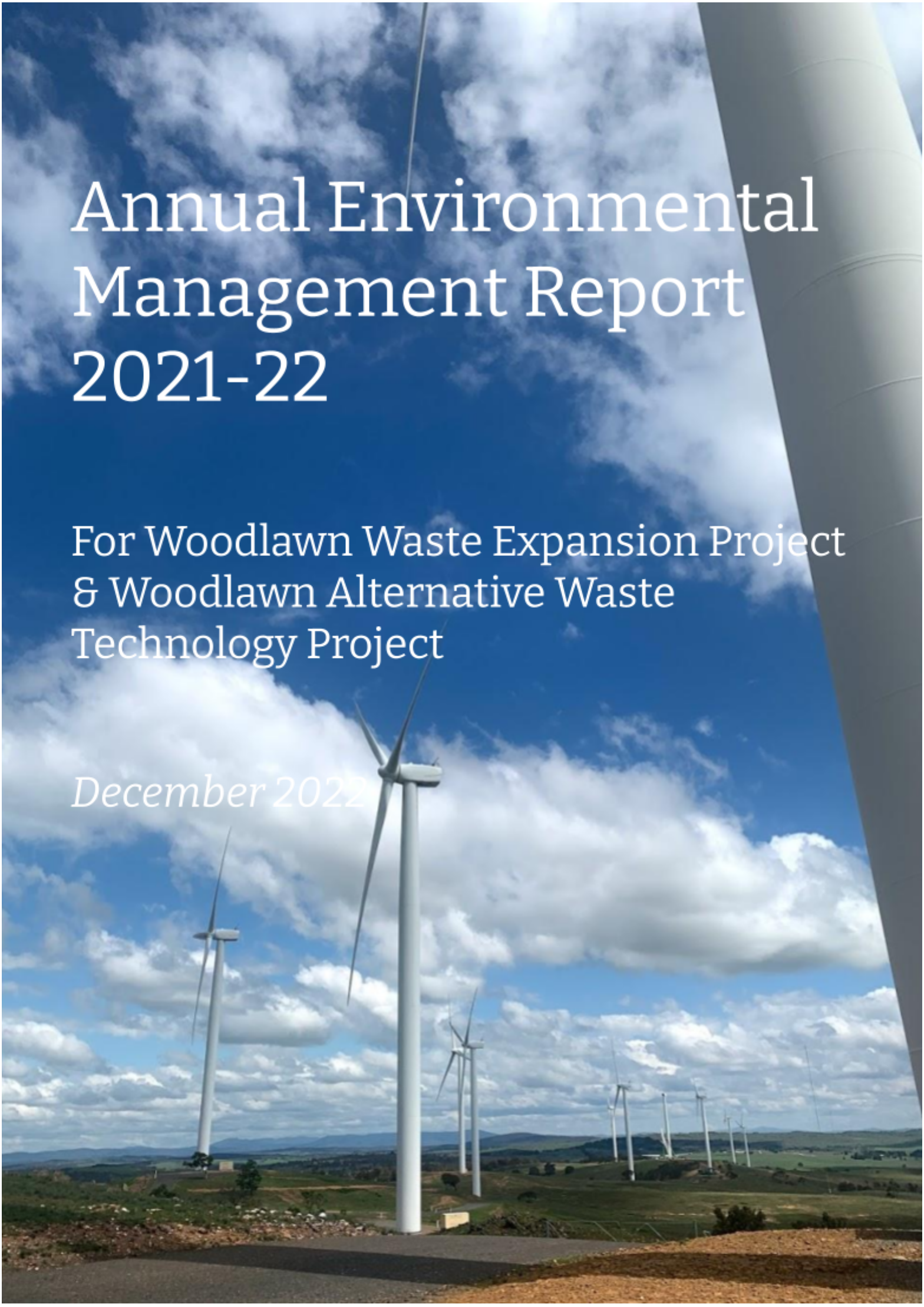

Annual Environmental Management Report 2021-22

For Woodlawn Waste Expansion Project & Woodlawn Alternative Waste Technology Project

December 2022

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1	Final	• NSW Department of Planning, Industry and Environment	December 2022

Contents

Definitions/Abbreviations

AEMR	Annual Environmental Management Report
BTT	Banksmeadow Transfer Terminal
CoR	Chain of Responsibility
CTT	Clyde Transfer Terminal
DPE	NSW Department of Planning and Environment
EMP	Environmental Management Plan
EIS	Environmental Impact Statement
EP&A	Environmental Planning and Assessment Act 1979 (and Regulations)
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence
ERP	Emergency Response Plan
IEA	Independent Environmental Audit
IMF	Crisps Creek Intermodal Facility
IOA	Independent Odour Audit
LEMP	Landfill Environmental Management Plan
LFG	Landfill Gas
LMP	Leachate Management Plan
LTP	Leachate Treatment Plant
LWMS	Leachate and Water Management System
MBT	Woodlawn Mechanical Biological Treatment Facility
MWOO	Mixed Waste Organic Output
MOP	Mining Operations Plan
NMMP	Noise Monitoring Management Plan
OEMP	Operational Environmental Management Plan (MBT)
PA	Project Approval
POEO	Protection of the Environment Operations Act 1997 (and Regulations)
RRO	Resource Recovery Order
RRE	Resource Recovery Exemption
SMA	Sydney Metropolitan Region
SWMP	Soil and WaterManagement Plan
TADPAI	Tarago and District Progress Association Inc
TPA	Tonnes per annum
Veolia	Veolia Australia and New Zealand
WIP	Woodlawn Infrastructure Plan
WOO	Woodlawn Organic Outputs

Executive Summary

This Annual Environmental Management Report (AEMR) has been prepared in accordance with the Woodlawn Waste Expansion Project under Project Approval (PA) 10_0012 and the Alternative Waste Technology Project under PA 06_0239, as well as relevant legislative requirements and industry best practices .

On instruction from the NSW Department of Planning, Industry and Environment (DPE), the requirements under each PA have been combined in this AEMR to comprise collectively the 2021-22 reporting period respectively for:

- PA 10_0012 (Schedule 7, Condition 5) