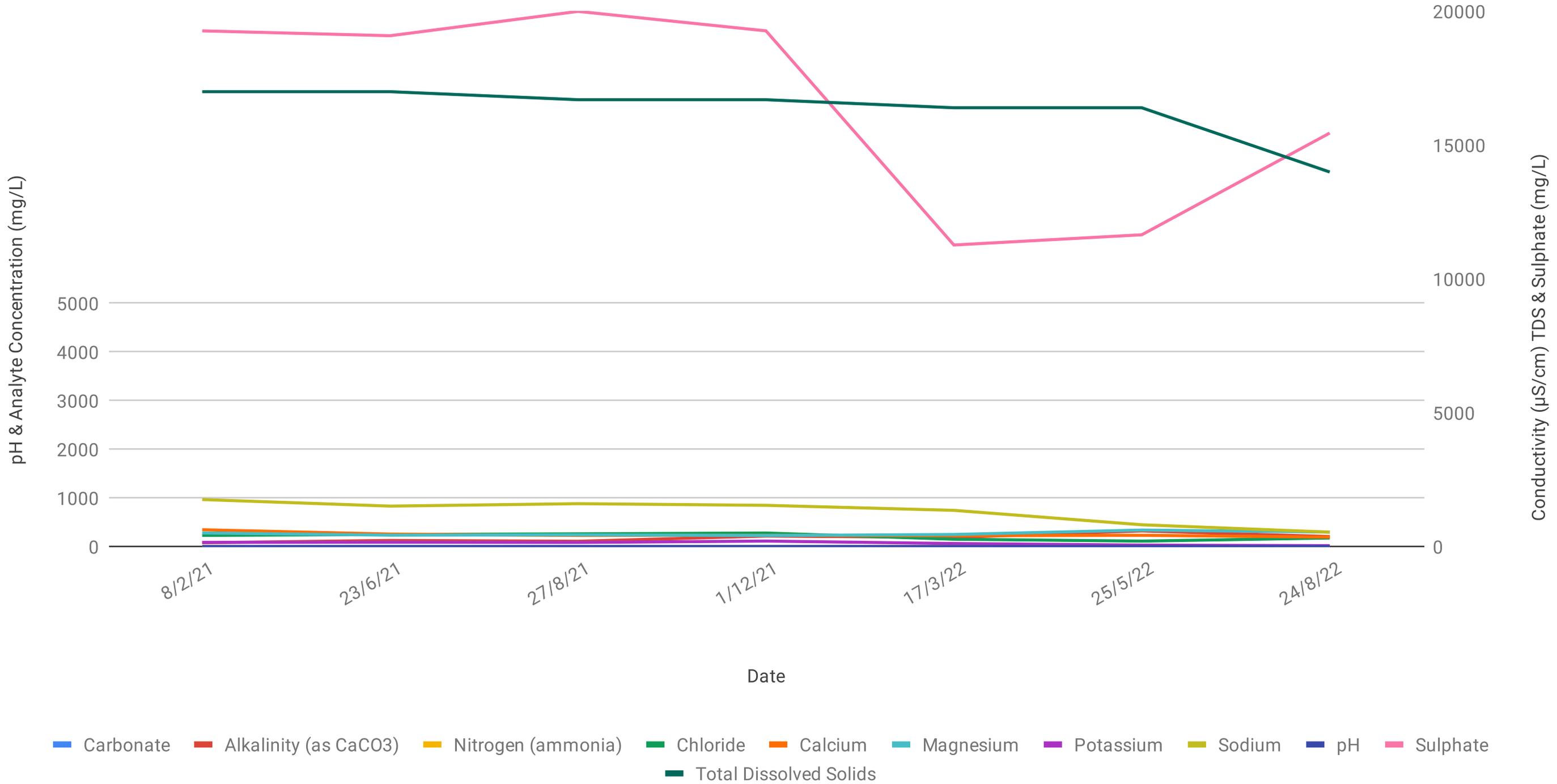


Figure 1.5.4.1 Leachate Dam

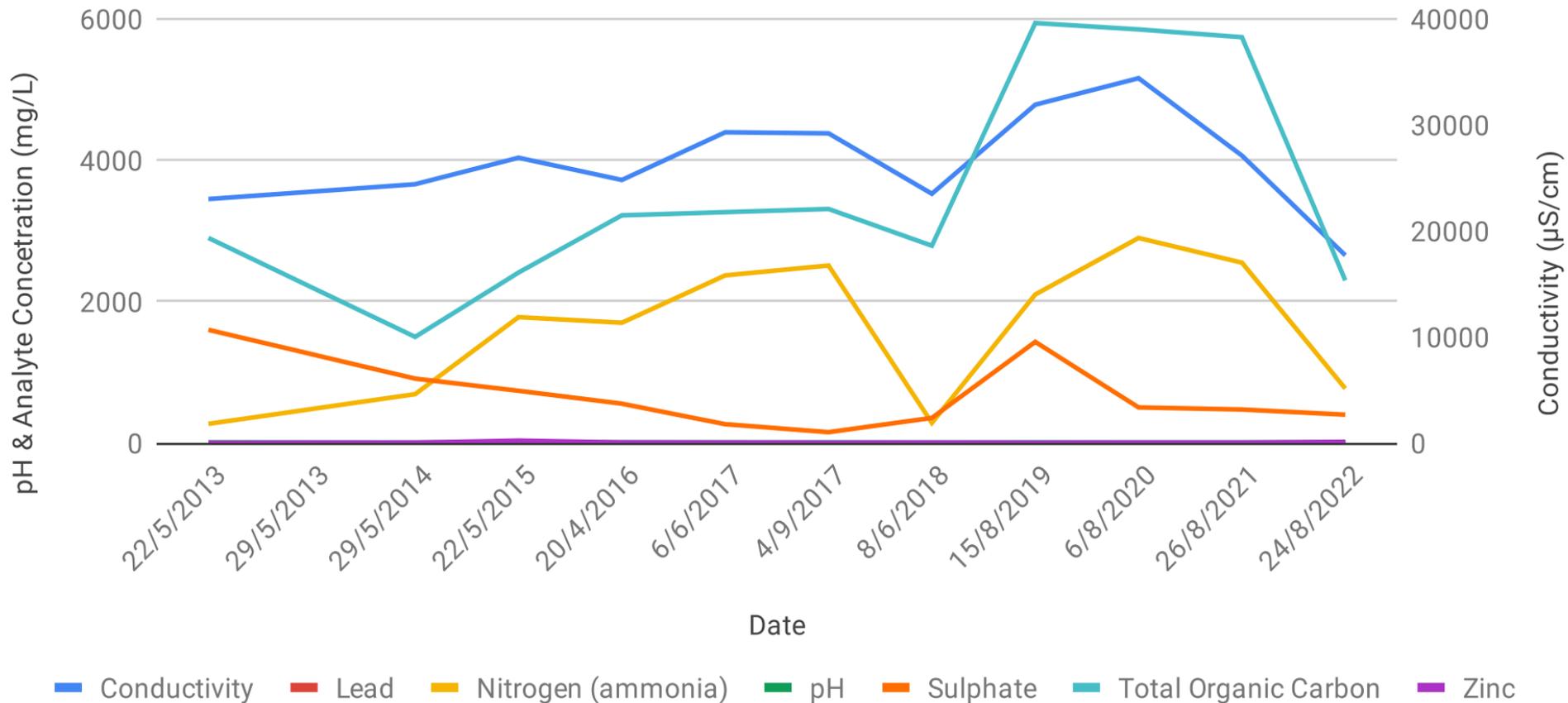


Figure 1.5.4.2 Leachate Recirculation

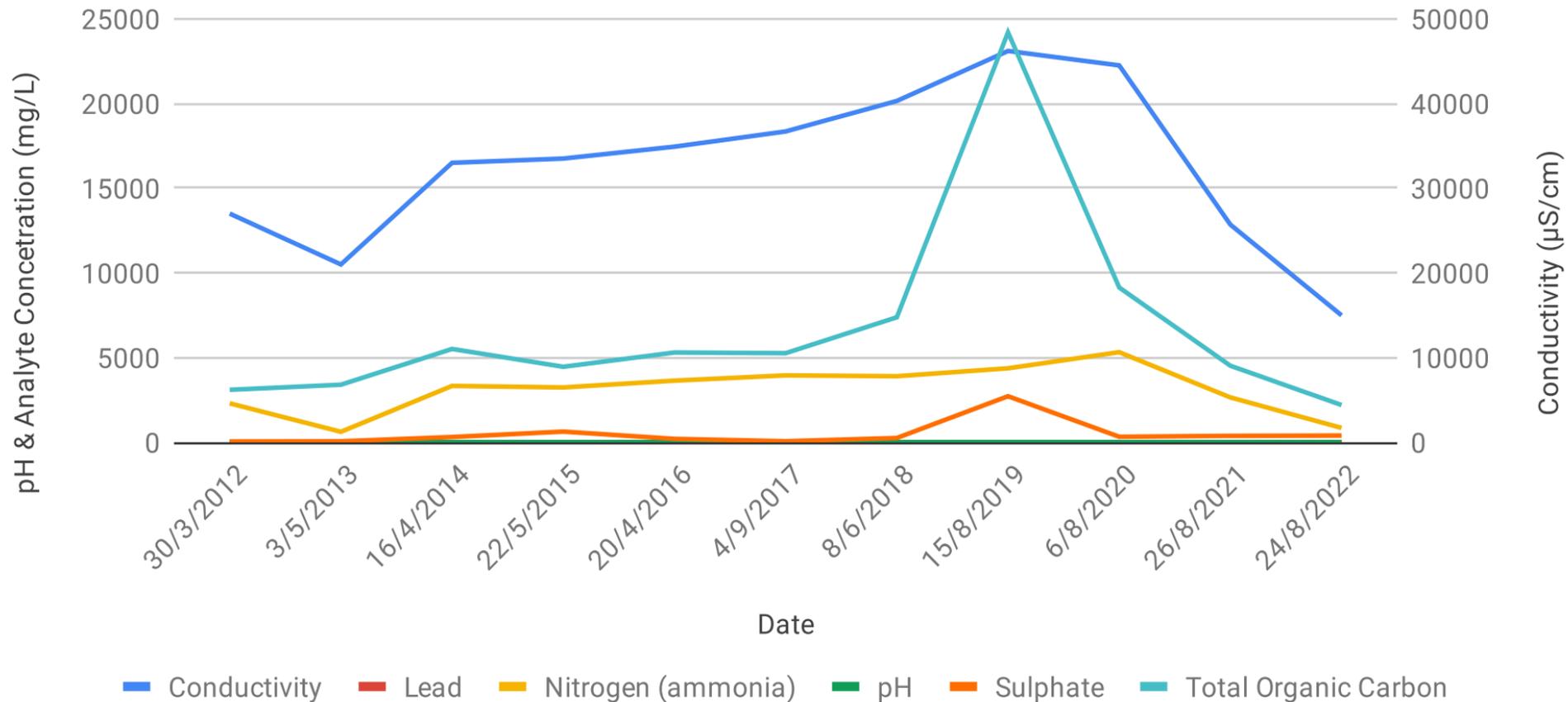


Figure 2.4.1.1 Site 110 - Upstream

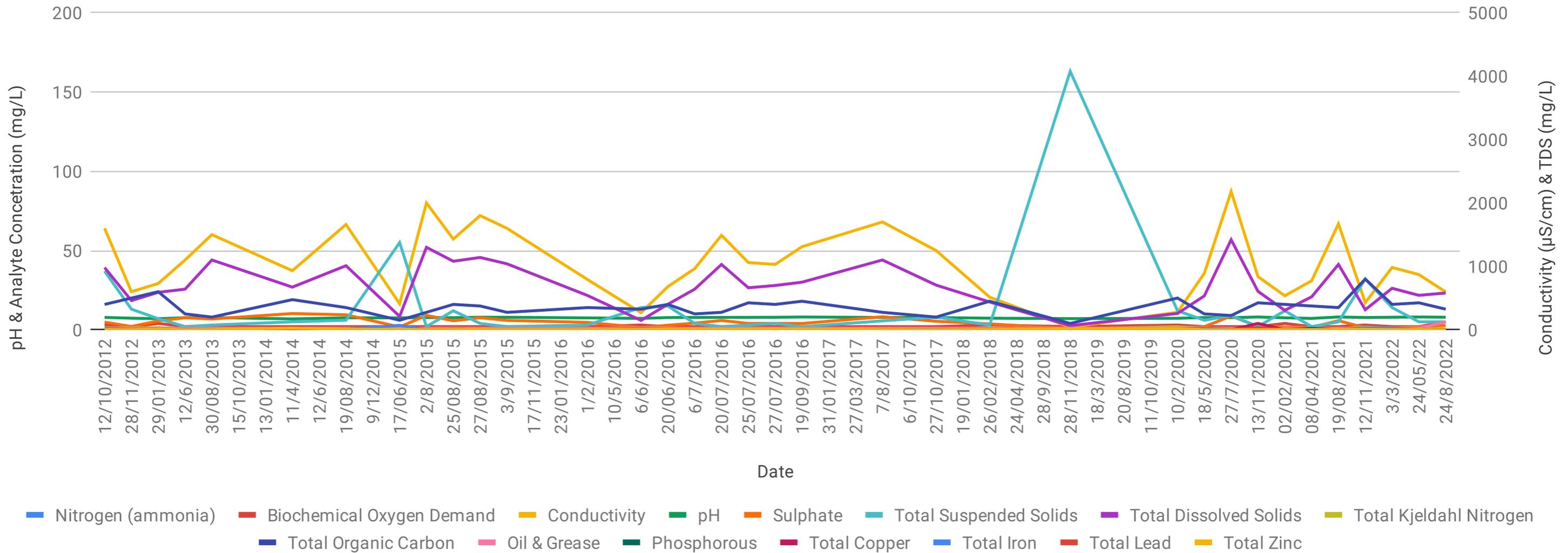
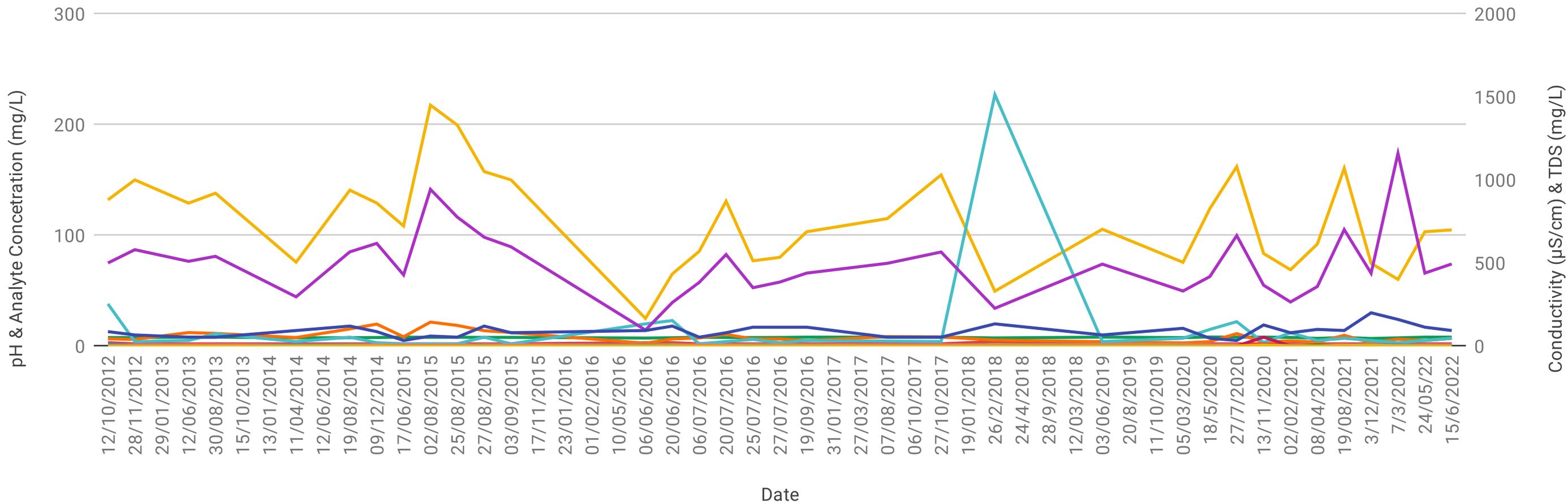


Figure 2.4.1.2 Site 150 - Mulwaree River



- Nitrogen (ammonia)
- Biochemical Oxygen Demand
- Conductivity
- pH
- Sulphate
- Total Suspended Solids
- Total Dissolved Solids
- Total Kjeldahl Nitrogen
- Total Organic Carbon
- Oil & Grease
- Phosphorous
- Total Copper
- Total Iron
- Total Lead
- Total Zinc

Figure 2.4.1.First Flush - Stormwater Outlet

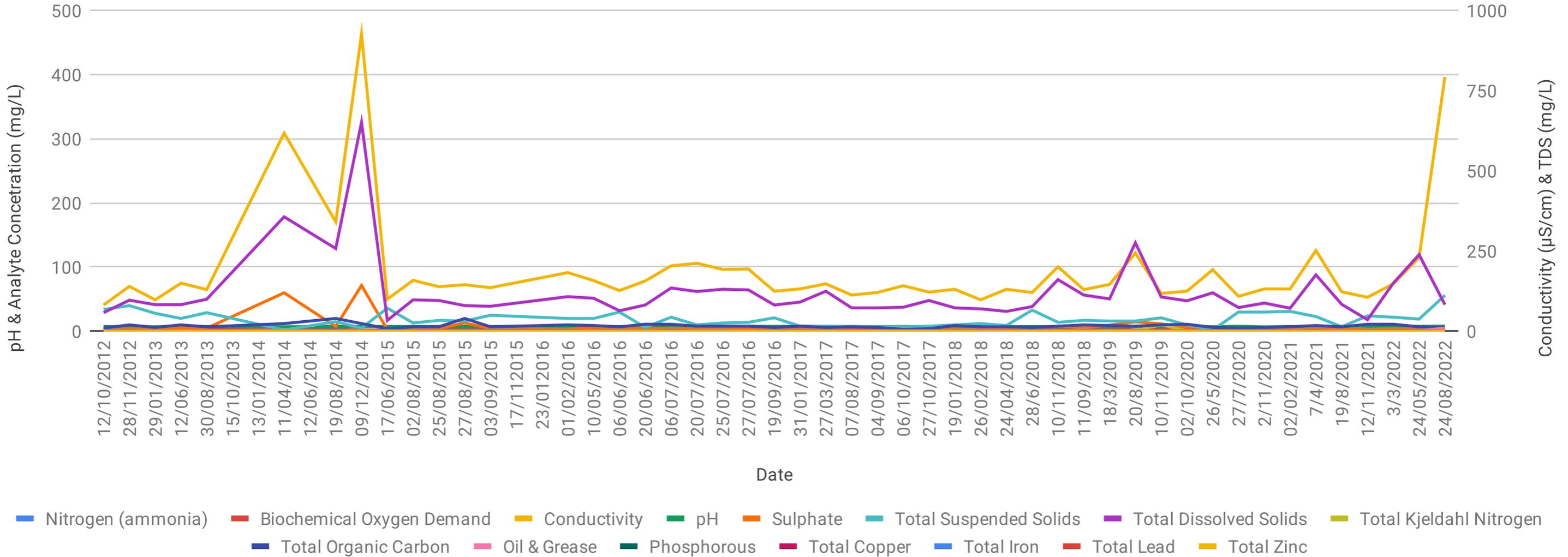


Table 1.1 GMBH1				
Date	20/12/2021	03/02/2022	28/04/2022	25/08/2022
Methane	0	0	0	0
Table 1.2 GMBH2				
Date	20/12/2021	03/02/2022	28/04/2022	25/08/2022
Methane	0	0	0	<0.1
Table 1.3 GMBH4				
Date	20/12/2021	03/02/2022	28/04/2022	25/08/2022
Methane	0	0	0	0

Table 2.1 Landfill Gas Booster (Annual)		
Date		14/12/2021
Carbon dioxide	%	36.6
Dry gas density	mg/m ³	1,520,000
Moisture content	%	0.63
Oxygen (O2)	°C	3.4
Temperature	mg/m ³	4
Volatile organic compounds	m ³ /s	17,000.00
Volumetric flowrate	m ³ /s	0.72

Table 2.2 Landfill Gas Booster (Monthly)													
Date (Monthly)	Unit	20/09/2021	06/10/2021	19/11/2021	17/12/2021	14/01/2022	16/02/2022	08/03/2022	14/04/2022	11/05/2022	17/06/2022	20/07/2022	24/08/2022
Volumetric flowrate	m ³ /s	1.10	1.13	1.10	1.20	1.00	1.12	0.95	1.08	1.06	1.08	1.35	1.52
Hydrogen Sulfide	ppm	788	807	1610	1670	2360	1217	2237	1175	678	644	764	972

Table 3.1 Average Landfill Surface Gas (Monthly)													
Date	Unit	15/09/2022	20/10/2022	22/11/2022	17/12/2022	20/01/2022	24/02/2022	15/03/2022	14/04/2022	03/06/2022	01/07/2022	29/07/2022	25/08/2022
Methane	ppm	49	32.3	33.1	22.2	29	63	47	67	75	51	90	95
Hydrogen	ppm	0.004	0	0.041	0	0.012	0.035	0.031	0.034	0	0.015	0.016	0.114

Table 4.1 Landfill Gas Engine #2 Exhaust		
Carbon Dioxide	%	12.1
Carbon Monoxide	mg/m ³	870
Dry Gas Density	mg/m ³	1,360,000
Moisture Content	%	12
Molecular Weight Of Stack Gases	g/gmol	29
Nitrogen Oxides	mg/m ³	290
Oxygen	%	8.3
Sulfuric Acid Mist & Sulfur Trioxides SO ₃	mg/m ³	0.87
Sulphur Dioxide	mg/m ³	680
Temperature	°C	446
Velocity	m/sec	44
Volatile Organic Compounds	mg/m ³	99.6
Volumetric Flowrate	m ³ /s	4.2
Hydrogen Sulphide	mg/m ³	<0.7
Table 4.2 Landfill Gas Flare #1		
Designed Residence time	seconds	>0.3
Designed Temperature	°C	1293
Hydrogen Sulphide	mg/m ³	<0.6
Table 4.3 Landfill Gas Flare #2		
Designed Residence time	seconds	>0.3
Designed Temperature	°C	1288
Hydrogen Sulphide	mg/m ³	<0.8
Table 4.4 Landfill Gas Flare #3		
Designed Residence time	seconds	>0.3
Designed Temperature	°C	1473
Hydrogen Sulphide	mg/m ³	<0.8

Table 5.1 Particulates - Deposited Matter (Insoluble Solids) g/m2/mth												
Month	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22
DG 22	1.3	0.8	1.6	2	4.6	4.8	1.1	1.6	2.1	0.6	0.7	0.3
DG 34	1.5	3.2	14.4	27.6	13.4	4.6	9.7	8.7	4.4	10.8	8.8	3.8
DG 28	0.6	[1]	2.3	2	0.9	0.7	0.7	0.8	0.6	1.3	0.6	0.8

[1] DDG broken on arrival at ALS therefore not testing

Table 6.1 Site 115 – Allianoyonyiga Creek					
Pollutant	Unit	13/10/2021	20/01/2022	14/03/2022	23/06/2022
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	<0.1
Biochemical Oxygen Demand	mg/L	<2	<2	<2	<2
Conductivity	µS/cm	2200	1150	880	2470
pH	pH	7.79	7.84	8.23	8.08
Total Dissolved Solids	mg/L	1820	1000	624	1300
Total Organic Carbon	mg/L	20	12	14	13
Total Potassium	mg/L	1.2	3.3	2.6	1.7
Dissolved Oxygen	mg/L	9.5	8.5	10.2	10.2
Oxidation-Reduction Potential	mV	208	229	48.3	257

Table 6.2 Spring 2					
Pollutant	Unit	12/11/2021	03/03/2022	08/05/2022	24/08/2022
Nitrogen (ammonia)	mg/L	<0.1	<0.1	0.2	0.36
Biochemical Oxygen Demand	mg/L	3	2	<2	10
Conductivity	µS/cm	383	2160	1280	2589
pH	pH	6.21	7.21	7.36	7.47
Total Dissolved Solids	mg/L	296	1970	966	2600
Total Organic Carbon	mg/L	32	23	29	31
Total Potassium	mg/L	12.2	3.7	1.7	3
Dissolved Oxygen	mg/L	5.9	8.3	9.6	9.53
Oxidation-Reduction Potential	mV	395	482	319	-204.6

Table 6.3 Site 105 – Crisps Creek					
Pollutant	Unit	28/09/2021	03/03/2022	18/05/2022	24/08/2022
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	0.05
Biochemical Oxygen Demand	mg/L	<2	<2	<2	<5
Conductivity	µS/cm	2500	2040	1070	1029
pH	pH	7.44	7.91	7.62	7.98
Total Dissolved Solids	mg/L	1620	1520	658	1100
Total Organic Carbon	mg/L	27	24	23	15
Total Potassium	mg/L	0.3	7.7	14.7	1
Dissolved Oxygen	mg/L	8.7	8.7	11.4	8.5
Oxidation-Reduction Potential	mV	277	535	327	-231.2

Table 6.4 WM200 Raw Water Dam					
Pollutant	Unit	16/11/2021	03/03/2022	18/05/2022	24/08/2022
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	0.015
Biochemical Oxygen Demand	mg/L	<2	<2	<2	6
Conductivity	µS/cm	886	720	799	583
pH	pH	6.78	8.06	7.84	8.49
Total Dissolved Solids	mg/L	764	592	561	560
Total Organic Carbon	mg/L	10	6	6	5
Total Potassium	mg/L	2.9	3	3.7	3
Dissolved Oxygen	mg/L	8.9	9	10	9.87
Oxidation-Reduction Potential	mV	281	360	307	-175.8

Table 6.5 WM201 – Entrance Road Culvert					
Pollutant	Unit	12/11/2021	03/03/2022	13/05/2022	24/08/2022
Nitrogen (ammonia)	mg/L	<0.1	<0.1	0.3	0.5

Biochemical Oxygen Demand	mg/L	<2	<2	2	<5
Conductivity	µS/cm	267	410	496	317.1
pH	pH	5.74	7.1	7.31	7.67
Total Dissolved Solids	mg/L	182	297	382	320
Total Organic Carbon	mg/L	12	8	30	11
Total Potassium	mg/L	7.4	2.8	20.8	5
Dissolved Oxygen	mg/L	8.7	9.3	9	1.03
Oxidation-Reduction Potential	mV	407	474	219	-248.3

Table 6.6 ED3SS – Lagoon 5

Pollutant	Unit	19/11/2021	03/03/2022	24/05/2022	24/08/2022
Nitrogen (ammonia)	mg/L	285	181	153	72
Biochemical Oxygen Demand	mg/L	1420	1630	1520	1690
Conductivity	µS/cm	22200	13500	17800	13345
pH	pH	8.47	8.49	8.38	8.49
Total Dissolved Solids	mg/L	18100	14000	13400	15000
Total Organic Carbon	mg/L	3590	2530	2590	2000
Total Potassium	mg/L	1980	1440	1680	1300
Dissolved Oxygen	mg/L	<0.5	<0.5	<0.6	6.25
Oxidation-Reduction Potential	mV	2.4	164	184	-129.3

Table 6.7 WM203 – Evaporation Dam 3 North

Pollutant	Unit	19/11/2021	03/03/2022	24/05/2022	24/08/2022
Nitrogen (ammonia)	mg/L	83.5	84.8	121	41
Biochemical Oxygen Demand	mg/L	15	215	357	157
Conductivity	µS/cm	37100	22100	31300	19678
pH	pH	8.62	8.6	7.47	8.37
Total Dissolved Solids	mg/L	35400	29200	25700	25000
Total Organic Carbon	mg/L	3360	2890	2540	1600
Total Potassium	mg/L	3910	3110	3100	1900
Dissolved Oxygen	mg/L	<1.7	<0.5	0.6	0
Oxidation-Reduction Potential	mV	186	168	<0.1	-95.3

Table 6.8 Pond 5

Pollutant	Unit	12/11/2021	02/03/2022	13/05/2022	05/08/2022
Nitrogen (ammonia)	mg/L	3.7	1.1	3.3	25.2
Biochemical Oxygen Demand	mg/L	<2	<2	7	11
Conductivity	µS/cm	966	1920	1960	1380
pH	pH	3.18	6.71	3	5.06
Total Dissolved Solids	mg/L	722	1880	1690	1240
Total Organic Carbon	mg/L	4	8	7	57
Total Potassium	mg/L	1.7	4.8	3.6	13.2
Dissolved Oxygen	mg/L	9	8.7	9.5	8.8
Oxidation-Reduction Potential	mV	544	595	467	278

Table 6.9 WM202 – ED3S

Pollutant	Unit	29/10/2021	03/03/2022	24/05/2022	24/08/2022
Nitrogen (ammonia)	mg/L	46.5	33.1	29.2	24
Biochemical Oxygen Demand	mg/L	<2	<2	<2	<5
Conductivity	µS/cm	4950	3500	3320	2590
pH	pH	3.41	3.62	3.8	4.59
Total Dissolved Solids	mg/L	5120	4340	3790	3300

Total Organic Carbon	mg/L	3	5	4	4
Total Potassium	mg/L	15.2	14.6	15.7	14
Dissolved Oxygen	mg/L	8.6	9.2	9.4	8.28
Oxidation-Reduction Potential	mV	388	437	384	8.7

Table 6.10 ED1 - Evaporation Dam 1

Pollutant	Unit	16/11/2021	03/03/2022	10/05/2022	24/08/2022
Nitrogen (ammonia)	mg/L	12.3	14.8	6.9	11
Biochemical Oxygen Demand	mg/L	<2	<2	2	<5
Conductivity	µS/cm	13700	14800	15000	10139
pH	pH	2.54	2.57	4.12	3.01
Total Dissolved Solids	mg/L	22800	27600	17300	23000
Total Organic Carbon	mg/L	15	11	141	26
Total Potassium	mg/L	1.6	2.5	362	65
Dissolved Oxygen	mg/L	9	8.8	10.1	11.31
Oxidation-Reduction Potential	mV	592	581	412	315.1

Table 6.11 ED1 Coffe Dam

Pollutant	Unit	30/09/2021	28/10/2021	24/11/2021	30/12/2021	27/01/2022	24/02/2022	31/03/2022	28/04/2022	26/05/2022	30/06/2022	28/07/2022	25/08/2022
Nitrogen (ammonia)	mg/L	<10	<10	<10	<10	<0.1	<10	<10	<0.1	<10	<1.4	<0.1	<10
Biochemical Oxygen Demand	mg/L	5	7	3	5	4	5	<2	<13	3	3	3	2
Conductivity	µS/cm	17700	19000	20700	20700	20400	20900	20900	19000	18100	20800	19200	18900
pH	pH	8.59	8.52	8.79	8.72	8.75	8.70	8.81	8.77	8.69	8.86	8.69	8.75
Total Dissolved Solids	mg/L	17400	15100	16300	16500	15800	16000	15500	14600	14600	15700	13900	14400
Total Suspended Solids	mg/L	24.7	98	6.9	46.6	35.9	45	30.7	106	73.6	29	8.6	51.5
Chloride	mg/L	3490	3260	3250	3220	3190	3340	3060	3090	3050	1560	1260	2810
Nitrate	mg/L	853	642	748	694	732	779	735	713	610	746	663	644
Phosphorous	mg/L	4.51	3.07	4.29	4.08	3.75	4.40	3.98	4.48	3.74	4.02	3.64	4.11
Chemical Oxygen Demand	mg/L	2460	2010	1950	2310	4060	2000	1980	1920	1780	1600	1660	1770

Table 7.1 Leachate Dam				Table 7.2 Leachate Recirculation System			
Pollutant	Unit*	Frequency	24/08/2022	Pollutant	Unit*	Frequency	24/08/2022
Alkalinity (as CaCO3)	mg/L	Annual	9400	Alkalinity (as CaCO3)	mg/L	Annual	9000
Aluminium	mg/L	Annual	11	Aluminium	mg/L	Annual	3.1
Arsenic	mg/L	Annual	0.29	Arsenic	mg/L	Annual	0.32
Barium	mg/L	Annual	0.25	Barium	mg/L	Annual	0.11
Benzene	mg/L	Annual	<10	Benzene	mg/L	Annual	<10
Cadmium	mg/L	Annual	0.015	Cadmium	mg/L	Annual	0.0043
Calcium	mg/L	Annual	0.11	Calcium	mg/L	Annual	0.064
Chloride	mg/L	Annual	2000	Chloride	mg/L	Annual	2100
Chromium (Hexavalent)	mg/L	Annual	<0.005	Chromium (Hexavalent)	mg/L	Annual	<0.005
Chromium (Total)	mg/L	Annual	0.47	Chromium (Total)	mg/L	Annual	0.51
Cobalt	mg/L	Annual	0.11	Cobalt	mg/L	Annual	0.087
Conductivity	µS/cm	Annual	17696	Conductivity	µS/cm	Annual	14991
Copper	mg/L	Annual	0.034	Copper	mg/L	Annual	0.023
Ethyl Benzene	mg/L	Annual	<10	Ethyl Benzene	mg/L	Annual	<10
Fluoride	mg/L	Annual	1.1	Fluoride	mg/L	Annual	0.8
Lead	mg/L	Annual	0.057	Lead	mg/L	Annual	0.016
Magnesium	mg/L	Annual	120	Magnesium	mg/L	Annual	130
Manganese	mg/L	Annual	2.5	Manganese	mg/L	Annual	0.48
Mercury	mg/L	Annual	<0.0005	Mercury	mg/L	Annual	<0.0005
Nitrate	mg/L	Annual	<0.05	Nitrate	mg/L	Annual	<0.05
Nitrite	mg/L	Annual	<0.05	Nitrite	mg/L	Annual	<0.05
Nitrogen (ammonia)	mg/L	Annual	770	Nitrogen (ammonia)	mg/L	Annual	850
Organo-chlorine pesticides	mg/L	Annual	<0.0004	Organo-chlorine pesticides	mg/L	Annual	<0.0002
Organo-phosphate pesticides	mg/L	Annual	<0.0004	Organo-phosphate	mg/L	Annual	<0.0002
pH	pH	Annual	8.41	pH	pH	Annual	8.42
Phosphorous (Total)	mg/L	Annual	44	Phosphorous (Total)	mg/L	Annual	25
Polycyclic Aromatic	mg/L	Annual	<0.001	Polycyclic Aromatic	mg/L	Annual	<0.001
Potassium	mg/L	Annual	780	Potassium	mg/L	Annual	830
Sodium	mg/L	Annual	1700	Sodium	mg/L	Annual	1700
Sulphate	mg/L	Annual	400	Sulphate	mg/L	Annual	400
Toluene	mg/L	Annual	<10	Toluene	mg/L	Annual	<10
Total Dissolved Solids	mg/L	Annual	10000	Total Dissolved Solids	mg/L	Annual	12000
Total Organic Carbon	mg/L	Annual	2300	Total Organic Carbon	mg/L	Annual	2200
Total Petroleum Hydrocarbons	mg/L	Annual	15.9	Total Petroleum	mg/L	Annual	14.1
Total Phenols	mg/L	Annual	1600	Total Phenols	mg/L	Annual	0.06
Total Suspended Solids	mg/L	Annual	1500	Total Suspended Solids	mg/L	Annual	1400
Xylene	mg/L	Annual	<0.002	Xylene	mg/L	Annual	<0.002
Zinc	mg/L	Annual	16	Zinc	mg/L	Annual	39

Table 8.1 Effluent from Leachate Treatment Plant (LTP)

Date	pH	Conductivity (uS/cm)	COD (mg/L)	BOD (mg/L)	Total Phosphorous (mg/L)	Ammonia (NH4-N) (mg/L)	Nitrate (NO3-N) (mg/L)	TSS (mg/L)	TDS (mg/L)	Chloride (mg/L)
09/09/2021	7.8	16200	1930	3	1.8	<10	909.0	3.2	12200.0	2260
16/09/2021	7.6	15200	1820	3	1.9	<10	670.0	2.5	12000.0	2200
23/09/2021	7.7	15300	1920	2	1.5	<10	659.0	3.7	11400.0	2260
30/09/2021	7.7	12800	2100	3	2.2	<10	792.0	2.3	12600.0	2300
07/10/2021	7.9	15800	1280	3	2.2	<10	652.0	<0.5	12400.0	2410
14/10/2021	7.8	15900	2240	4	2.2	<10	669.0	<0.5	12100.0	2460
21/10/2021	8.0	13700	1940	4	3.5	<10	552.0	4.0	11900.0	2400
28/10/2021	7.9	14600	1640	3	2.1	<10	379.0	6.0	11500.0	2380
04/11/2021	8.0	13400	1540	4	3.7	<10	507.0	0.9	12000.0	2560
11/11/2021	8.0	16600	1980	4	3.2	<10	556.0	1.2	12500.0	2540
18/11/2021	8.1	13700	1280	4	1.3	<10	188.0	<0.5	10400.0	1680
24/11/2021	8.1	11200	1120	3	1.0	<10	201.0	1.1	8360.0	1670
02/12/2021	8.1	8940	990	3	1.1	0.3	149.0	3.6	7160.0	1440
09/12/2021	8.0	8690	1180	<2	2.1	<10	486.0	<0.5	8780.0	1360
16/12/2021	8.0	8200	1120	<2	2.1	<10	300.0	1.4	6980.0	1180
23/12/2021	7.9	7530	1130	<2	2.0	<10	314.0	<0.5	7450.0	1220
30/12/2021	7.9	10400	1100	<2	2.4	<10	306.0	2.0	7950.0	1380
06/01/2022	7.9	8710	1030	3	2.2	<10	340.0	3.1	6670.0	1310
13/01/2022	8.0	6980	957	2	1.7	<0.1	108.0	<0.5	6280.0	1160
20/01/2022	7.5	9730	1110	2	2.0	<0.1	260.0	<0.5	8080.0	1370
27/01/2022	7.6	10600	1200	3	2.1	<0.1	271.0	1.2	7590.0	1370
03/02/2022	7.9	10600	1100	2	5.3	<10	181.0	1.1	7100.0	1540
10/02/2022	8.4	7650	1030	2	1.7	<10	61.9	0.9	6740.0	1460
17/02/2022	8.0	10300	1100	<2	1.4	<10	158.0	2.6	7360.0	1430
24/02/2022	7.8	8140	1070	4	1.9	<10	326.0	1.3	8040.0	1520
03/03/2022	7.9	8900	1120	<2	2.0	<10	368.0	2.8	8530.0	1820
10/03/2022	8.5	8750	982	2	1.0	<10	37.9	<0.5	7160.0	1410
17/03/2022	8.0	8740	806	2	0.9	<10	32.6	<0.5	5950.0	1220
24/03/2022	8.1	8760	869	<2	1.1	<0.1	45.7	0.5	6020.0	1250
31/03/2022	8.0	9420	950	<2	1.0	<10	185.0	<0.5	6440.0	1210
07/04/2022	7.7	10300	921	2	0.7	<0.1	274.0	<0.5	7380.0	1400
14/04/2022	7.8	10400	1060	<2	1.0	<10	289.0	<0.5	7980.0	1380
21/04/2022	7.7	12200	1070	2	0.9	<10	487.0	<0.5	9280.0	1570
28/04/2022	8.1	10900	1090	3	1.2	<0.1	332.0	2.8	8480.0	1610
05/05/2022	7.8	11900	985	<2	0.7	<10	364.0	2.8	8350.0	1720
12/05/2022	7.9	11200	961	3	1.5	<10	148.0	<0.5	7670.0	1520
19/05/2022	8.1	10200	900	3	0.4	<10	72.1	1.9	7000.0	1500
26/05/2022	8.1	9460	850	3	0.3	<10	62.4	0.5	6950.0	1460
02/06/2022	8.0	9690	960	3	0.4	25.7	36.8	1.0	6790.0	1450
09/06/2022	8.0	10300	1080	4	2.1	<10	48.1	<0.5	7020	1500
17/06/2022	7.8	11300	1120	5	6.8	<10	192.0	<0.5	7840	1810
23/06/2022	8.0	10900	1210	3	2.3	<10	116.0	<0.5	8130	1940
30/06/2022	8.1	12400	1160	3	1.8	<10	174.0	0.7	8740	1960
07/07/2022	8.2	12300	1370	4	0.7	<10	48.3	<0.5	8870	1970
14/07/2022	8.0	12200	1010	4	1.7	<10	63.0	2.5	7990	1840
21/07/2022	7.9	12400	1420	4	1.0	<0.1	95.0	0.6	9190	1770
28/07/2022	8.1	9570	1410	3	1.4	<0.1	150.0	1.3	8870	976
04/08/2022	8.0	12500	750	3	2.4	<0.1	21.0	1.0	8950	1870
11/08/2022	8.1	9020	1190	3	4.7	0.2	96.4	<0.5	8590	1780
18/08/2022	8.3	12100	1400	4	6.4	<10	207.0	<0.5	9150	1760
25/08/2022	7.7	13300	1890	<2	7.5	<10	478.0	<0.5	9870	1890
01/09/2022	7.7	13400	1420	3	7.3	6.4	528.0	<0.5	9540	1830

Table 9.1 MB1					
Pollutant	Unit	07/12/2021	05/04/2022	28/06/2022	10/08/2022
Alkalinity (as calcium carbonate)	mg/L	392	375	462	370
Calcium	mg/L	163	179	180	190
Chloride	mg/L	209	255	223	250
Magnesium	mg/L	84	90.6	92.4	98
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	<0.005
pH	pH	7.32	7.73	7.43	8.35
Potassium	mg/L	6.8	30.7	7.4	8.5
Sodium	mg/L	51.1	62.9	64.8	73
Standing water level	mg/L	18.31	15.68	14.47	13.93
Sulfate	mg/L	248	245	270	250
Total dissolved solids	mg/L	1360	1440	8430	1200
Aluminium	mg/L			<0.01	
Arsenic	mg/L			0.150	
Barium	mg/L			<0.001	
Benzene	mg/L			0.00254	
Cadmium	mg/L			0.0004	
Chromium (hexavalent)	mg/L			0.01	
Chromium (total)	mg/L			0.0065	
Cobalt	mg/L			0.0149	
Copper	mg/L			<0.0001	
Ethyl benzene	mg/L			0.277	
Fluoride	mg/L			0.27	
Lead	mg/L			0.26	
Manganese	mg/L			<0.01	
Mercury	mg/L			<0.0135	
Nitrate	mg/L			<0.014	
Nitrite	mg/L			<0.5	
Organochlorine pesticides	mg/L			<20	
Organophosphate pesticides	mg/L			<50	
Polycyclic aromatic hydrocarbons	mg/L			<100	
Toluene	mg/L			<50	
Total organic carbon	mg/L			<0.05	
Total petroleum hydrocarbons	mg/L			<2	
Total Phenolics	mg/L			<1	
Xylene	mg/L			0.104	
Zinc	mg/L			0.01	

Table 9.3 MB3					
Pollutant	Unit	06/12/2021	29/03/2022	29/06/2022	09/08/2022
Alkalinity (as calcium carbonate)	mg/L	296	272	239	250
Calcium	mg/L	119	128	129	130
Chloride	mg/L	446	446	440	430
Magnesium	mg/L	94.2	97.6	101	100
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	<0.005
pH	pH	6.9	7.09	7.71	6.7
Potassium	mg/L	1.4	1.4	12.6	2
Sodium	mg/L	61.9	74.1	80.2	68
Standing water level	mg/L	0.96	0.49	0.2	0.22
Sulfate	mg/L	26.6	27.3	44.1	30
Total dissolved solids	mg/L	1640	1310	1150	1200
Aluminium	mg/L			0.16	
Arsenic	mg/L			<0.001	
Barium	mg/L			0.0355	
Benzene	mg/L			<1	
Cadmium	mg/L			0.00258	
Chromium (hexavalent)	mg/L			0.01	
Chromium (total)	mg/L			0.002	
Cobalt	mg/L			0.0004	
Copper	mg/L			0.0900	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.08	
Lead	mg/L			<0.0474	
Manganese	mg/L			0.0084	
Mercury	mg/L			<0.0001	
Nitrate	mg/L			0.92	
Nitrite	mg/L			<0.01	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			2	
Total petroleum hydrocarbons	mg/L			<0.05	
Total Phenolics	mg/L			<0.05	
Xylene	mg/L			<2	
Zinc	mg/L			0.322	

Table 9.5 MB6					
Pollutant	Unit	14/10/2021	14/03/2022	15/06/2022	09/08/2022
Alkalinity (as calcium carbonate)	mg/L				
Calcium	mg/L				
Chloride	mg/L				
Magnesium	mg/L				
Nitrogen (ammonia)	mg/L				
pH	pH				
Potassium	mg/L				
Sodium	mg/L				

Table 9.2 MB2					
Pollutant	Unit	07/12/2021	29/03/2022	28/06/2022	09/08/2022
Alkalinity (as calcium carbonate)	mg/L	216	364	216	230
Calcium	mg/L	499	530	499	560
Chloride	mg/L	639	768	832	860
Magnesium	mg/L	800	791	786	820
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	0.074
pH	pH	6.83	7.01	7.02	6.3
Potassium	mg/L	1.5	1.6	1.9	2
Sodium	mg/L	244	271	250	250
Standing water level	mg/L	1.42	1.66	1.49	1.28
Sulfate	mg/L	3930	3680	4070	3500
Total dissolved solids	mg/L	7820	7610	2430	7900
Aluminium	mg/L			0.64	
Arsenic	mg/L			0.001	
Barium	mg/L			0.0276	
Benzene	mg/L			<1	
Cadmium	mg/L			0.03850	
Chromium (hexavalent)	mg/L			<0.01	
Chromium (total)	mg/L			0.004	
Cobalt	mg/L			0.0015	
Copper	mg/L			0.016	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.25	
Lead	mg/L			0.02040	
Manganese	mg/L			0.0951	
Mercury	mg/L			<0.0001	
Nitrate	mg/L			<0.05	
Nitrite	mg/L			<0.01	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			3	
Total petroleum hydrocarbons	mg/L			<0.05	
Total Phenolics	mg/L			<0.05	
Xylene	mg/L			<2	
Zinc	mg/L			0.154	

Table 9.4 MB4					
Pollutant	Unit	14/10/2021	09/03/2022	30/06/2022	09/08/2022
Alkalinity (as calcium carbonate)	mg/L	28	31	25	26
Calcium	mg/L	7.91	8.23	12.1	11
Chloride	mg/L	489	318	510	610
Magnesium	mg/L	100	106	104	150
Nitrogen (ammonia)	mg/L	<0.1	<0.1	0.3	<0.005
pH	pH	6.2	6.1	5.55	5.45
Potassium	mg/L	1.7	1.8	19.7	3
Sodium	mg/L	199	197	204	210
Standing water level	mg/L	11.28	10.45	9.87	9.83
Sulfate	mg/L	188	95.9	239	210
Total dissolved solids	mg/L	1620	1180	1240	1500
Aluminium	mg/L			<0.14	
Arsenic	mg/L			<0.001	
Barium	mg/L			0.0357	
Benzene	mg/L			<1	
Cadmium	mg/L			0.01070	
Chromium (hexavalent)	mg/L			<0.01	
Chromium (total)	mg/L			<0.002	
Cobalt	mg/L			0.0233	
Copper	mg/L			0.082	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.015	
Lead	mg/L			0.0091	
Manganese	mg/L			0.221	
Mercury	mg/L			<0.0001	
Nitrate	mg/L			0.27	
Nitrite	mg/L			<0.01	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			<2	
Total petroleum hydrocarbons	mg/L			<0.05	
Total Phenolics	mg/L			<0.05	
Xylene	mg/L			<2	
Zinc	mg/L			3	

Table 9.6 MB7					
Pollutant	Unit	23/12/2021	11/03/2022	29/06/2022	10/08/2022
Alkalinity (as calcium carbonate)	mg/L	695	660	647	690
Calcium	mg/L	274	299	310	330
Chloride	mg/L	2500	2610	2950	2500
Magnesium	mg/L	516	559	572	600
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	<0.005
pH	pH	7.42	7.65	7.45	6.85
Potassium	mg/L	8.3	9	8.3	11
Sodium	mg/L	550	569	569	480

Standing water level	mg/L				
Sulfate	mg/L				
Total dissolved solids	mg/L				
Aluminium	mg/L				
Arsenic	mg/L				
Barium	mg/L				
Benzene	mg/L				
Cadmium	mg/L				
Chromium (hexavalent)	mg/L				
Chromium (total)	mg/L				
Cobalt	mg/L				
Copper	mg/L	NT	NT	NT	NT
Ethyl benzene	mg/L				
Fluoride	mg/L				
Lead	mg/L				
Manganese	mg/L				
Mercury	mg/L				
Nitrate	mg/L				
Nitrite	mg/L				
Organochlorine pesticides	mg/L				
Organophosphate pesticides	mg/L				
Polycyclic aromatic hydrocarbons	mg/L				
Toluene	mg/L				
Total organic carbon	mg/L				
Total petroleum hydrocarbons	mg/L				
Total Phenolics	mg/L				
Xylene	mg/L				
Zinc	mg/L				

Standing water level	mg/L	1.1	1.14	1.06	0.98
Sulfate	mg/L	141	145	167	150
Total dissolved solids	mg/L	5600	4930	4820	5200
Aluminium	mg/L			0.08	
Arsenic	mg/L			<0.001	
Barium	mg/L			131	
Benzene	mg/L			<1	
Cadmium	mg/L			0.0014	
Chromium (hexavalent)	mg/L			<0.01	
Chromium (total)	mg/L			0.002	
Cobalt	mg/L			<0.0002	
Copper	mg/L			0.004	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.27	
Lead	mg/L			<0.0018	
Manganese	mg/L			0.0485	
Mercury	mg/L			<0.0001	
Nitrate	mg/L			0.62	
Nitrite	mg/L			<0.01	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			7	
Total petroleum hydrocarbons	mg/L			<0.05	
Total Phenolics	mg/L			<0.05	
Xylene	mg/L			<2	
Zinc	mg/L			0.1	

Table 9.7 MB10					
Pollutant	Unit	06/12/2021	05/04/2022	28/06/2022	09/08/2022
Alkalinity (as calcium carbonate)	mg/L	311	307	297	290
Calcium	mg/L	513	472	464	590
Chloride	mg/L	1130	950	1030	1100
Magnesium	mg/L	762	665	657	840
Nitrogen (ammonia)	mg/L	<0.1	0.5	<0.1	0.012
pH	pH	7	7.92	7.58	6.59
Potassium	mg/L	1	3	2.2	1
Sodium	mg/L	475	452	424	540
Standing water level	mg/L	1.5	1.75	1.53	1.34
Sulfate	mg/L	3790	3190	3500	3600
Total dissolved solids	mg/L	8310	6660	6730	7300
Aluminium	mg/L			0.18	
Arsenic	mg/L			<0.001	
Barium	mg/L			0.0373	
Benzene	mg/L			<1	
Cadmium	mg/L			0.00415	
Chromium (hexavalent)	mg/L			<0.01	
Chromium (total)	mg/L			0.003	
Cobalt	mg/L			0.0032	
Copper	mg/L			0.014	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.30	
Lead	mg/L			0.01	
Manganese	mg/L			0.577	
Mercury	mg/L			<0.0001	
Nitrate	mg/L			0.46	
Nitrite	mg/L			<0.01	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			4	
Total petroleum hydrocarbons	mg/L			<0.05	
Total Phenolics	mg/L			<0.05	
Xylene	mg/L			<2	
Zinc	mg/L			0.502	

Table 9.8 ED3B					
Pollutant	Unit	23/12/2021	05/04/2022	29/06/2022	10/08/2022
Alkalinity (as calcium carbonate)	mg/L	551	534	498	540
Calcium	mg/L	91.8	101	96.4	95
Chloride	mg/L	1760	1750	1830	1700
Magnesium	mg/L	394	425	411	460
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	0.044
pH	pH	6.98	7.63	7.62	8.03
Potassium	mg/L	9.4	2.4	1.3	0.6
Sodium	mg/L	957	1340	965	820
Standing water level	mg/L	1.91	2.52	2.47	2.38
Sulfate	mg/L	1250	1280	1400	1200
Total dissolved solids	mg/L	5420	5300	5220	5000
Aluminium	mg/L			0.26	
Arsenic	mg/L			<0.001	
Barium	mg/L			0.0363	
Benzene	mg/L			<1	
Cadmium	mg/L			0.0021	
Chromium (hexavalent)	mg/L			0.01	
Chromium (total)	mg/L			<0.002	
Cobalt	mg/L			0.0021	
Copper	mg/L			0.0070	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.35	
Lead	mg/L			0.00620	
Manganese	mg/L			0.289	
Mercury	mg/L			<0.0001	
Nitrate	mg/L			<0.05	
Nitrite	mg/L			<0.01	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			4	
Total petroleum hydrocarbons	mg/L			<0.05	
Total Phenolics	mg/L			<0.05	
Xylene	mg/L			<2	
Zinc	mg/L			0.19	

Table 9.9 WM1					
Pollutant	Unit	02/12/2021	18/03/2022	26/06/2022	24/08/2022
Alkalinity (as calcium carbonate)	mg/L	92	188	205	130
Calcium	mg/L	313	356	235	270
Chloride	mg/L	158	144	181	95
Magnesium	mg/L	68.1	179	114	83
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	0.42
pH	pH	6.75	7.44	7.13	6.65
Potassium	mg/L	76.1	9.7	4.9	8.3
Sodium	mg/L	51.1	92.3	71.6	65
Standing water level	mg/L	29	31.81	30.2	25.38
Sulfate	mg/L	1050	1430	830	950
Total dissolved solids	mg/L	2090	2660	1780	1800
Aluminium	mg/L			0.06	
Arsenic	mg/L			<0.001	
Barium	mg/L			0.0310	
Benzene	mg/L			<1	
Cadmium	mg/L			0.0374	
Chromium (hexavalent)	mg/L			<0.01	
Chromium (total)	mg/L			<0.0001	

Table 9.10 WMS					
Pollutant	Unit	7/12/2021	05/04/2022	29/06/2022	10/08/2022
Alkalinity (as calcium carbonate)	mg/L	607	612	686	810
Calcium	mg/L	46.1	65.9	73.6	120
Chloride	mg/L	972	890	1650	2100
Magnesium	mg/L	131	217	253	380
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	0.12
pH	pH	7.27	7.59	6.98	7.07
Potassium	mg/L	1.5	2.6	2.4	3
Sodium	mg/L	485	678	749	930
Standing water level	mg/L	0.42	0.76	0.34	0.24
Sulfate	mg/L	27.3	22.2	28	92
Total dissolved solids	mg/L	2390	3150	3170	4300
Aluminium	mg/L			0.54	
Arsenic	mg/L			0.020	
Barium	mg/L			0.951	
Benzene	mg/L			<1	
Cadmium	mg/L			0.00071	
Chromium (hexavalent)	mg/L			<0.01	
Chromium (total)	mg/L			0.002	

Cobalt	mg/L			0.003	
Copper	mg/L			0.028	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.5	
Lead	mg/L			0.0126	
Manganese	mg/L			0.234	
Mercury	mg/L			<0.0001	
Nitrate	mg/L			0.64	
Nitrite	mg/L			<0.01	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			4	
Total petroleum hydrocarbons	mg/L			<0.05	
Total Phenolics	mg/L			<0.05	
Xylene	mg/L			<2	
Zinc	mg/L			0.33	

Cobalt	mg/L				0.0016
Copper	mg/L				0.008
Ethyl benzene	mg/L				<2
Fluoride	mg/L				0.46
Lead	mg/L				0.0081
Manganese	mg/L				7.77
Mercury	mg/L				<0.0001
Nitrate	mg/L				<0.05
Nitrite	mg/L				<0.01
Organochlorine pesticides	mg/L				<0.0135
Organophosphate pesticides	mg/L				<0.014
Polycyclic aromatic hydrocarbons	mg/L				<0.5
Toluene	mg/L				<2
Total organic carbon	mg/L				10
Total petroleum hydrocarbons	mg/L				<0.05
Total Phenolics	mg/L				<0.05
Xylene	mg/L				<2
Zinc	mg/L				0.081

Table 9.11 WM6

Pollutant	Unit	07/12/2021	05/04/2022	28/06/2022	10/08/2022
Alkalinity (as calcium carbonate)	mg/L	48	62	43	57
Calcium	mg/L	106	102	107	150
Chloride	mg/L	4870	4660	4940	4400
Magnesium	mg/L	458	453	440	540
Nitrogen (ammonia)	mg/L	<0.1	<0.1	0.3	0.042
pH	pH	5.97	6.48	6.03	5.98
Potassium	mg/L	1.9	2.2	1.6	2
Sodium	mg/L	1980	1210	2250	2000
Standing water level	mg/L	3.17	3.15	3.22	3.15
Sulfate	mg/L	284	270	323	310
Total dissolved solids	mg/L	9270	8020	2850	8100
Aluminium	mg/L			0.22	
Arsenic	mg/L			<0.002	
Barium	mg/L			0.0507	
Benzene	mg/L			<1	
Cadmium	mg/L			0.0036	
Chromium (hexavalent)	mg/L			<0.01	
Chromium (total)	mg/L			<0.002	
Cobalt	mg/L			0.0416	
Copper	mg/L			0.019	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.19	
Lead	mg/L			0.0203	
Manganese	mg/L			0.136	
Mercury	mg/L			0.0002	
Nitrate	mg/L			7.54	
Nitrite	mg/L			<0.01	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			4	
Total petroleum hydrocarbons	mg/L			<0.1	
Total Phenolics	mg/L			<0.05	
Xylene	mg/L			<2	
Zinc	mg/L			0.335	

Table 9.12 MW85

Pollutant	Unit	07/12/2021	05/04/2022	28/06/2022	10/08/2022
Alkalinity (as calcium carbonate)	mg/L	53	107	27	9
Calcium	mg/L	85.8	128	211	310
Chloride	mg/L	224	191	176	480
Magnesium	mg/L	251	359	505	680
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	0.053
pH	pH	6.05	6.73	5.77	5.02
Potassium	mg/L	2.3	2	1.9	2
Sodium	mg/L	294	413	304	300
Standing water level	mg/L	5.77	5	4.8	4.54
Sulfate	mg/L	1780	2730	3960	4300
Total dissolved solids	mg/L	2140	4720	5710	6800
Aluminium	mg/L			7.5	
Arsenic	mg/L			0.007	
Barium	mg/L			0.0193	
Benzene	mg/L			<1	
Cadmium	mg/L			2.08	
Chromium (hexavalent)	mg/L			<0.01	
Chromium (total)	mg/L			0.003	
Cobalt	mg/L			0.914	
Copper	mg/L			1.03	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.47	
Lead	mg/L			0.0519	
Manganese	mg/L			19.5	
Mercury	mg/L			<0.0005	
Nitrate	mg/L			24.6	
Nitrite	mg/L			<0.01	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			8	
Total petroleum hydrocarbons	mg/L			<0.05	
Total Phenolics	mg/L			<0.05	
Xylene	mg/L			<2	
Zinc	mg/L			275	

Table 9.13 MW8D

Pollutant	Unit	07/12/2021	05/04/2022	28/06/2022	10/08/2022
Alkalinity (as calcium carbonate)	mg/L	60	15	15	<5
Calcium	mg/L	135	307	348	270
Chloride	mg/L	232	199	257	210
Magnesium	mg/L	363	760	837	510
Nitrogen (ammonia)	mg/L	<0.1	0.4	0.4	1.3
pH	pH	6.1	5.35	5.04	4.13
Potassium	mg/L	2.3	4.1	3.5	8.3
Sodium	mg/L	353	438	402	150
Standing water level	mg/L	5.41	5	4.75	4.55
Sulfate	mg/L	2480	5350	6500	4200
Total dissolved solids	mg/L	4260	7890	9020	6000
Aluminium	mg/L			5.3	
Arsenic	mg/L			0.002	
Barium	mg/L			0.0232	
Benzene	mg/L			<1	
Cadmium	mg/L			1.260	
Chromium (hexavalent)	mg/L			<0.01	
Chromium (total)	mg/L			0.002	
Cobalt	mg/L			0.613	
Copper	mg/L			3.42	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.91	
Lead	mg/L			0.02120	
Manganese	mg/L			19.1	
Mercury	mg/L			<0.0001	
Nitrate	mg/L			6.62	
Nitrite	mg/L			<0.01	

Table 9.14 MW95

Pollutant	Unit	23/12/2021	05/04/2022	28/06/2022	10/08/2022
Alkalinity (as calcium carbonate)	mg/L				
Calcium	mg/L				
Chloride	mg/L				
Magnesium	mg/L				
Nitrogen (ammonia)	mg/L				
pH	µS/cm				
Potassium	mg/L				
Sodium	mg/L				
Standing water level	mg/L				
Sulfate	mg/L				
Total dissolved solids	pH				
Aluminium	mg/L				
Arsenic	mg/L				
Barium	mg/L				
Benzene	mg/L				
Cadmium	mg/L				
Chromium (hexavalent)	mg/L				
Chromium (total)	mg/L				
Cobalt	mg/L	NT	NT	NT	NT
Copper	mg/L				
Ethyl benzene	mg/L				
Fluoride	mg/L				
Lead	mg/L				
Manganese	mg/L				
Mercury	mg/L				
Nitrate	mg/L				
Nitrite	mg/L				

Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			7	
Total petroleum hydrocarbons	mg/L			<0.05	
Total Phenolics	mg/L			<0.05	
Xylene	mg/L			<2	
Zinc	mg/L			180	

Organochlorine pesticides	mg/L				
Organophosphate pesticides	mg/L				
Polycyclic aromatic hydrocarbons	mg/L				
Toluene	mg/L				
Total organic carbon	mg/L				
Total petroleum hydrocarbons	mg/L				
Total Phenolics	mg/L				
Xylene	mg/L				
Zinc	mg/L				

Table 9.15 MW105					
Pollutant	Unit	07/12/2021	05/04/2022	28/06/2022	10/08/2022
Alkalinity (as calcium carbonate)	mg/L				
Calcium	mg/L				
Chloride	mg/L				
Magnesium	mg/L				
Nitrogen (ammonia)	mg/L				
pH	pH				
Potassium	mg/L				
Sodium	mg/L				
Standing water level	mg/L				
Sulfate	mg/L				
Total dissolved solids	mg/L				
Aluminium	mg/L				
Arsenic	mg/L				
Barium	mg/L				
Benzene	mg/L				
Cadmium	mg/L				
Chromium (hexavalent)	mg/L				
Chromium (total)	mg/L				
Cobalt	mg/L	NT	NT	NT	NT
Copper	mg/L				
Ethyl benzene	mg/L				
Fluoride	mg/L				
Lead	mg/L				
Manganese	mg/L				
Mercury	mg/L				
Nitrate	mg/L				
Nitrite	mg/L				
Organochlorine pesticides	mg/L				
Organophosphate pesticides	mg/L				
Polycyclic aromatic hydrocarbons	mg/L				
Toluene	mg/L				
Total organic carbon	mg/L				
Total petroleum hydrocarbons	mg/L				
Total Phenolics	mg/L				
Xylene	mg/L				
Zinc	mg/L				

Table 9.16 MB28					
Pollutant	Unit	23/12/2021	05/04/2022	28/06/2022	10/08/2022
Alkalinity (as calcium carbonate)	mg/L	660	649	631	700
Calcium	mg/L	168	152	108	110
Chloride	mg/L	1810	1490	1070	980
Magnesium	mg/L	426	382	277	290
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	<0.005
pH	pH	7.44	7.82	7.49	8.2
Potassium	mg/L	13.5	2.1	1.3	1
Sodium	mg/L	795	763	653	660
Standing water level	mg/L	5.67	6.3	6.85	5.62
Sulfate	mg/L	751	717	738	750
Total dissolved solids	mg/L	5220	4470	3430	3400
Aluminium	mg/L			0.83	
Arsenic	mg/L			0.002	
Barium	mg/L			0.024	
Benzene	mg/L			<1	
Cadmium	mg/L			0.00557	
Chromium (hexavalent)	mg/L			<0.01	
Chromium (total)	mg/L			0.006	
Cobalt	mg/L			0.0018	
Copper	mg/L			0.01	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.84	
Lead	mg/L			0.0105	
Manganese	mg/L			0.0586	
Mercury	mg/L			0.0002	
Nitrate	mg/L			2.66	
Nitrite	mg/L			<0.01	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			5	
Total petroleum hydrocarbons	mg/L			<0.05	
Total Phenolics	mg/L			<0.05	
Xylene	mg/L			<2	
Zinc	mg/L			0.663	

Table 9.17 MB33					
Pollutant	Unit	01/12/2021	17/03/2022	25/05/2022	24/08/2022
Alkalinity (as calcium carbonate)	mg/L	156	183	325	230
Calcium	mg/L	88.6	98.7	109	75
Chloride	mg/L	135	125	135	140
Magnesium	mg/L	<0.1	<0.1	6.15	<0.5
Nitrogen (ammonia)	mg/L	0.8	0.9	0.8	0.72
pH	pH	11.4	11.6	11.6	11.39
Potassium	mg/L	106	112	129	81
Sodium	mg/L	213	227	262	220
Standing water level	mg/L	43.54	42.86	42.33	46.19
Sulfate	mg/L	479	418	483	420
Total dissolved solids	mg/L	1230	1130	1220	1100
Aluminium	mg/L			0.97	
Arsenic	mg/L			0.002	
Barium	mg/L			0.0812	
Benzene	mg/L			<1	
Cadmium	mg/L			0.00134	
Chromium (hexavalent)	mg/L			<0.01	
Chromium (total)	mg/L			0.006	
Cobalt	mg/L			0.0058	
Copper	mg/L			0.024	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.36	
Lead	mg/L			0.0298	
Manganese	mg/L			0.195	
Mercury	mg/L			<0.0001	
Nitrate	mg/L			<0.05	
Nitrite	mg/L			0.88	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			5	
Total petroleum hydrocarbons	mg/L			<0.05	
Total Phenolics	mg/L			<50	
Xylene	mg/L			<2	
Zinc	mg/L			3.1	

Table 9.18 SP2-MW1					
Pollutant	Unit	23/12/2021	17/03/2022	28/06/2022	09/08/2022
Chloride	mg/L	790	823	911	770
Conductivity	µS/cm	2800	2590	3640	177.1
pH	mg/L	7.12	7.68	7.26	5.44
Sulphate	mg/L	170	104	101	170
Total Dissolved Solids	mg/L	2220	1900	2010	1900
Cadmium	mg/L	0.00	0.00	0.00157	0.00
Copper	mg/L	0.001	0.009	0.016	0.004
Lead	mg/L	<0.0002	<0.0002	<0.0446	<0.001
Zinc	mg/L	0.144	0.651	0.25	0.19
Standing Water Level	m	1.36	1.26	1.24	1.41

Table 9.19 MW-FRC1					
Pollutant	Unit	07/12/2021	29/03/2022	28/06/2022	09/08/2022
Chloride	mg/L	1230	1230	1220	1100
Conductivity	µS/cm	4020	5340	4600	3181
pH	mg/L	7.27	7.43	7.27	7.67
Sulphate	mg/L	299	427	122	120
Total Dissolved Solids	mg/L	3580	3530	2520	2600
Cadmium	mg/L	0.01	0.00369	0.00045	0.00
Copper	mg/L	0.008	0.004	0.012	0.002
Lead	mg/L	<0.0002	<0.0002	<0.0104	<0.001
Zinc	mg/L	0.192	0.147	0.176	0.031
Standing Water Level	m	0.91	1.09	0.88	0.72

Table 9.20 MB105					
Pollutant	Unit	06/12/2021	05/04/2022	05/04/2022	09/08/2022
Chloride	mg/L	146	220	327	390
Conductivity	µS/cm	2480	3280	4600	3614
pH	mg/L	7.09	7.67	7.23	7.37
Sulphate	mg/L	1410	1810	2240	2100
Total Dissolved Solids	mg/L	2480	3680	4030	4300
Cadmium	mg/L	0.03	0.0236	0.02	0.00
Copper	mg/L	0.005	0.004	0.013	0.002
Lead	mg/L	<0.0002	<0.0002	<0.0025	<0.001
Zinc	mg/L	1.3	0.753	2.51	0.31
Standing Water Level	m	0.35	0.65	0.4	0.32

Table 9.21 MB34					
Pollutant	Unit	02/12/2021	17/03/2022	25/05/2022	24/08/2022
Alkalinity (as calcium carbonate)	mg/L	262	251	306	290
Calcium	mg/L	61.8	89.9	137	82
Chloride	mg/L	274	240	299	280
Magnesium	mg/L	111	104	144	110
Nitrogen (ammonia)	mg/L	<0.1	<0.1	0.4	0.072
pH	pH	7.28	7.37	7.23	6.9
Potassium	mg/L	5.4	8.7	9.3	5
Sodium	mg/L	67.8	74.9	94.5	79
Standing water level	mg/L	56.49	54.85	54.19	54.8
Sulfate	mg/L	193	243	326	230
Total dissolved solids	mg/L	1020	1050	1270	1400
Aluminium	mg/L			8.42	
Arsenic	mg/L			0.034	
Barium	mg/L			0.0112	
Benzene	mg/L			<1	
Cadmium	mg/L			0.0159	
Chromium (hexavalent)	mg/L			<0.01	
Chromium (total)	mg/L			0.061	
Cobalt	mg/L			0.026	
Copper	mg/L			0.248	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			0.64	
Lead	mg/L			0.322	
Manganese	mg/L			1.32	
Mercury	mg/L			<0.0001	
Nitrate	mg/L			0.11	
Nitrite	mg/L			<0.01	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			5	
Total petroleum hydrocarbons	mg/L			<0.05	
Total Phenolics	mg/L			<50	
Xylene	mg/L			<2	
Zinc	mg/L			7.7	

Table 9.22 MB35					
Pollutant	Unit	1/12/21	17/03/2022	25/05/2022	24/08/2022
Alkalinity (as calcium carbonate)	mg/L	220	193	325	210
Calcium	mg/L	429	412	428	360
Chloride	mg/L	282	155	116	180
Magnesium	mg/L	420	459	623	550
Nitrogen (ammonia)	mg/L	8.8	4.2	4.1	9.5
pH	µS/cm	5.79	5.81	5.75	5.88
Potassium	mg/L	117	66.7	34.4	22
Sodium	mg/L	851	748	452	300
Standing water level	mg/L	39.63	38.3	38.55	36.7
Sulfate	mg/L	10600	6200	6410	8500
Total dissolved solids	pH	16700	16400	16400	14000
Aluminium	mg/L			4.23	
Arsenic	mg/L			0.022	
Barium	mg/L			0.0323	
Benzene	mg/L			<1	
Cadmium	mg/L			0.00399	
Chromium (hexavalent)	mg/L			<1	
Chromium (total)	mg/L			0.007	
Cobalt	mg/L			0.988	
Copper	mg/L			0.045	
Ethyl benzene	mg/L			<2	
Fluoride	mg/L			3.76	
Lead	mg/L			0.037	
Manganese	mg/L			37.2	
Mercury	mg/L			<0.001	
Nitrate	mg/L			<0.5	
Nitrite	mg/L			0.51	
Organochlorine pesticides	mg/L			<0.0135	
Organophosphate pesticides	mg/L			<0.014	
Polycyclic aromatic hydrocarbons	mg/L			<0.5	
Toluene	mg/L			<2	
Total organic carbon	mg/L			38	
Total petroleum hydrocarbons	mg/L			0.13	
Total Phenolics	mg/L			<0.05	
Xylene	mg/L			<2	
Zinc	mg/L			366	

Table 10.1 P38				
P38A				
Date	03/12/2021	03/02/2021	09/05/2022	10/08/2022
Depth to Water	37.63	38.20	36.00	34.00
Depth to Water (Reduced Level)	777.68	777.11	779.31	781.31
P38B				
Date	03/12/2021	03/02/2022	09/05/2022	10/08/2022
Depth to Water	76.00	67.40	66.20	64.10
Depth to Water (Reduced Level)	739.31	747.91	749.11	751.21
Table 10.2 P200				
P200A				
Date	03/12/2021	03/02/2022	09/05/2022	10/08/2022
Depth to Water	17.89	17.70	17.05	16.00
Depth to Water (Reduced Level)	797.42	797.61	798.26	799.31
P200B				
Date	03/12/2021	03/02/2022	09/05/2022	10/08/2022
Depth to Water	16	16.30	16.20	15.80
Depth to Water (Reduced Level)	799.31	799.01	799.11	799.51
Table 10.3 P58				
P58A				
Date	03/12/2021	03/02/2022	09/05/2022	10/08/2022
Depth to Water	42	42.05	41.90	40.20
Depth to Water (Reduced Level)	773.31	773.26	773.41	775.11
P58B				
Date	03/12/2021	03/02/2022	09/05/2022	10/08/2022
Depth to Water	58.15	57.50	56.90	55.50
Depth to Water (Reduced Level)	757.16	757.81	758.41	759.81
Table 10.4 P59				
P59A				
Date	03/12/2021	03/02/2022	09/05/2022	10/08/2022
Depth to Water	15	15.74	15.00	14.50
Depth to Water (Reduced Level)	800.31	799.57	800.31	800.81
P59B				
Date	03/12/2021	03/02/2022	09/05/2022	10/08/2022
Depth to Water	16.27	16.40	16.20	16.20
Depth to Water (Reduced Level)	799.04	798.91	799.11	799.11
Table 10.5 P100				
P100A				
Date	03/12/2021	03/02/2022	09/05/2022	10/08/2022
Depth to Water	41	40.9	39.8	39.6
Depth to Water (Reduced Level)	774.31	774.41	775.51	775.71
P100B				
Date	03/12/2021	03/02/2022	09/05/2022	10/08/2022
Depth to Water	56.27	56.05	55.40	54.40
Depth to Water (Reduced Level)	759.04	759.26	759.91	760.91

Table 11.1 Site 110 - Upstream					
Pollutant	Unit	12/11/2021	03/03/2022	24/05/2022	24/08/2022
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	<0.02
Biochemical Oxygen Demand	mg/L	<3	<2	<2	<5
Conductivity	µS/cm	428	982	870	596
pH	pH	7.72	7.91	8.06	7.93
Sulphate	mg/L	31.2	31.7	49.1	68
Total Suspended Solids	mg/L	32	14	5	<5
Total Dissolved Solids	mg/L	316	654	543	580
Total Kjeldahl Nitrogen	mg/L	1.72	1	1.01	0.5
Total Organic Carbon	mg/L	32	16	17	13
Oil & Grease	mg/L	<1	<1	<1	<5
Phosphorous	mg/L	<0.19	<0.04	<0.02	<0.05
Copper	mg/L	0.022	0.017	0.008	0.001
Iron	mg/L	1.18	1.05	0.21	0.021
Lead	mg/L	0.0039	0.007	<0.0002	<0.001
Zinc	mg/L	0.34	0.13	0.182	0.017

Table 11.2 Site 150 - Mulwaree River					
Pollutant	Unit	03/12/2021	07/03/2022	24/05/2022	15/06/2022
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.1	<0.1
Biochemical Oxygen Demand	mg/L	<2	<2	<2	<2
Conductivity	µS/cm	498	401	688	699
pH	pH	6.83	7.39	8.02	8.02
Sulphate	mg/L	19.6	41.5	32.7	46.5
Total Suspended Solids	mg/L	5	3	5	7
Total Dissolved Solids	mg/L	438	1160	439	494
Total Kjeldahl Nitrogen	mg/L	1.46	0.74	0.96	0.42
Total Organic Carbon	mg/L	30	24	17	14
Oil & Grease	mg/L	<1	<1	<1	<1
Phosphorous	mg/L	<0.05	<0.04	0.02	<0.01
Copper	mg/L	0.018	0.017	0.006	0.005
Iron	mg/L	1.01	1.02	0.5	0.54
Lead	mg/L	0.0007	0.0001	0.0006	0.0009
Zinc	mg/L	0.522	0.244	0.098	0.075

Table 11.3 First Flush Stormwater Outlet					
Pollutant	Unit	12/11/2021	03/03/2022	24/05/2022	24/08/2022
Nitrogen (ammonia)	mg/L	<0.1	<0.1	<0.2	<0.018
Biochemical Oxygen Demand	mg/L	4	5	3	<5
Conductivity	µS/cm	106	148	230	793
pH	pH	8.11	7.28	7.69	8.08
Sulphate	mg/L	6.6	8.5	7.9	5
Total Suspended Solids	mg/L	24	22	19	56
Total Dissolved Solids	mg/L	36	150	239	83
Total Kjeldahl Nitrogen	mg/L	0.77	1.17	0.8	0.4
Total Organic Carbon	mg/L	11	11	7	6
Oil & Grease	mg/L	<1	<1	<1	<5
Phosphorous	mg/L	0.11	0.08	0.05	<0.05
Copper	mg/L	0.006	0.008	0.004	<0.001
Iron	mg/L	0.99	1.39	0.92	0.068
Lead	mg/L	0.0036	0.0036	0.0018	<0.001
Zinc	mg/L	0.054	0.097	0.05	0.002

Table 12.1 Particulates - Deposited Matter (Insoluble Solids) g/m2/mth												
Month	Sep-22	Oct-22	Nov-22	Dec-22	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22
DG18	1.5	0.4	3.4	10.4	17.4	10.6	19.9	1.5	1.1	0.6	0.8	0.9

Woodlawn Bioreactor Complaints Register

Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
05/09/2022	7:50:00 am	EPA Environmental Line	Odour	Braidwood Road, Tarago	Complainant reported being impacted by a "bad odour or rotten eggs" when they went outside their house. They alleged the odour was coming from "Veolia Woodlawn".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
05/09/2022	7:20:00 am	EPA Environmental Line	Odour	Braidwood Road, Lake Bathurst	Complainant reported being impacted by a "very strong offensive rotten refuse odour" that they attributed to the Woodlawn waste facility. They said "no wind today, the air was very still" and rated the odour strength as 10 out of 10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
01/09/2022	6:00:00 pm	EPA Environmental Line	Odour	Cullulla Road, Tarago	Complainant reported being impacted by "a rotting garbage smell consistent with the smell we have noticed from Woodlawn in the past". They said they "noticed it at approximately 6pm when we were driving along Cullulla road to Tarago. It was strongest in the section from Mayfield road and coming down the hill into Tarago.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
01/09/2022	10:15:00 am	EPA Environmental Line	Odour	Collector Road, Tarago	Complainant reported being impacted by "a disgusting smell emanating from Veolia's Woodlawn bio-reactor". The complainant said they noticed the odour "when passing Collector Road and driving south towards Canberra". They said "It was very strong and made me gag as it entered the car when I was driving through".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
26/08/2022	9:00:00 am	EPA Environmental Line	Odour	Braidwood Road, Lake Bathurst	Complainant reported being impacted by a very strong odour that they alleged was coming from Woodlawn waste facility. They said the wind conditions were "virtually still" at 9am when they first noticed the odour and that a very slight breeze started at 9.30am from the southeast.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
26/08/2022	7:45:00 am	EPA Environmental Line	Odour	King Street, Tarago	Caller reported being impacted by an odour that was "quite bad and noticeable" as they were leaving their house to go to work. They said the odour has been an ongoing issue however they have not reported incidents in the past, but feel it is now important to start do so. They said on one occasion a Council Inspector was visiting the property and noticed how bad the odour was. They said that when they moved into the area "the odour was a lot more open and widespread" and advised it has improved over the years.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
24/08/2022	7:30:00 am	EPA Environmental Line	Odour	Braidwood Road, Lake Bathurst	Complainant reported being impacted by a very strong garbage smell that they alleged was coming from "Veolia Woodlawn". They said it was still occurring at the time of their call at 11:28 AM. They said "the odour is disgusting" and reported that it had given them a headache after being exposed to it all morning while outside working on the farm.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
20/08/2022	5:00:00 pm	EPA Environmental Line	Odour	Tarago township	Complainant reported being impacted by a "strong putrid garbage odour coming from Woodlawn Eco Precinct". They said they were unable to operate the air conditioner in their vehicle whilst driving through Tarago "due to stench".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
19/08/2022	7:00:00 pm	EPA Environmental Line	Odour	Loaded Dog Hotel, Tarago	Complainant reported a "strong rubbish odour" in the air when they "went to get dinner at the pub". They said "there was a western wind and in the past, whenever the wind blows in this direction, a strong rubbish odour can be smelt in the area". They said that they wanted to sit outside however were unable to due to the strong smell in the air. They said they first noticed it when arriving at 7pm and again when leaving at 7:50pm.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
17/08/2022	5:30:00 pm	EPA Environmental Line	Odour	Rosebery Street, Tarago	Complainant reported being impacted by an odour they attributed to the Woodlawn waste facility. They said it had a strength of 3/5 and smelled like sewerage. They said the odour caused them to stop all outdoor activities.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
17/08/2022	9:00:00 am	EPA Environmental Line	Odour	Leahys Road, Tarago	Complainant reported being impacted by offensive odour that they attributed to the Woodlawn waste facility. They described the odour as "a rotten refuse odour - e.g. sour milk/dirty nappies, awful, nauseating".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
17/08/2022	7:30:00 am	EPA Environmental Line	Odour	Bus stop at corner Braidwood Road and Lumley Road Tarago	Complainant reported being impacted by offensive odour that they attributed to the Woodlawn waste facility. They described the odour as "a rotten refuse odour - e.g. sour milk/dirty nappies, awful, nauseating".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
16/08/2022	7:15:00 pm	EPA Environmental Line	Odour	Braidwood Road, Tarago	Complainant reported being impacted by a "really bad odour coming from the Woodlawn Mine".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
13/08/2022	Unknown	E-mail	Odour	Rosebery Street, Tarago	Complainant reported that "While I appreciate that water causes grief in terms of odour, and that odour has been an issue for the past couple of weeks, it has been in the order of understandable; however, this morning is just foul.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
13/08/2022	8:00:00 am	EPA Environmental Line	Odour	Rosebery Street, Tarago	Complainant reported being impacted by "a very strong odour from the landfill. Over the past few weeks the odour has been noticeable but today it running close to a 9 or a 10".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
12/08/2022	4:02:00 pm	EPA Environmental Line	Odour	Braidwood Road, Tarago	Complainant reported being impacted by odours allegedly coming from the Woodlawn Eco Precinct. They said "again we cannot go outside or open any windows and the smell gets into the house making it very unpleasant.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
08/08/2022	8:00:00 am	EPA Environmental Line	Odour	Mooneys Road, Currawang	Complainant reported that "the odour from the Woodlawn bioreactor is very strong this morning. The odour is so strong we can taste, which has left us gagging if we go outside. The odour is therefore more than a 10 out of 10 in strength. It smells of rotting eggs and sewerage.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
02/08/2022	8:00:00 am	EPA Environmental Line	Odour	Tarago Public School	Complainant reported being impacted by a "vile" offensive odour when dropping their child off at Tarago Public School. They said the odour smelt like "rotting garbage/dirty nappies/sour milk" and alleged it was coming from "Veolia Woodlawn".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.

Woodlawn Bioreactor Complaints Register

Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
30/07/2022	7:00:00 pm	EPA Environmental Line	Odour	Braidwood Road, Tarago	Complainant reported being impacted by a "garbage" odour allegedly coming from the Woodlawn Eco Precinct. They rated the strength of the odour as 5/5. They said that they "have smelt the odour on and off over the last few months but tonight it was very, very bad. We have multiple air purifiers inside the house and it still couldn't stop the smell. The smell is outside and inside the house, we can't go outside. Strong smell of organic waste slash garbage. Nausea resulted from the smell it was unbearable."	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
30/07/2022	5:00:00 am	EPA Environmental Line	Odour	Braidwood Road, Tarago	Complainant reported being impacted by a "garbage" odour allegedly coming from the Woodlawn Eco Precinct. They rated the strength of the odour as 3/5.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
29/07/2022	2:00:00 pm	EPA Environmental Line	Odour	Braidwood Road, Lake Bathurst	Complainant reported being impacted by an offensive odour that they alleged was coming from the Woodlawn Bioreactor. They said that the "odour is quite strong (7/10) and smells like rotting food/garbage".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
28/07/2022	Not Specified	EPA Environmental Line	Odour	Ryans Road, Quialigo	Complainant reported being impacted by a "smell emulating from the waste facility at Tarago today". They said "The smell made me feel quite unwell, affecting my sinuses and breathing".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
28/07/2022	7:30:00 am	EPA Environmental Line	Odour	Bus stop at corner of Lumley Rd and Braidwood Road, Tarago	Complainant reported being affected by "strong, offensive, nauseating odour" that they to the Woodlawn waste facility. They described the odour as "like dirty nappies/sour milk, rotten refuse". They said they were compelled to keep their child in the car instead of waiting at the bus stop as planned. They advised that, from previous experience, the odour tends to make the child feel very unwell when waiting and then they get travel sick on the bus, including vomiting. Waiting in the car then delayed the complainant to get to work. They advised that this recurrent problem is starting to lead to concerns being raised at their work about lateness.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
25/07/2022	10:00:00 am	EPA Environmental Line	Odour	Collector Road, 3km from entrance to Woodlawn premises	An EPA officer reported being impacted by "a strong putrescible waste type odour" whilst driving along Collector Road approximately 3km south east of the entrance to the Woodlawn mine. The officer advised that "the odour had a sweet, very pungent garbage smell, with a strength of 7/10".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
24/07/2022	11:58:00 am	EPA Environmental Line	Odour	Currawang Road, Currawang	Complainant reported being impacted by a "bad odour" they described as a "natural gas", "methane", "fart-like smell". They stated that they had never noticed it until about 3 weeks ago. They said the smell is mostly dependent on wind, a calm still day will have a worse smell.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.

Woodlawn Bioreactor Complaints Register

Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
16/07/2022	8:45:00 am	EPA Environmental Line	Odour	Braidwood Road, south of Tarago	Complainant reported being impacted by a "rotten garbage" odour with a strength of 4/10. They said the odour lasted for about 2 hours between 8:45am and 11am. In describing the odour, the reporter also mentioned it had "rotten eggs or sulfide", "faecal, manure, sewer" and "compost" characteristics (as per descriptors on the EPA's "How do I report odours?" factsheet). They also stated that "Odour wafted in while driving. Changed aircon over to internal circulation - could not remove the smell. Was not until well past Tarago with aircon on external source before smell was gone."	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
16/07/2022	8:45:00 am	E-mail	Odour	Braidwood Road, south of Tarago	Complainant reported being impacted by a smell of rotten garbage at 8:45am and again at 11am. They said it had a strength of 4/10. Wind was reported to be a Light W or NW wind.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
16/07/2022	8:30:00 am	EPA Environmental Line	Odour	Rosebery Street, Tarago	Complainant reported being impacted by a "odour from the Veolia precinct". They described the odour as "a rubbish tip" smell and rated its strength as 2/5. They said the presence of the odour caused them to bring their washing inside.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
16/07/2022	8:00:00 am	EPA Environmental Line	Odour	Cullulla Road, Tarago	Complainant reported being impacted by "a very unpleasant garbage odour with a gassy smell that resembles leachate". They also stated that "the current wind situation is 0 kmh".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
15/07/2022	11:15:00 am	Community Feedback Line	Odour	King Street, Tarago	Complainant reported being impacted by an odour, as well as during the two previous evenings. They described the odour to be ever so slightly different from usual, more sulfuric possibly.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
12/07/2022	5:30:00 am	E-mail	Odour	Boro Road, near Tarago	Complainant reported being impacted by a smell of rotten garbage. They said it had a strength of 4/10. Wind was reported to be a Light W or NW wind.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
08/07/2022	9:00:00 am	EPA Environmental Line	Odour	Tarago Village	Complainant reported being impacted by a "a very strong methane gas odour in the air" while driving through Tarago	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
07/07/2022	10:00:00 am	EPA Environmental Line	Odour	Glenoval Road, Lake Bathurst	Complainant reported a "stench" that they alleged was coming from the Woodlawn Landfill. They said the "stench has been going on and off over last week". They said "this morning the odour was very strong and there was no wind" and described it as a "very methane odour".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
07/07/2022	8:30:00 am	EPA Environmental Line	Odour	Rosebery Street, Tarago	Complainant reported being impacted by an offensive "rubbish tip" odour that they alleged was coming from "Veolia Tarago". They reported the strength of the odour as 3/5.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
05/07/2022	8:10:00 am	EPA Environmental Line	Odour	Breadalbane Road, Collector	Complainant reported being affected by a "very strong rotten egg gas smell from Veolia Woodlawn". The complainant said they noticed the odour when they went outside their house.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
01/07/2022	7:30:00 am	EPA Environmental Line	Odour	Mooneys Road, Currawang	Complainant reported being affected by offensive odour allegedly coming from the Woodlawn Bioreactor. The complainant described the odour as smelling of "rotting vegetation/onions, rotting eggs and/or sewage".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
30/06/2022	6:55:00 pm	EPA Environmental Line	Odour	Federal Highway, Lake George, near Badcoe VC rest area	EPA officer detected a "sickly sweet odour" for approximately 30 seconds whilst travelling in their vehicle south on the Federal Highway along Lake George, at or near the Badcoe VC rest area. They said the odour was very reminiscent of that which they had previously experienced on site at that Woodlawn Landfill.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
30/06/2022	9:30:00 am	Community Feedback Line	Odour	King Street, Tarago	Complainant reported being impacted by an odour again today.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
30/06/2022	1:00:00 am	EPA Environmental Line	Odour	Shop, Tarago Village	Complainant reported being impacted by offensive odour that they attributed to the Woodlawn Landfill. They said they noticed the odour at 1 am that morning when they turned up for work and said the odour was still continuing at the time of their call at 9:36 AM. They said it was extremely strong at 1am but was weaker at the time of their call.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
29/06/2022	9:15:00 pm	EPA Environmental Line	Odour	Goulburn Street, Tarago	Complainant reported being impacted by a "smell of sulfur" from the "Woodlawn waste terminal". They said it had a strength of 4/5.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
28/06/2022	7:00:00 am	EPA Environmental Line	Odour	Mooneys Road, Currawang	Complainant reported being impacted by an odour that smelt like "rotting vegetation/onions and rotting eggs" that they alleged was coming from the Woodlawn Bioreactor. When asked to rate the strength of the odour they said "the odour was at least a five out of five. I would rate it higher if I could as it went beyond odour and affected the sense of taste as well". They said "the odour was so strong between 0700 and midday that it could not only be smelled but also left a taste in my mouth which made me start gagging.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
27/06/2022	6:00:00 pm	EPA Environmental Line	Odour	Farm at Lake Bathurst, "9km as crow flies from Woodlawn Eco- Precinct"	Complainant reported being impacted by a "strong odour of rotting garbage coming from Woodlawn Eco-precinct". The complainant said "it is making surrounding residents sick due to the nature of the odour". They said it is an ongoing issue (~10 years +) but has got worse since drought conditions ended a couple of years ago. They said "the odour is disrupting residents day to day life as odour is permeating houses and air conditioning units". Complainant said they are unable to turn on heating in the house due to odour coming through their air conditioning system.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
27/06/2022	6:00:00 pm	EPA Environmental Line	Odour	Covan Creek Road, Lake Bathurst	Complainant reported being impacted by an odour that they described as a "mix between rotten egg gas and petrol" that they alleged was coming from the Woodlawn Eco Precinct. They advised there have been many previous instances but tonight odour has been particularly strong. Caller advised odour is not detectable inside at time of call due to winter weather but is detectable outside and was detectable while driving in vehicle.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
27/06/2022	5:00:00 pm	EPA Environmental Line	Odour	Carneys Road, Currawang	Complainant reported being impacted by "a stench I was unfortunate enough to breathe in". They said "I had to endure the stench in order to feed my horses and chickens. The stench was present the whole time I was outside, approx. 35 minutes.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
27/06/2022	7:00:00 am	EPA Environmental Line	Odour	Braidwood Road, Lake Bathurst	Complainant reported being affected by a "strong offensive rotten refuse odour" that they attributed to the Woodlawn waste facility. They said they first noticed the odour at 7am and that it was still present at 8:10 when they left home.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
26/06/2022	10:35:00 am	EPA Environmental Line	Odour	Tarago Village	Complainant reported being impacted by a "pooley" smell in the air allegedly coming from the Woodlawn Eco Precinct when driving through Tarago village. They said they had to change the air conditioner to recirculate to stop the smell in the car. The complainant said they had their baby in the car and advised that the odour made them feel sick.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
26/06/2022	10:30:00 am	EPA Environmental Line	Odour	Tarago Village	Complainant reported being impacted by an offensive odour driving through Tarago. They said the air conditioner was turned off at the time but the odour still permeate the car. They alleged the odour was coming from the Woodlawn Eco-Precinct.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
25/06/2022	9:00:00 am	EPA Environmental Line	Odour	Mooneys Road, Currawang	Complainant reported being impacted by "a strong rotting rubbish/ ammonia smell coming from Veolia Woodlawn site near Tarago". They said there was a slight breeze from south east and it was sunny. Temperature was 10 degrees. They said it was a strong unpleasant smell that was constant and very offensive so they were unable to remain in the area.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. In consultation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
23/06/2022	8:40:00 am	Community Feedback Line	Odour	King Street, Tarago	Complainant reported being impacted by an odour being carried over in the strong winds today. They advised that they odour has been horrible in the last week or so, and were concerned about the ongoing smell, dust and health impacts from the site.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
22/06/2022	5:00:00 pm	EPA Environmental Line	Odour	Crisps Creek Intermodal Facility	Complainant reported smelling a "strong odour" when driving past the Crisps Creek Intermodal Facility on Bungendore Road. They said the odour "was permeating into vehicle while driving past".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
22/06/2022	5:00:00 pm	EPA Environmental Line	Odour	Hilltop Close, Tarago	Complainant reported being impacted by "the Woodlawn bin juice smell". They said "I just got home and I can still smell it. It makes me feel a bit of nausea".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
22/06/2022	9:30:00 am	EPA Environmental Line	Odour	Cullulla Road, Lower Boro	Complainant reported being impacted by a "bad odour of rotting garbage from Veolia Woodlawn Bioreactor". They said their home is approx 10kms from the Veolia site and this is the strongest that they have ever noticed the odour. They said there was a slight breeze from the NW. No cloud. The odour was noticed when caller first went outside at 9.30am and was still present at time of call at 11.40am.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
22/06/2022	9:15:00 am	E-mail	Odour	Tarago Primary School	Veolia received an email from a complainant who reported an odour at Tarago Primary School. They reported that it was a rotten garbage smell, with an odour strength of 3/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
22/06/2022	9:15:00 am	EPA Environmental Line	Odour	Tarago Public School	Complainant reported smelling a "garbage" odour at the Tarago Public School. The complaints noted "this was not the normal rotten eggs smell - this smelt more like garbage".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
22/06/2022	8:30:00 am	EPA Environmental Line	Odour	Cullulla Road, Lower Boro	Complainant reported being impacted by a "strong rotten garbage odour" that they alleged was coming from "the landfill site". They said they noticed the odour around 8:30 am this morning when they went outside. They said the odour was still continuing at the time of their call at 11:47 am.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
22/06/2022	7:15:00 am	EPA Environmental Line	Odour	Hilltop Close, Tarago	Complainant reported being impacted by "the rubbish smell of Woodlawn". They said "you can smell the bin juice sort of smell. I had my car warming up and now it's stinking like rubbish because I had it on outside air. I'll go back inside and wait for the smell in my car to dissipate before I drive to work. Should of left an hour ago."	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
22/06/2022	7:00:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	Complainant reported being impacted by "a disgusting stench of rotting meat/offal/garbage/dirty nappies all mixed up" when they went outside at around 7am. They said they had to remain outside for an hour to attend to animals. They said "the stench made me feel unwell. I have developed a headache and it made me feel sick. I couldn't stomach breakfast because of it."	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
22/06/2022	7:00:00 am	EPA Environmental Line	Odour	Tarago Village	Complainant reported being impacted by a "very strong sickly-sweet smell in Tarago village, strongest at the rail transfer station. I was driving and it permeated through closed windows and aircon impacting comfort. This has happened repeatedly the last few weeks and I request a response about what has been done about it. Weather was foggy but still."	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
21/06/2022	8:00:00 pm	EPA Environmental Line	Odour	Leahys Lane, Tarago	Complainant reported being impacted by a "strong offensive rotten refuse odour" that they attributed to the Woodlawn waste facility. They said the air was still and the odour infiltrated their home and persisted through the evening and was still present when the caller went to bed. They said they experienced a headache that they attributed to the odour.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
21/06/2022	3:30:00 pm	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	Complainant reported being impacted by a "stinking, rotten meaty garbage smell consistent with previous odour from Woodlawn" at their home at Willow Glen Road, Lower Boro. They said the odour was present from 3:30pm until "after 9:30pm when I went to bed. Odour gave me a headache and made me feel ill".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
21/06/2022	11:20:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro and Tarago and near Collector Road	Complainant reported being impacted by a "stinking, rotten meaty garbage smell consistent with previous odour from Woodlawn" at their home at Willow Glen Road, Lower Boro. They said they smelt it again in Tarago and near Collector Road during the period 11:20 to 12:30.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
21/06/2022	9:15:00 am	E-mail	Odour	Braidwood Road, Tarago	Veolia received an email from a complainant who reported an odour 3-4 minutes south of the township of Tarago, near the Tarago Primary School, and along the Bungendore Road right near Woodlawn. They reported that it was a rotten garbage smell, with an odour strength of 4/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
21/06/2022	6:45:00 am	EPA Environmental Line	Odour	Collector Road to Village of Tarago	Complainant reported being impacted by a "the Veolia smell around the collector road all the way to Tarago village".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
20/06/2022	5:45:00 pm	EPA Environmental Line	Odour	Collector Road to Village of Tarago	Complainant reported being impacted by a "the Veolia smell around the collector road all the way to Tarago village".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
20/06/2022	9:00:00 am	E-mail	Odour	Braidwood Road, Tarago	Veolia received an email from a complainant who reported an odour 3-4 minutes south of the township of Tarago. They reported that it was a rotten garbage smell, with an odour strength of 3/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
20/06/2022	9:00:00 am	EPA Environmental Line	Odour	Tarago Public School	Complainant reported smelling a "rotten garbage" odour at the Tarago Public School. The complaints said the odour had a strength of 3/10. The complainant further defined the character of the odour by using descriptor codes from the EPA "How do I report odours?" fact sheet. The codes the complaint used were: 06 (rotten eggs, sulfide; faecal), 09 (faecal, manure, sewer), 13 (compost).	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
18/06/2022	11:00:00 am	EPA Environmental Line	Odour	Collector Road, Tarago	Complainant reported being impacted by odours that they alleged were coming from the Woodlawn Bioreactor. They said "usual smell, however, a very metallic tinge to it today. Really intense this morning."	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
18/06/2022	8:00:00 am	EPA Environmental Line	Odour	Glenoval Road, Lake Bathurst	Complainant reported having to "close the house" due to a "very strong methane gas odour". They said "it is very rare to get the odour this far away. Normally it is about 3 times a year. This morning the odour is very strong. It is still on going."	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
18/06/2022	7:30:00 am	EPA Environmental Line	Odour	Goulburn Street, Tarago	Complainant reported being impacted by a "very strong rotten egg, sulphur smell". They said that they were concerned about long term exposure to the odour.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
18/06/2022	6:00:00 am	EPA Environmental Line	Odour	Mayfield Road, Tarago	Complainant reported by an offensive odour that they alleged was coming from the Woodlawn waste facility. They said that they were "not an inside person but rather an outdoors person". They said "it is too bad to go outside". They also reported that they cannot open the windows to air out the house and has two air humidifiers running in their home. They said they "do not know how Woodlawn gets away with it". They said that some when they go outside to let their dogs out it is so bad that they have to come back inside. They said "The stink is unreal".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
17/06/2022	9:00:00 am	EPA Environmental Line	Odour	Braidwood Road, Lake Bathurst	Complainant reported being impacted by a "strong sour rotten stench" coming into their home. They said they first noticed the odour at around 9am when they went outside and it was still present at the time of their call at 1:00PM. They said the strength of the odour was around 7/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
17/06/2022	8:00:00 am	EPA Environmental Line	Odour	Tarago Primary School	School staff reported smelling a "rotten egg or sulfide smell" with a strength of 4/6 when driving into the 60km/hr zone near the school. They said the odour was "very strong when getting out of the car".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
16/06/2022	NOT PROVIDED	EPA Environmental Line	Odour	Silverstream Road, Lower Boro	Complainant reported being impacted by "a strong, unpleasant smell" that they said they assumed "was from the Veolia site near Tarago". They said "This is an ongoing issue and I would like to see EPA take effective steps to fix the root cause."	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
16/06/2022	3:00:00 pm	EPA Environmental Line	Odour	Tarago Primary School	Complainant reported smelling a "rotten garbage" odour at the Tarago Public School. The complaints said the odour had a strength of 3/10. The complainant further defined the character of the odour by using descriptor codes from the EPA "How do I report odours?" fact sheet. The codes the complaint used were: 06 (rotten eggs, sulfide; faecal), 09 (faecal, manure, sewer), 13 (compost).	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
16/06/2022	3:00:00 pm	E-mail	Odour	Tarago Primary School	Veolia received an email from a complainant who reported an odour at Tarago Primary School. They reported that it was a rotten garbage smell, with an odour strength of 3/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
16/06/2022	6:00:00 pm	EPA Environmental Line	Odour	Leahys Lane, Tarago	Complainant reported being impacted by an offensive odour that they suspected of coming from the Woodlawn Eco-Precinct. They said they first noticed the odour in their house at about 6pm and that it got stronger after that. When the caller opened the door to go outside they noticed it was much stronger outside. They said that by the time they went to bed they "had a headache from the odour".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
16/06/2022	6:00:00 pm	EPA Environmental Line	Odour	Cullulla Road, Tarago	Complainant reported being impacted by an ongoing and persistent odour. They said "the smell is an overpowering unpleasant strong eggy garbage smell".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
15/06/2022	10:00:00 am	EPA Environmental Line	Odour	Tarago Railway Station	Complainant reported being impacted by an offensive odour that they suspected was coming from the Woodlawn Eco-Precinct. They said the odour is increasingly getting worse.	

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
15/06/2022	9:15:00 am	E-mail	Odour	Braidwood Road Tarago	Veolia received an email from a complainant who reported an odour in the township of Tarago. They reported that it was a rotten garbage smell, with an odour strength of 4/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
15/06/2022	8:30:00 am	EPA Environmental Line	Odour	Tarago Primary School	School staff reported smelling a "rotten egg or sulfide smell" with a strength of 4/6 when driving into the 60km/hr zone near the school. They said the odour was "very strong when getting out of the car".	
15/06/2022	12:00:00 am	E-mail	Odour	Braidwood Road Tarago	Veolia received an email from a complainant who reported an odour in the township of Tarago. They reported that it was a rotten garbage smell, with an odour strength of 4/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
14/06/2022	2:10:00 pm	EPA Environmental Line	Odour	Tarago Primary School	Complainant reported smelling a "rotten garbage" odour at the Tarago Public School. The complaints said the odour had a strength of 4/10. The complainant further defined the character of the odour by using descriptor codes from the EPA "How do I report odours?" fact sheet. The codes the complaint used were: 06 (rotten eggs, sulfide; faecal), 09 (faecal, manure, sewer), 13 (compost).	
14/06/2022	2:10:00 pm	E-mail	Odour	Tarago Primary School	Veolia received an email from a complainant who reported an odour at Tarago Primary School. They reported that it was a rotten garbage smell, with an odour strength of 4/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
14/06/2022	9:30:00 am	EPA Environmental Line	Odour	Tarago Primary School	Complainant reported smelling a "rotten garbage" odour at the Tarago Public School. The complaints said the odour had a strength of 3/10. The complainant further defined the character of the odour by using descriptor codes from the EPA "How do I report odours?" fact sheet. The codes the complaint used were: 06 (rotten eggs, sulfide; faecal), 09 (faecal, manure, sewer), 13 (compost).	
14/06/2022	9:30:00 am	E-mail	Odour	Tarago Primary School	Veolia received an email from a complainant who reported an odour at Tarago Primary School. They reported that it was a rotten garbage smell, with an odour strength of 3/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
09/06/2022	7:30:00 am	EPA Environmental Line	Odour	Bus stop, cnr Lumley Rd and Braidwood Rd Tarago	Complainant reported being impacted by "a very strong odour coming from Veolia Woodlawn". They said they were dropping off their child at the bus stop at the corner of Lumley Rd and Braidwood Rd Tarago. The odour was so bad the caller had to wait with their child in the car until the school bus turned up. They said the odour was again present at 4pm when they returned to the bus stop to pick up their child but the it was not as strong as the morning.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
08/06/2022	10:00:00 am	EPA Environmental Line	Odour	Leahys Lane, Tarago	Complainant reported being impacted by odour they attributed to the Woodlawn Bioreactor. They said the odour had been occurring all morning but got very strong from 10:00 am. They said they had farm work to do could not work outside after an hour. They said they felt very unwell and started back towards the house but caller was on the other side of the farm and as result the caller started vomiting before reaching the house.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
08/06/2022	9:44:00 am	EPA Environmental Line	Odour	Tarago Township	Complainant reported that they were driving their vehicle through the township of Tarago and there was "the strongest sulphur odour permeating the town which is totally overpowering". They advised the wind direction was west to east and they were not sure what the source of the odour was.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
08/06/2022	5:30:00 am	EPA Environmental Line	Odour	Glen Willow Road, Lower Boro	Complainant reported being impacted by odours that they attributed to the Woodlawn Eco Precinct. They said "I went outside at 5:30am and the smell was so bad I had to come back inside. I braved it again at 6:30am as I have animals to tend to. The smell is a clinging, rotten garbage smell. It coats your throat, sticks in your hair and clothing, and makes me sick to the stomach. I can't eat breakfast now because it has made me sick, my throat also hurts and I feel light-headed. I was outside for an hour as I couldn't delay things any further. I can still smell the stench now even though I've come inside. It's cold with a frost today. Sunny with a light breeze from a south-westerly direction. We live approximately 15k from the Eco-Precinct, but the smell is a daily occurrence at the moment and is consistent with the stench we experience from Woodlawn and the stench as you drive past Collector Road where the facility is located."	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
07/06/2022	5:00:00 am	EPA Environmental Line	Odour	Glen Willow Road, Lower Boro and Tarago township	Complainant reported being impacted by odours that they attributed to the Woodlawn waste facility. They said "the odour was particularly disgusting today. It smelt like being trapped in small box with an air supply comprising only of the worst farts you could ever imagine. It was very bad at our house in the morning between 5:00am and 8:30am, and bad when I drive through Tarago at approximately 10:15am. When I arrived home around 1pm the stench had lessened to a taint, but at 4:30pm it was back to stinking. The weather is cold, very windy (from Westerly direction) and raining on and off. The odour made me feel nauseous, retch and gave me a headache".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
06/06/2022	9:00:00 am	EPA Environmental Line	Odour	Glen Willow Road, Lower Boro and Collector Road	Complainant reported being impacted by a "rotting garbage / rotten meat smell" that they attributed to the Woodlawn waste facility. They said "the odour was bad in the morning and evening. It was also very bad when I went to collect mulch at the Collector Road intersection (11:30am and 3pm approximately) and when I drove past there at about 9am. It made me retch while driving and when I got out of the car. It was very windy and rainy today - wind from Westerly direction."	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
05/06/2022	9:45:00 am	EPA Environmental Line	Odour	Glen Willow Road, Lower Boro	Complainant reported being impacted by an offensive odour that they attributed to the Woodlawn waste facility. They said "the odour was bad at our house during the morning and evening. It makes me retch when I go outside in the morning to look after our animals".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
05/06/2022	9:30:00 am	EPA Environmental Line	Odour	Braidwood Road, Tarago ("about 3 minutes south of the Tarago township")	Complainant reported a "rotten garbage odour" while driving on Braidwood Road "about 3 minutes south of Tarago township". They rated the strength of the odour as a 4/10. They noted that the odour was detected even in very high winds while driving.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
05/06/2022	9:30:00 am	E-mail	Odour	3 km South of Tarago, on Braidwood Road	Veolia received an email from a complainant who reported that they detected an odour as they approached Tarago on the Braidwood Road. They reported that it was a rotten garbage smell, with an odour strength of 4/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
04/06/2022	9:45:00 am	EPA Environmental Line	Odour	Tarago Village and Collector Road	Complainant reported being impacted by "a rotting animal / garbage smell". They said the odour was bad in the morning at home, and quite potent at times in Tarago between 9:45 and 1pm. "It was disgusting driving past the Collector Road turn-off at around 1:45pm and again around 4:30pm. It was also bad in the evening. It was a rotting animal/garbage smell."They said it made them retch several times while attending an event at the town hall.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
03/06/2022	2:00:00 pm	EPA Environmental Line	Odour	Leahys Lane, Tarago and Tarago Public School	Complainant reported being impacted by a very strong odour from 2:00pm at their home at Leahys Lane, Tarago. They said they went to pick their child up from Tarago Public School at 4pm and when they got out their car at the school it "knocked my head back". They said "the odour was through the town and was disgusting". They said the odour made them feel nauseous.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
03/06/2022	8:20:00 am	EPA Environmental Line	Odour	Intersection of Willow Glen Road Lower Boro and Cullulla Road Tarago	Complainant reported being impacted by "a rotten garbage odour with a sour smell mixed in". They said it was also "stinking in Tarago" when they returned at about midday, and then smelt it at home in the evening at Willow Glen Road.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
03/06/2022	7:00:00 am	EPA Environmental Line	Odour	Roseview Road, Mount Fairy	Complainant reported being impacted by "a bad odour coming from the Woodlawn Eco- precinct, the odour is rotten-egg and methane like". The complainant advised the wind was coming from the north-west which is why he believes the smell is coming from the Woodlawn Eco-precinct.	
03/06/2022	6:30:00 am	EPA Environmental Line	Odour	Braidwood Road, Tarago (south of village)	Complainant reported a "gas garbage smell coming from Woodlawn Eco-precinct". They said the "smell is pungent; you can cut the air with a knife". The said this is an ongoing issue.	
03/06/2022	5:30:00 am	E-mail	Odour	Boro Road, Lower Boro	Veolia received an email from a complainant who reported an odour at their property. They reported that it was a rotten garbage smell, with an odour strength of 7/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
03/06/2022	5:30:00 am	EPA Environmental Line	Odour	Boro Road, Lower Boro	Complainant reported a "rotten garbage odour". They rated the strength of the odour as a 7/10. They said the odour was so bad they were unable to enjoy the use of their property.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
02/06/2022	5:00:00 pm	EPA Environmental Line	Odour	Mulwaree Street, Tarago	Complainant reported smelling a "very intense rotting garbage smell" that they alleged was coming from the Woodlawn Eco Precinct.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
02/06/2022	3:00:00 pm	EPA Environmental Line	Odour	Leahys Lane, Tarago	Complainant reported being impacted by "a very strong smell" that they alleged to be coming from the Woodlawn Eco-Precinct.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
02/06/2022	2:00:00 pm	EPA Environmental Line	Odour	Braidwood Road, Tarago (approx. 4.5 km south of Village)	Complainant reported being affected by a strong odour allegedly coming from "Veolia Tarago". They said the odour had "a rotten garbage and gas smell" and that they "had to shut up the house". They said the odour had a strength of 6/6.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
02/06/2022	12:00:00 pm	EPA Environmental Line	Odour	Braidwood Road, Lake Bathurst	Complainant reported being affected by offensive odour that they attributed to the Veolia's "Tarago waste facility". They said "the odour is very strong and there is no wind".	
02/06/2022	11:00:00 am	EPA Environmental Line	Odour	Tarago Primary School	Complainant reported being impacted by "a very strong smell" when dropping their child off at Tarago Public School. They rated the odour strength as 5/6 and said that they became unwell due to the odour. They alleged the odour was coming from the Woodlawn Eco- Precinct.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
02/06/2022	9:30:00 am	E-mail	Odour	Tarago Village	Veolia received an email from a complainant who reported an odour that they detected at the TaragoTown Hall and Coffee Shop. They reported the odour strength to be 7/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
02/06/2022	9:30:00 am	EPA Environmental Line	Odour	Tarago Town Hall and Coffee Shop	Complainant reported a "rotten garbage odour". They rated the strength of the odour as a 7/10. They said "my wife felt like throwing up the odour was that bad".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
01/06/2022	All Day	EPA Environmental Line	Odour	Braidwood Road, Lake Bathurst	Complainant reported being impacted by "offensive rotten-like odour" all day today. Complainant reports that there has been strong winds during the day.	
01/06/2022	9:30am, 12:00pm	E-mail	Odour	Braidwood Road, near Tarago	Veolia received an email from a complainant who reported an odour that they detected whilst traveling along Braidwood Road near Tarago. They reported the odour strength to be 3/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
01/06/2022	12:00:00 pm	EPA Environmental Line	Odour	Braidwood Road, near Tarago	Complainant reported a "rotten garbage odour". They rated the strength of the odour as a 3/10.	
01/06/2022	9:30:00 am	EPA Environmental Line	Odour	Braidwood Road, near Tarago	Complainant reported a "rotten garbage odour". They rated the strength of the odour as a 3/10.	

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
01/06/2022	7:30:00 am	EPA Environmental Line	Odour	Goulburn Street, Tarago	Complainant reported being affected by a strong, offensive odour that they attributed to the Woodlawn waste facility. They said that upon returning home at around 3pm the caller has found that the odour was still present and very strong. They said the odour had infiltrated their home and was "really unpleasant". They noted that it had rained in the previous few days and that "typically this tends to make the odour worse than usual".	
01/06/2022	7:00:00 am	EPA Environmental Line	Odour	Braidwood Road, Lake Bathurst	Complainant reported being affected by a "strong offensive odour" they attributed to the Woodlawn waste facility.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
31/05/2022	All Day	EPA Environmental Line	Odour	Braidwood Road, Lake Bathurst	Complainant reported being impacted by "offensive rotten-like odour" all day today. Complainant reports that there has been strong winds during the day.	
31/05/2022	8:30:00 am	EPA Environmental Line	Odour	Intersection of Braidwood Road and Lower Boro Road	Complainant reported a "rotten garbage odour". They rated the strength of the odour as a 2/10.	
30/05/2022	8:00:00 am	EPA Environmental Line	Odour	Braidwood Road, Lake Bathurst	Complainant reported being impacted by "an offensive odour" allegedly coming from the Veolia facility in Tarago. They said they first noticed the odour around 8 am and said it was continuing at the time of their call (~10:30am). They described the odour as "a mixture of gas and rotten garbage". They said the odour was making them sick.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
30/05/2022	5:45:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro and Collector Road, Tarago	Complainant reported being impacted by a "rotting garbage smell with mild gassy odour coming from Veolia Woodlawn Eco Precinct". They said it was a "thick stench" and "you can almost see it in the air". They said they went outside their house and had to come back in because of the smell being so strong. They said that after smelling the odour at their house they drove past Collector Rd at 07:50am, and there was a strong gassy smell and the air that came into the car made them feel sick and gave them a headache.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
29/05/2022	6:00:00 pm	EPA Environmental Line	Odour	Leahys Lane, Tarago	Complainant reported being impacted by an odour allegedly coming from the Woodlawn waste facility. They said it was so bad it permeated throughout the house, even with the windows and doors closed. They said that when they turned on a tap in the house the smell came through the tap. They said they ended up with a bad headache.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
29/05/2022	8:30:00 am	EPA Environmental Line	Odour	Lower Boro Road, Near Tarago	Complainant reported a "rotten garbage odour". They rated the strength of the odour as a between 3/10 and 4/10.	
29/05/2022		E-mail	Odour	Lower Boro Road, Lower Boro	Veolia received an email from a complainant who reported an odour at their property. They reported the odour strength to be 3/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.

Woodlawn Bioreactor Complaints Register

Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
28/05/2022	Morning and 5:17 pm	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	Complainant reported being impacted by "a rotten garbage odour" in the morning and again at the time of their call at 5:17pm. They advised that it made them dry retch.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
28/05/2022	9:00am, 3:30pm	EPA Environmental Line	Odour	Tarago Village	Complainant reported smelling a "rotten garbage" odour when driving through the Tarago Village at 9am and again at 3:30pm. The complainant said the odour had a strength of 3/10. The complainant further defined the character of the odour by using descriptor codes from the EPA "How do I report odours?" fact sheet. The codes the complaint used were: 06 (rotten eggs, sulfide; faecal), 09 (faecal, manure, sewer), 13 (compost).	
28/05/2022	9:00am, 3:30pm	E-mail	Odour	Braidwood Road, Tarago	Veolia received an email from a complainant who reported that they detected an odour on Braidwood Road near Tarago. They reported the odour strength to be 3/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
28/05/2022	10:38:00 am	EPA Environmental Line	Odour	Duralla Place, Mount Fairy	Complainant reported being impacted by an odour allegedly coming from the Woodlawn waste facility. They said odour had been "going on and off for 3 days".	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
28/05/2022	6:30:00 am	EPA Environmental Line	Odour	Leahys Lane, Tarago	Complainant reported being impacted by a "very, very bad odour" allegedly coming from the Woodlawn waste facility. They rated its strength as 6/6. They said they felt nauseous when they went outside to work on their farm. They said the odour was still ongoing at 09:30am.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
28/05/2022	6:00:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	Complainant reported being affected by a "really bad smell" as soon as she walked outside of their house. They alleged the smell was coming from the Veolia waste facility. They said the odours have been occurring for a few years, but today was significantly worse. They said they and their family were experiencing headaches and feeling unwell.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
27/05/2022	8:30:00 am	E-mail	Odour	Braidwood Road/Lower Boro Road	Veolia received an email from a complainant who reported that they detected an odour at the intersection of Braidwood Road and Lower Boro Road. They reported the odour strength to be 2/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
26/05/2022	7:40:00 pm	Community Feedback Line	Odour	Unknown	Veolia received a report to the Community Feedback Line from a complainant who wished to report an odour allegedly coming from the Site.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
26/05/2022	9:58:00 am	Community Feedback Line	Odour	Duralla Road, Mount Fairy	Veolia received a report to the Community Feedback Line from a resident of Mt Fairy who reported a rotten rubbish smell allegedly coming from the Site.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
26/05/2022	9:45:00 am	Community Feedback Line	Odour	Duralla Place, Mount Fairy	Veolia received a report to the Community Feedback Line from a resident of Mt Fairy who reported a sickly, rotten garbage smell allegedly coming from the Site.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.

Woodlawn Bioreactor Complaints Register

Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
26/05/2022	8:30:00 am	EPA Environmental Line	Odour	Intersection of Braidwood Road and Lower Boro Road	Complainant reported a "rotten garbage odour". They rated the strength of the odour as a 2/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
22/05/2022	8:30:00 am	EPA Environmental Line	Odour	Intersection of Braidwood Road and Lower Boro Road	Complainant reported a "rotten garbage odour". They rated the strength of the odour as a 2/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
18/05/2022	4:00:00 pm	Community Feedback Line	Odour	Connen Hill, Lake Bathurst	Veolia received a report to their Community Feedback Line from a resident of Lake Bathurst, Connen Hill, reporting an odour that they believed was coming from Woodlawn. They stated that they occasionally smell the odour but have not been reporting it until seeing a recent Veolia newsletter encouraging locals to report any odours.	Site personnel responded to the complainants location immediately following the report and was unable to detect any odour. An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken.
17/05/2022	2:00:00 pm	E-mail	Odour	Tarago Primary School	Veolia received an email from a resident reporting an odour of rotten garbage at the Tarago Primary School, that they rated a 5/10, lasting at least 20 minutes.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
14/05/2022	7:30:00 am	E-mail	Odour	Boro Road, Braidwood Road and Tarago Township	Veolia received an email from a resident of Lower Boro reporting an odour of rotten garbage, that they rated a 5/10, lasting at least an 2 hours.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
13/05/2022	9:40:00 am	Phone (Direct)	Odour	Braidwood Road, Tarago	Veolia received a call to its Community Feedback Line from a resident of Tarago reporting a very bad odour that was throughout the entire house.	The Woodlawn Manager contacted the complainant.
03/05/2022	4:30:00 pm	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	The EPA received a report to Environment Line from a resident who was affected by an offensive odour at their property. The reporter stated that the smell is rotten, gassy and poisonous. As the odour got progressively worse, the reporter has had to go inside, close all the windows and bring her dog inside because she was concerned for its health.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
03/05/2022	9:00:00 am	EPA Environmental Line	Odour	Burrabinga Road, Tarago	The EPA received a complaint from a resident who reported an odour described as a "weird, choking, chemical odour" that was observed throughout the early morning hours and abated at around 9:00am. The complainant alleged that the odour was coming from the Woodlawn Bioreactor.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
03/05/2022	8:30:00 am	EPA Environmental Line	Odour	Duckfield Road, Boro	The EPA received a report to Environment Line from a resident who was affected by offensive odour at their property. The reporter was affected this morning by strong, offensive rotten egg odour attributed to the Woodlawn waste facility. There was some fog this morning. A further report was made by the complainant reporting that they were affected by offensive odour of rotten eggs, at 11:15, though not as strong as before.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
03/05/2022	8:20:00 am	E-mail	Odour	Burrabinga Road, Tarago	Veolia received an email from a resident of Tarago reporting a bad methane smell allegedly coming from the Bioreactor. This was also reported to the EPA at the same time.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
03/05/2022	7:45:00 am	EPA Environmental Line	Odour	Braidwood Road, Tarago	The EPA received a report to Environment Line from a resident who was affected by an offensive odour when driving their child to the bus stop on Braidwood Road, Tarago. The reporter stated that they had to change the air vents in the vehicle so no air was coming inside from the outside, but could still smell it.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
03/05/2022	7:00:00 am	E-mail	Odour	Boro Road, Lower Boro, Braidwood Road and Tarago Village	Veolia received an email from a resident of Lower Boro reporting an odour of rotten garbage, that they rated a 6/10.	
03/05/2022	6:30:00 am	E-mail	Odour	Rosebery Street, Tarago	Veolia received an email from a resident reporting a horrendous smell this morning. They stated that I've put up with it for many years and never complained but it is not getting better.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
03/05/2022	6:30:00 am	Community Feedback Line	Odour	King Street, Tarago	The complainant contacted Veolia's Community Feedback Line to report an odour allegedly coming from the Woodlawn Bioreactor. The odour was described as horrible but somewhat fading now as the wind is picking up. It was also noticed the previous 2 mornings.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
02/05/2022	10:55:00 am	EPA Environmental Line	Odour	Mt Fairy Road, Mt Fairy	The EPA received a report to Environment Line from a resident who was affected by an offensive odour at their property on 29/04/2022 at 10:55am which continued until 30/04/2022. The reporter described the odour as a rotting decaying smell which was very extreme.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
02/05/2022	7:30:00 am	E-mail	Odour	Burrabinga Road, Tarago	Veolia received an email from a resident of Tarago reporting a smell of rotten egg and gas allegedly coming from the Bioreactor. This was also reported to the EPA at the same time.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
02/05/2022	7:00:00 am	E-mail	Odour	Boro Road, Lower Boro	Veolia received an email from a resident of Lower Boro reporting an odour of rotten garbage. They rated it a 3/10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
02/05/2022	6:00:00 am	EPA Environmental Line	Odour	Leahys Lane, Tarago	The EPA received two reports from a resident who was affected by an offensive odour at their property on 30/04/2022. It was a rotting garbage, sour milk, dirty nappies odour with a back of throat tang.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
01/05/2022	7:41:00 am	EPA Environmental Line	Odour	Duralla Place, Mt Fairy	The EPA received a report to Environment Line from a resident who was affected by offensive odour at their property. The report stated Smells like rotten garbage coming from Woodlawn Eco-Precinct.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
01/05/2022	7:00:00 am	EPA Environmental Line	Odour	Leahys Lane, Tarago	The EPA received a complaint from a resident who reported a odour described as a "rotting garbage, sour milk smell with a back of throat tang" that was first observed at approximately 7:00am and carried through to approximately 10:00am that morning. The complainant alleged that the odour was coming from the Woodlawn Bioreactor.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
30/04/2022	8:23:00 pm	EPA Environmental Line	Odour	Goulburn Street, Tarago	The EPA received a complaint from a resident who reported a "putrid sulphur smell" that was observed throughout the entire day but became very intense at approximately 8:23pm in the evening when the call was made to the EPA. The complainant alleged that the odour was coming from the Woodlawn Bioreactor.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
30/04/2022	8:00:00 pm	EPA Environmental Line	Odour	Leahys Lane, Tarago	The EPA received two reports from a resident who was affected by an offensive odour at their property on 02/05/2022. Rotting garbage, sour milk and dirty nappies coming from Woodlawn Bio Reactor - Veolia	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
29/04/2022	6:00:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	The EPA received a report to Environment Line from a resident who was affected by an offensive odour at their property. The odour was described by the Reporter as a rotten and sickly sweet smell. The reporter has stated that smell has given them a headache and made them feel nauseous to the point where they were retching.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
21/04/2022	5:45:00 am	EPA Environmental Line	Odour	Hilltop Close, Tarago	The EPA received a report to Environment Line from a resident who was affected by an offensive odour at their property. The odour was described by the reporter as a bin juice smell.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
18/04/2022	9:30:00 am	EPA Environmental Line	Odour	Braidwood Road, Tarago	The EPA received a report to Environment Line from a resident of Lower Boro, who was affected by an offensive odour whilst passing through the town and had stopped at the service station. The odour was described as a rotten garbage smell.	After carrying out an assessment of meteorological data and operational activity in relation to the location, date and time of the report of odour in order to investigate the potential source or cause of odour, it was apparent that this complaint was the same as a report made directly to Veolia and previously reported to the EPA.
18/04/2022	9:30:00 am	E-mail	Odour	Braidwood Road, Tarago	Veolia received an email from a resident of the area reporting a smell of rotten garbage allegedly coming from the Bioreactor whilst passing through town on Braidwood Road, Tarago. They rated the odour a strength a 3 out of 10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
18/04/2022	7:52:00 am	EPA Environmental Line	Odour	Cullulla Road, Tarago	The EPA received a report to Environment Line from a resident who was affected by offensive odour at their property. The reporter stated that the smell is an unpleasant eggy garbage smell. The current weather conditions are the wind blowing from a westerly direction at approximately 5-10 km an hour.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
18/04/2022	2:45:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	The EPA received a report to Environment Line from a resident who was affected by an offensive odour at their property. The report stated that the odour is coming from Veolia's Woodlawn Eco-Precinct. It's a sweet, rotting garbage stink in the air which was very bad at about 2:45am.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
17/04/2022	8:40:00 pm	EPA Environmental Line	Odour	Duralla Place, Mount Fairy	The EPA received a report to Environment Line from a resident who was affected by offensive odour at their property. The report stated Strong odour pollution of garbage from Woodlawn Bio Reactor. Strong garbage odour 6 or 7 out of 10 in regards to odour strength.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
15/04/2022	5:40:00 pm	EPA Environmental Line	Odour	Unknown Address	The EPA received a report to Environment Line from a resident who was affected by offensive odour at their property. The report stated that at the time of this email they could smell a bin juice smell coming from the Woodlawn precinct.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken, however due to the lack of information in relation to the complainants location, it is impossible to identify if any emissions were present and/or impacting on the complainant at the time of the report of odour.
15/04/2022	7:50:00 am	EPA Environmental Line	Odour	Unknown Address	The EPA received a report to Environment Line from a resident who was affected by offensive odour at their property. The report stated that to log a foul smell from Veolia that they are not happy waking up to.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken, however due to the lack of information in relation to the complainants location, it is impossible to identify if any emissions were present and/or impacting on the complainant at the time of the report of odour.
15/04/2022	7:30:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	The EPA received a report to Environment Line from a resident who reported a faint odour in the air in the morning, odour became more potent at around 7:30am and is coming from the Veolia Woodlawn Eco-precinct.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
15/04/2022	7:18:00 am	EPA Environmental Line	Odour	Cullulla Road, Tarago	The EPA received a report to Environment Line from a resident who was affected by offensive odour at their property. The report stated that the smell is an unpleasant strong garbage odour, that has an overpowering egg smell which they suspect is Veolia Woodlawn.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
15/04/2022	7:10:00 am	EPA Environmental Line	Odour	Lumley Road, Lake Bathurst	The EPA received a report to Environment Line from a resident who was affected by offensive odour at their property. The report stated rotten organic smell, which could be smelled inside their home.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
15/04/2022	7:00:00 am	EPA Environmental Line	Odour	Mayfield Road, Lower Boro	The EPA received a report to Environment Line from a resident who was affected by offensive odour at their property. The report stated there was a rubbish waste odour in the air.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
15/04/2022	7:00:00 am	EPA Environmental Line	Odour	Leahys Lane, Tarago	The EPA received a report to Environment Line from a resident who was affected by offensive odour at their property. The report stated that this was an ongoing issue and that it is coming from the woodlawn bioreactor.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
15/04/2022	5:00:00 am	EPA Environmental Line	Odour	Mayfield Road, Lower Boro	The EPA received a report to Environment Line from a resident who was affected by offensive odour at their property. The report stated ongoing Issue and that the smell is so bad it makes you want to vomit.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
11/04/2022	8:11:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro and Tarago Cafe and Bakery, 1-3 Braidwood Rd, Tarago	The EPA received a report to Environment Line from a resident who stated that there was a smell in the air coming from Woodlawn Eco-precinct making the caller feel unwell. The complainant was able to smell the smell at her work address and also from her home address which is approx 10k away.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
11/04/2022	6:15:00 am	EPA Environmental Line	Odour	Unknown Address	The EPA received a report to Environment Line from a resident who stated that a stinky, garbage, rotten smell (like food that you have left too long in the rubbish bin) coming from Woodlawn Eco-precinct (Veolia).	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken, however due to the lack of information in relation to the complainants location, it is impossible to identify if any emissions were present and/or impacting on the complainant at the time of the report of odour.
11/04/2022	6:05:00 am	EPA Environmental Line	Odour	Currawang Road, Tarago	The EPA received a report to Environment Line from a resident who reported an unpleasant strong overpowering egg smell which the suspected source was Woodlawn. The wind is almost nil wind.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
11/04/2022	6:00:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	The EPA received a report to Environment Line from a resident who alleged that a really strong and pungent rotten gas smell was coming from Veolia Woodlawn Eco-precinct, 619 Collector Rd, Tarago.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
11/04/2022	6:00:00 am	EPA Environmental Line	Odour	Unknown Location	The EPA received a report to Environment Line from a resident of Unknown Address who was affected by offensive odour in air coming from the VEOLIA Bioreactor facility located at 619 Collector Road, Tarago. The caller advises that the odour strength was 6/6, and as a result the caller could not go out, and felt like vomiting, the caller also couldn't put washing out because of the odour, and the children could not go out because the odour made them feel sick.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken, however due to the lack of information in relation to the complainants location, it is impossible to identify if any emissions were present and/or impacting on the complainant at the time of the report of odour.
10/04/2022	11:10:00 pm	EPA Environmental Line	Odour	Braidwood Road, Tarago	The EPA received a report to Environment Line from a resident who was affected by offensive odour. The report stated there was a very strong gas odour this evening from Veolia Bio Reactor Waste Facility which is increasing in intensity since first smelt and is the worst it has been after reporting this issue for years.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
05/04/2022	9:30:00 am	EPA Environmental Line	Odour	Leahys Lane, Tarago	The EPA received a report to Environment Line from a resident of Leahys Lane, Tarago who was affected by an offensive odour at their property. They advised that at the time of the incident, there was no wind and rated the odour strength a 5 out of 6. The odour was described by the reporter as the usual odour; a rotten, awful smell.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
05/04/2022	7:00:00 am	EPA Environmental Line	Odour	Boro Road, Lower Boro	The EPA received a report to Environment Line from a resident who was affected by an offensive odour at their property. The reporter advised that at the time of the incident the conditions were calm / very light NW with cold overnight temps, and rated the odour strength a 1 out of 10. The odour was described by the reporter as a rotten garbage smell.	After carrying out an assessment of meteorological data and operational activity in relation to the location, date and time of the report of odour in order to investigate the potential source or cause of odour, it was apparent that this complaint was the same as a report made directly to Veolia and previously reported to the EPA.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
05/04/2022	7:00:00 am	E-mail	Odour	Boro Road, Lower Boro	Veolia received an email from a resident of Lower Boro reporting a smell of rotten garbage allegedly coming from the Bioreactor. They rated the odour a strength a 1 out of 10.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources.
05/04/2022	5:45:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	The EPA received a report to Environment Line from a resident of Willow Glen Road, Lower Boro who was affected by offensive odour at their property allegedly coming from EPL20476 at Collector. The caller described the odour as a rotten smell in the air that started dissipating at 9am.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
04/04/2022	1:00:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	The EPA received a report to Environment Line from a resident of Willow Glen Road, Lower Boro who was affected by an offensive odour at their property which was still there when the reporter left their property at 9:15am. The reporter advised that the wind was westerly at the time of the incident.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
31/03/2022	Not Specified	EPA Environmental Line	Odour	Carneys Road, Currawang	The EPA received a report to Environment Line from a resident residing in Carneys Rd, Currawang. The complainant reported being impacted by an "overwhelmingly disgusting odour" that was first observed yesterday morning and persisted throughout the day.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
31/03/2022	3:00:00 pm	EPA Environmental Line	Odour	Currawang	The EPA received a report to Environment Line from a resident of Currawang who was affected by offensive odour at their property. The report stated they have been enduring a putrid, sour, rotting smell for two days blowing in from the facility.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
31/03/2022	9:30:00 am	EPA Environmental Line	Odour	Mooneys Road, Currawang	The EPA received reports to their Environment Line from a resident of Mooneys Road Currawang who was affected by offensive odour at their property. The reporter stated that the odour is a strong rubbish/gas smell brought to them by a strong SSE wind.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
31/03/2022	9:00:00 am	EPA Environmental Line	Odour	Mooneys Road, Currawang	The EPA received reports to their Environment Line from a resident of Mooneys Road Currawang who was affected by offensive odour at their property. The reporter stated that the odour was very bad, smelling of rotting vegetation and sewerage, which is a regular occurrence at their property for the past three weeks.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
30/03/2022	8:00:00 am	EPA Environmental Line	Odour	Collector Road, Currawang	The EPA received a report to Environment Line from a resident of Collector Road Currawang who was affected by offensive odour at their property. The report stated Odour was noticed on 30/3/22, 8am coming from Woodlawn Bioreactor, wind was from the S about 7km/h and it was an off compost smell.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
29/03/2022	7:23:00 pm	EPA Environmental Line	Odour	Unknown Location	The EPA received a report to Environment Line from a resident of unknown address who was affected by offensive odour at their property. The report stated that an odour is coming from the pit, not as offensive as what it has been but it still stinks.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
29/03/2022	8:44:00 am	EPA Environmental Line	Odour	Breadalbane Road, Collector	The EPA received a complaint this morning from a resident residing in Breadalbane Road, Collector who reported a "sulfur gas-like offensive odour" that was first observed at approximately 8:44am this morning.	An operational odour source inspection was carried out for each of the individual Eco-Precinct facilities immediately following receipt of the complaint. The findings of the site inspections, combined with an assessment of meteorological data and operational activities was then undertaken in order to investigate the potential source or cause of odour. Although a number of improvement actions will be undertaken as a result of the site inspections, no unusual activities or conditions were identified.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
28/03/2022	9:30:00 am	EPA Environmental Line	Odour	Mooneys Road, Currawang	The EPA received reports to their Environment Line from a resident of Mooneys Road Currawang who was affected by offensive odour at their property. The reporter stated that the odour is a strong rubbish/gas smell brought to them by a strong SSE wind.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
28/03/2022	9:30:00 am	EPA Environmental Line	Odour	Goulburn Street, Collector	The EPA received a report to Environment Line from a resident of Goulburn Street, Collector who was affected by an offensive odour. The reporter stated that 'the smell coming from Woodlawn is horrendous, you can't even have your doors or windows open due to the stench'.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia recently met with the EPA to discuss odour management, particularly, measurement of hydrogen sulphide, and fugitive gas emissions to refine the monitoring and investigation of potential odour sources. The Independent Odour Audit fieldwork was also undertaken on site last week. A detailed odour complaint analysis will be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
28/03/2022	6:30:00 am	EPA Environmental Line	Odour	Mooneys Road, Currawang	The EPA received reports to their Environment Line from a resident of Mooneys Road Currawang who was affected by offensive odour at their property. The reporter stated that the odour was very bad, smelling of rotting vegetation and sewerage, which is a regular occurrence at their property for the past three weeks.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
23/03/2022	5:00:00 pm	EPA Environmental Line	Odour	Lucky Pass Road, Currawang	The EPA received a report to Environment Line from a resident of Tarago who was affected by an offensive odour at their property. The reporter stated that the odour was a lot like a rubbish tip smell and at the time of the incident there was strong easterly wind gusts.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
22/03/2022	10:54:00 am	Community Feedback Line	Odour	King Street, Tarago	Veolia received a report of odour from a resident of King Street, Tarago who advised that they had experienced a smell of rotting food allegedly coming from the Bioreactor. They rated the odour strength around 9/10.	Site management responded to the complainants location immediately following the report and was unable to detect any odour. An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
22/03/2022	9:10:00 am	EPA Environmental Line	Odour	Cullulla Road, Tarago	The EPA received a report to Environment Line from a resident of Cullulla Road, Tarago who was affected by an offensive odour at their property. The reporter stated that the odour is very strong, and the weather at the time of the incident was sunny with no wind.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
22/03/2022	7:30:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	The EPA received a report to Environment Line from a resident of Willow Glen Road, Lower Boro who was affected by offensive odour at their property. The reporter stated that the odour has a sickly sweet rotting smell and that the wind was slight at the time of the incident.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
19/03/2022	8:00:00 am	EPA Environmental Line	Odour	Collector Road, Currawang	The EPA received a complaint from a resident residing in Collector Rd, Currawang. The complainant reported a strong odour that was first observed at approximately 8:00am.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
18/03/2022	8:30:00 am	EPA Environmental Line	Odour	Unknown address	The EPA received a report to Environment Line on 18 March 2022 from a resident of an unknown address who was affected by offensive odour at their property. The report stated odour from Bioreactor was affecting caller at home again this morning.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken, however due to the lack of information in relation to the complainants location, it is impossible to identify if any emissions were present and/or impacting on the complainant at the time of the report of odour.
18/03/2022	6:30:00 am	EPA Environmental Line	Odour	Mooneys Road, Currawang	The EPA received a complaint from a resident residing in Mooneys Rd, Currawang. The complainant reported "a distinct smell of rubbish" that the complainant alleged was coming from the Woodlawn Bioreactor.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
18/03/2022	6:30:00 am	EPA Environmental Line	Odour	Mooneys Road Currawang	The EPA received a report to Environment Line on from a resident of Mooneys Lane, Currawang. The reporter stated 'strong and repellent odour has been a regular occurrence for the past two weeks at their property.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
18/03/2022	6:30:00 am	EPA Environmental Line	Odour	Leahys Lane, Tarago	The EPA received a report to Environment Line on from a resident of Leahys Lane Tarago. The reporter stated that odour was affecting the caller at home again today. Very strong (5 out of 6). First noticed at 6.30am and had largely dissipated by 9am.	An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken. Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
17/03/2022	2:30:00 pm	EPA Environmental Line	Odour	Braiwood Road, Tarago	The EPA received a report to Environment Line from a resident of Braidwood Road Tarago (Tarago area Women's Shed) who was affected by offensive odour at their property. The complainant noticed the odour around 02:30 pm this afternoon. It is rotten garbage odour.	Veolia site management and a number of other operational staff were situated at various locations throughout Tarago during the course of the day due to the management of the arrival of the first train from Sydney following the rail line closures. A number of residents and workers in the area at the time were spoken to who had indicated that they had not been impacted by the arrival of the train or truck movement in any way during this time. An assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was undertaken.
11/03/2022	9:00:00 pm	EPA Environmental Line	Odour	Mooneys Road, Currawang	The EPA received a report of odour from a resident of Mooneys Road, Currawang who was affected by offensive odour allegedly coming from Veolia. The breeze was coming from a S/SE direction and it was slightly overcast.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
10/03/2022	8:00:00 am	EPA Environmental Line	Odour	Mooneys Road, Currawang	The EPA received a report of odour from a resident of Mooneys Road, Currawang. The weather conditions were reported as cool and overcast with a light breeze from a SE direction.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
09/03/2022	6:30:00 pm	EPA Environmental Line	Odour	Covan Creek Road, Lake Bathurst	The EPA received a report of odour from a resident of Covan Creek Road, Lake Bathurst. The reporter stated that the odour had the characteristic of gas or petrol, is causing headaches, and is more intense following the recent heavy rain. The odour is reported as permeating through the reporters home, and windows and doors need to be kept closed.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
07/03/2022	2:30:00 pm	EPA Environmental Line	Odour	Mooneys Road, Currawang	The EPA received a report of odour from a resident of 96 Mooneys Road, Currawang. The complainant stated that the odour was pretty strong that morning and the weather is overcast and there were strong southerly winds today. The smell is a sickly sweet rubbish smell that has been consistent over the past week.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
06/03/2022	3:00:00 pm	EPA Environmental Line	Odour	Breadalbane Road, Collector	The EPA received a report of odour from a resident of Breadalbane Road, Collector. The complainant stated that the odour on that day was like rotting garbage and sulphur, which had unusually infiltrated the house. The odour strength was reported as very strong (5 out of 6) and the weather conditions were reported as rainy with a 17km/h SSE breeze.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
06/03/2022	10:27:00 am	EPA Environmental Line	Odour	Currawang Road, Currawang	The EPA received a report of odour from a resident of Currawang Road, Currawang. The complainant stated that the odour left a metallic taste in the mouth and that the wind at the time of the incident was SSE blowing at 28km/h.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
06/03/2022	6:30:00 am	EPA Environmental Line	Odour	Breadalbane Road, Collector	The EPA received a report of odour from a resident of Breadalbane Road, Collector. The complainant stated that the odour is offensive and sickening and inhibits the residents from utilising their property. It is a rotten egg garbage smell. The odour is worse when the weather is overcast and windy.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
05/03/2022	3:00:00 am	EPA Environmental Line	Odour	Taylors Creek Road, Tarago	The EPA received a complaint from a resident residing on Taylors Creek Rd, Tarago. The complainant reported a strong odour that was observed between approximately 3:00am and 9:00am that morning.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
04/03/2022		EPA Environmental Line	Odour	Breadalbane Road, Collector	The EPA received a report of odour from a resident of Breadalbane Road, Collector. The complainant rated the odour strength when they went outside of their property around 8/10.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
03/03/2022	08:30	EPA Environmental Line	Odour	Breadalbane Road, Collector	The EPA received a report of odour from a resident of Breadalbane Road, Collector. The reporter stated that the odour was pretty strong that morning, rated the odour strength around 5/6 and was too unpleasant to be outside. The reporter advised that at the time of the incident the weather was cloudy and overcast with a light breeze.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
21/02/2022	8:35:00 am	EPA Environmental Line	Odour	Boro Road, Boro	The EPA received a report of odour from a resident of Boro Road, Boro. The complainant advised that this was their first report although they have smelt the odour here once before and they were very concerned that the odour has reached their location in Boro. The odour was like rotten eggs or sulphide.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
21/02/2022	8:35:00 am	E-mail	Odour	Boro Road, Boro	Veolia received a report of odour from a resident of Boro Road, Boro. The complainant advised that the smell was too unpleasant to sit outside for breakfast as they normally would.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
18/02/2022	7:30:00 am	Community Feedback Line	Odour	Braidwood Road, Tarago	Veolia received a report of odour from a resident of Braidwood Road, Tarago. The complainant advised that the stench was extremely unpleasant and was so bad that they had to rewash clothes that were hanging on their washing line.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
18/02/2022	6:58:00 am	EPA Environmental Line	Odour	Braidwood Road, Tarago	The EPA received a report of odour from a resident of Braidwood Road, Tarago. The complainant advised that all windows and doors in their home had to be shut due to the strength of the odour and was giving the Reporter asthma.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
10/02/2022	8:19:00 am	Community Feedback Line	Odour	Mt Fairy Road, Mt Fairy	The complainant advised that the odour was first noticed at 1:30am and was still evident at the time of the report. The weather was reported to be very warm and still when the odour was present.	An operational odour source site inspection was carried out of all Woodlawn Eco-Precinct upon receipt of the report of odour and an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour was carried out.
10/02/2022	7:30:00 am	E-mail	Odour	Boro Road, Tarago	The complainant emailed Veolia directly to report that whilst traveling from their address in Lower Boro to Tarago a rotten garbage odour was evident, allegedly coming from the Woodlawn Bioreactor.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
10/02/2022	6:00:00 am	EPA Environmental Line	Odour	Mayfield Road, Tarago	The complainant reported an awful stench affecting the caller at home, a few kilometres out of town. They advised that odours had not been too bad for a while but, more recently, every foggy morning the odour has been overpowering, which is several times a week.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
10/02/2022	6:00:00 am	EPA Environmental Line	Odour	Braidwood Road, Tarago	The complainant reported noticing an odour early this morning, around 6am that was getting worse. They reported that it smelt like rotten garbage which was very strong. There was a light westerly wind outside.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
10/02/2022	5:30:00 am	EPA Environmental Line	Odour	Tarago	The complainant reported a very strong rotting waste odour coming from Woodlawn Bioreactor. The reporter was visiting the area in Tarago and said that you could not walk outside.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
10/02/2022	5:30:00 am	EPA Environmental Line	Odour	Willow Glen Road, Willow Glen	The complainant reported a sick, clawing, sweet garbage smell from Woodlawn Eco Precinct. The odour entered through an open window and was extremely strong in and outside. They advised that the odour tends to dissipate around 10:30-11:00 when the temperature increased but comes back later in the day/evening when it gets cooler.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
09/02/2022	10:00:00 pm	E-mail	Odour	Rosebery Street, Tarago	The complainant emailed Veolia directly to report that whilst all of their windows were open to cool the house down that night, the house was filled with a bad odour allegedly coming from the Woodlawn Bioreactor.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
09/02/2022	6:50:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	The complainant was woken by a strong odour described as "sickly sweet rotten garbage smell" at 3:00am that was still present when the call was received at 6:50am. The complainant alleged that the odour was coming from the Woodlawn Bioreactor.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
09/02/2022	6:00:00 am	EPA Environmental Line	Odour	Leahys Lane, Tarago	The complainant was affected by an odour described as a "rotting rubbish odour with a metallic tang" that intensified during the morning (between 6:00am and 9:00am). The complainant alleged that the odour was coming from the Woodlawn Bioreactor.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
09/02/2022	5:30:00 am	EPA Environmental Line	Odour	Cullulla Road, Tarago	The complainant advised that with a light wind, an odour was smelt from a north west direction. The reporters property is situated in straight line 15km from the Woodlawn.	Veolia continues to refine it's investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
09/02/2022	4:00:00 am	EPA Environmental Line	Odour	Goulburn Street, Tarago	The EPA received a report of odour from a resident of Goulburn Street, Tarago. The complainant advised that this is the first time for a while that the odour has been so strong and so strong that the rest of the family stayed inside until it dissipated. The weather at the time of the odour incident was reported as a slight breeze from the direction of the facility, with drizzle overnight and fine in the morning.	Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants.
07/02/2022	8:30:00 am	EPA Environmental Line	Odour	Tarago Public School	The complainant was dropping children at the School at approximately 8:30am when they observed a strong odour described as "rotten garbage". The complainant alleged that the odour was coming from the Woodlawn Bioreactor.	Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
06/02/2022	7:58:00 am	EPA Environmental Line	Odour	Collector Road, Currawang	The complainant reported odour described as a very strong and pervasive "metallic compost smell" that was first observed at approximately 7:58am. The complainant alleged that the odour was coming from the Woodlawn Bioreactor.	Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
04/02/2022	8:30:00 am	EPA Environmental Line	Odour	Tarago Public School	The EPA received a complaint on the morning of the 4th February 2022 relating to an odour observed at the Tarago Public School. The complainant was dropping children at the School at approximately 8:30am when they observed a strong odour described as "rotten garbage". The complainant alleged that the odour was coming from the Woodlawn Bioreactor.	Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
04/02/2022	7:30:00 am	EPA Environmental Line	Odour	Collector Road, Currawang	The complainant reported odour described as "a metallic foul smell" that was first observed at approximately 7:30am. The complainant alleged that the odour was coming from the Woodlawn Bioreactor.	Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
01/02/2022	7:30:00 am	EPA Environmental Line	Odour	Rosebery Street, Tarago	The complainant reported odour described as "a moderate strength landfill odour" that was first observed at approximately 7:30am. The complainant alleged that the odour was coming from the Woodlawn Bioreactor.	Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
01/02/2022	6:00:00 am	EPA Environmental Line	Odour	Leahys Lane, Tarago	The complainant advised that the odour started at 6:00am and continued to be experienced until 8:30am. They rated the odour level a 6 out of 6 and said that the weather was still and cool, there was thick fog, and that the odour got less as the fog cleared but was still bad at time of departure.	Odour management continues to be a main focus at the Woodlawn Eco-Precinct. Veolia is refining its investigation process of odour issues in the community, particularly surrounding the most common complaints, to assess the extent to which odour is present in the community.

Woodlawn Bioreactor Complaints Register

Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
01/02/2022	4:30:00 am	EPA Environmental Line	Odour	Lumley Road, Lake Bathurst	The complainant was woken by strong odour (undescribed) at 4:30am that remained present until their departure from the residence at approximately 8:30am. The complainant alleged that the odour was coming from the Woodlawn Bioreactor.	Veolia continues to refine its investigation process relating to odour issues to address potential odour sources. Veolia follows the continuous improvement methodology and is constantly implementing changes to the operations based on information provided by site monitoring and independent consultants. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
31/01/2022	6:00:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	The complainant advised that the odour started at 6:00am and had dissipated around 11am when the wind picked up. They noticed the smell again that day at 5pm. The weather was reported as hot and still when the odour was present.	Odour management continues to be a main focus at the Woodlawn Eco-Precinct. Veolia is refining its investigation process of odour issues in the community, particularly surrounding the most common complaints, to assess the extent to which odour is present in the community.
19/01/2022	9:25:00 pm	EPA Environmental Line	Odour	Collector Road, Currawang	The EPA received a report to their Environment Line from a resident of Collector Road, Currawang, who was affected by offensive odour. The complainant reported that the odour had a metallic foul smell and at the time of the incident the wind was from the south east about 20km/hr.	Odour management continues to be a main focus at the Woodlawn Eco-Precinct. Veolia is refining its investigation process of odour issues in the community, particularly surrounding the most common complaints, to assess the extent to which odour is present in the community. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
17/01/2022	10:51:00 pm	EPA Environmental Line	Odour	Cullulla Road, Tarago	The EPA received a report to their Environment Line from a resident of Cullulla Road, Tarago, who was affected by offensive odour.	Odour management continues to be a main focus at the Woodlawn Eco-Precinct. Veolia is refining its investigation process of odour issues in the community, particularly surrounding the most common complaints, to assess the extent to which odour is present in the community. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
17/01/2022	8:00:00 am	EPA Environmental Line	Odour	Leahys Lane, Tarago	The EPA received a report to their Environment Line from a resident of Leahys Lane, Tarago, who was affected by offensive odour allegedly coming from the Woodlawn Bioreactor. The complainant described the odour as "strong rotting garbage".	Odour management continues to be a main focus at the Woodlawn Eco-Precinct. Veolia is refining its investigation process of odour issues in the community, particularly surrounding the most common complaints, to assess the extent to which odour is present in the community. A detailed odour complaint analysis will also be undertaken as part of this year's Independent Odour Audit that will include an assessment of environmental parameters.
11/01/2022	6:00:00 am	EPA Environmental Line	Odour	Taylor's Creek Road, Tarago	The EPA received a report to their Environment Line from a resident of Taylor's Creek Road, Tarago, who was affected by offensive odour. The complainant reported that the odour had the character of gas.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
10/01/2022	1:00:00 pm	EPA Environmental Line	Odour	Taylor's Creek Road, Tarago	The EPA received a report to their Environment Line from a resident of Taylor's Creek Road, Tarago, who was affected by offensive odour. The complainant reported that the odour had the character of gas.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
21/12/2021	3:19:00 pm	EPA Environmental Line	Odour	Mulwaree Street, Tarago	The EPA received a report to their Environment Line from a resident of Mulwaree Street, Tarago, who was affected by offensive odour. The complainant reported that the odour had the character of rubbish/gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
20/12/2021	10:30:00 am	EPA Environmental Line	Odour	Willow Glen Road, Lower Boro	The EPA received a report to their Environment Line from a resident of Willow Glen Road, Lower Boro, who was affected by offensive odour. The complainant reported that the Odour is not strong but is very unpleasant.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
20/12/2021	6:30:00 am	EPA Environmental Line	Odour	Roseview Rd, Mount Fairy	The EPA received a complaint this morning from a resident residing in Roseview Rd, Mount Fairy. The complainant reported a odour described as " a thick foul odour of a sweet pungent smell" that was first observed at approximately 6:30am.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
16/12/2021	8:14:00 am	EPA Environmental Line	Odour	Mulwaree Street, Tarago	The EPA received a report to its Environment Line from a resident of Mulwaree Street, Tarago who was affected by an offensive odour.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
15/12/2021	Not Specified	EPA Environmental Line	Odour	Tarago	The EPA received a report to its Environment Line from a resident of Tarago. who was affected by offensive odour. The complainant reported an odor described as "garbage combined with dirt and mushrooms".	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
15/12/2021	8:35:00 pm	EPA Environmental Line	Odour	Mulwaree Street, Tarago	The EPA received a report to its Environment Line from a resident of Mulwaree Street, Tarago. The complainant reported a "very strong odour" that commenced around 8:35pm that evening that wafted into the residence and caused the complainant to close up the entire home in response to the odour.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
15/12/2021	9:22:00 am	EPA Environmental Line	Odour	Leahys Lane, Tarago	The EPA received a report to its Environment Line from a resident of Leahys Lane, Tarago who was affected by offensive odour. The odour was reported to have the character of rotting garbage and rated the smell 5/6. The weather was described as very still.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
15/12/2021	6:00:00 am	EPA Environmental Line	Odour	Covan Creek Road, Lake Bathurst	The EPA received a report to its Environment Line from a resident of Covan Creek Road, Lake Bathurst who was affected by an offensive odour. The reporter described the odour character as a rubbish smell.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
14/12/2021	6:00:00 am	EPA Environmental Line	Odour	Cullulla Road, Tarago	The EPA received a report to its Environment Line from a resident of Cullulla Road, Tarago who was affected by offensive odour. The reporter described an unpleasant strong garbage smell that has an overpowering egg smell.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
14/12/2021	6:00:00 am	EPA Environmental Line	Odour	Leahys Lane, Tarago	The EPA received a report to its Environment Line from a resident of Leahys, Tarago who was affected by offensive odour. The odour was reported to have the character of rotting garbage and was strong for two hours between the hours of 6am - 8am.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
10/12/2021	2:30:00 pm	EPA Environmental Line	Odour	Braidwood Road, Tarago	The EPA received a report to its Environment Line from a resident of Braidwood Road, Lake Bathurst, who was affected by offensive odour commencing about 2:30pm. Rain has been ongoing all day.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
09/12/2021	6:29:00 pm	EPA Environmental Line	Odour	Currawang Road, Currawang	The EPA received a report to its Environment Line from a resident of Currawang Road, Currawang, who was affected by offensive odour. The odour was reported to be metallic in character.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
04/12/2021	7:30:00 am	EPA Environmental Line	Odour	Taylor's Creek Road, Tarago	The EPA received a report to its Environment Line from a resident of Taylor's Creek Road, Tarago, who was affected by an offensive odour allegedly coming from the Woodlawn Eco-precinct. They advised that the odour could be smelled about 1.5 km away from their home.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
30/11/2021	5:15:00 am	EPA Environmental Line	Odour	Collector Road, Tarago	The EPA received calls to its Environment Line from a resident of Collector Road, Tarago complaining about an odour. The odour had the character of rotten garbage and was rated the intensity of the odour as an 8.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
28/11/2021	7:20:00 am	EPA Environmental Line	Odour	Collector Road, Tarago	The EPA received calls to its Environment Line from a resident of Collector Road, Tarago complaining about an odour. The odour had the character of "rotten rubbish" and has alleged that the odour was coming from the Woodlawn Bioreactor.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
11/11/2021	7:30:00 am	EPA Environmental Line	Odour	Tarago	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
08/11/2021	8:50:00 am	EPA Environmental Line	Odour	Tarago	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
08/11/2021	8:30:00 am	EPA Environmental Line	Odour	Lower Boro	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
01/11/2021	9:00:00 am	E-mail	Odour	Willandra Lane, Tarago	Veolia received an email from a resident of Tarago, reporting a strong odour allegedly coming from the Bioreactor. It came in between 9-9.15am and was still apparent at 10am.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
31/10/2021	7:00:00 am	EPA Environmental Line	Odour	Tarago	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
28/10/2021	8:40:00 am	Community Feedback Line	Odour	Mount Fairy Road, Mount Fairy	Veolia received a call to its Community Feedback Line from a resident of Mt Fairy reporting a pungent smell in the air allegedly coming from the Bioreactor.	Immediately following the report of odour, site management attended the complainant's location in an attempt to identify the odour. An odour source site inspection was also carried out to ascertain any operational aspects that may have contributed to the source of odour at the time of detection.
28/10/2021	8:00:00 am	EPA Environmental Line	Odour	Tarago	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
27/10/2021	8:50:00 am	EPA Environmental Line	Odour	Tarago	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
27/10/2021	8:50:00 am	E-mail	Odour	Braidwood Road, Tarago	Veolia received an email from reporting a smell of rotten garbage allegedly coming from the Bioreactor. The complainant advised it was smelt about 4-5kms south of Tarago on the Braidwood Road.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
23/10/2021	5:03:00 pm	EPA Environmental Line	Odour	Lower Boro	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
23/10/2021	7:30:00 am	E-mail	Odour	Boro Road, Lower Boro	Veolia received an email from a resident of Lower Boro reporting a very faint smell allegedly coming from the Bioreactor. They advised there had been a very heavy fog overnight.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
20/10/2021	9:00:00 am	EPA Environmental Line	Odour	Currawang	The EPA received a call to its Environment Line from a resident in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
14/10/2021	10:26:00 am	EPA Environmental Line	Odour	Tarago	The EPA received a call to its Environment Line from a resident in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
13/10/2021	8:01:00 am	EPA Environmental Line	Odour	Tarago	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
08/10/2021	6:00:00 pm	Community Feedback Line	Odour	Braidwood Road, Tarago	Veolia received a call to its Community Feedback Line from a resident of Tarago reporting a stench allegedly coming from the Bioreactor. They advised it was particularly strong over the night of 08/10 and early morning of 09/10.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
08/10/2021	6:30:00 am	EPA Environmental Line	Odour	Tarago	The EPA received a call to its Environment Line from a resident in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
06/10/2021	1:03:00 pm	EPA Environmental Line	Odour	Tarago	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
06/10/2021	7:46:00 am	EPA Environmental Line	Odour	Tarago	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
06/10/2021	7:00:00 am	EPA Environmental Line	Odour	Tarago	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
05/10/2021	11:25:00 am	Community Feedback Line	Odour	Braidwood Road, Tarago	Veolia received a call to its Community Feedback Line from a resident of Tarago reporting a stench allegedly coming from the Bioreactor. They advised that they hadn't smelt it often recently, but when it does come, the smell is intense.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
03/10/2021	3:00:00 pm	EPA Environmental Line	Odour	Lower Boro	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
03/10/2021	9:34:00 am	EPA Environmental Line	Odour	Tarago	The EPA received calls to its Environment Line from residents in the Tarago area complaining about an odour. They have generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
02/10/2021	10:00:00 pm	EPA Environmental Line	Odour	Tarago	The EPA has received calls to its Environment Line from residents in the Tarago area who are complaining about an odour. This caller has generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
01/10/2021	10:45:00 pm	EPA Environmental Line	Odour	Tarago	The EPA has received calls to its Environment Line from residents in the Tarago area who are complaining about an odour. This caller has generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
01/10/2021	10:45:00 pm	EPA Environmental Line	Odour	Tarago	The EPA has received calls to its Environment Line from residents in the Tarago area who are complaining about an odour. This caller has generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
01/10/2021	8:00:00 pm	EPA Environmental Line	Odour	Tarago	The EPA has received calls to its Environment Line from residents in the Tarago area who are complaining about an odour. This caller has generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
29/09/2021	7:25:00 am	Community Feedback Line	Odour	Taylor's Creek Road, Tarago	Veolia received a call to its Community Feedback Line from a resident of Taylor's Creek Road, Tarago reporting that there was an odour had come over recently despite being unnoticeable whilst outside earlier in the morning.	Immediately following the report of odour, site management attended the complainant's location in an attempt to identify the odour. An odour source site inspection was also carried out to ascertain any operational aspects that may have contributed to the source of odour at the time of detection.
23/09/2021	6:30:00 pm	EPA Environmental Line	Odour	Goulburn Street, Tarago	The EPA has received a call to its Environment Line from a resident of Tarago complaining about an odour. No further details were provided.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
22/09/2021	6:30:00 pm	EPA Environmental Line	Odour	Tarago	The EPA has received a call to its Environment Line from residents in the Tarago area who are complaining about an odour. This caller has generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
22/09/2021	6:00:00 pm	EPA Environmental Line	Odour	Tarago	The EPA has received a call to its Environment Line from residents in the Tarago area who are complaining about an odour. This caller has generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
22/09/2021	4:50:00 pm	EPA Environmental Line	Odour	Tarago	The EPA has received a call to its Environment Line from a resident of Tarago reporting an odour generally described as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
22/09/2021	1:24:00 pm	Community Feedback Line	Odour	Carneys Road, Currawang	Veolia received a call to its Community Feedback Line from a resident of Currawang reporting that there was an odour detected on their property that was noticed the day prior (21/09) after the rain had cleared, and again today at the time of their call.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.

Woodlawn Bioreactor Complaints Register

Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
22/09/2021	12:00:00 pm	EPA Environmental Line	Odour	Lucky Pass Road, Currawang	The EPA has received a call to its Environment Line from a resident of Tarago complaining about an odour. No further details were provided.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
21/09/2021	6:21:00 pm	EPA Environmental Line	Odour	Tarago	The EPA has received a call to its Environment Line from residents in the Tarago area who are complaining about an odour. This caller has generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
15/09/2021	8:47:00 am	EPA Environmental Line	Odour	Tarago	The EPA received calls to its Environment Line from residents of Tarago reporting an odour described as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
14/09/2021	3:44:00 am	EPA Environmental Line	Odour	Tarago	The EPA received calls to its Environment Line from residents of Tarago reporting an odour described as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
12/09/2021	12:00:00 pm	EPA Environmental Line	Odour	Mulwaree Street, Tarago	The EPA received a call to its Environment Line from a resident of Mulwaree Street, Tarago who reported a strong rotten garbage odour at their property. They reported that issue is ongoing, occurring every few days.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
08/09/2021	7:05:00 am	EPA Environmental Line	Odour	Tarago	The EPA received a call to its Environment Line from a resident of Tarago complaining about an odour. They generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
06/09/2021	10:00:00 pm	EPA Environmental Line	Odour	Tarago	The EPA received a call to its Environment Line from a resident of Tarago complaining about an odour. They generally described the odour as being offensive with a strong sulphur-like, rotting garbage smell, and gassy.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.
06/09/2021	5:30:00 pm	E-mail	Odour	Lake Bathurst	The complaint reported an offensive odour was smelled at Connen Hill, Lake Bathurst for the most of the day and particularly worse at 5.30pm.	Based on the complainant's information, an assessment of meteorological data and operational activity has been completed in order to investigate the potential source or cause of odour.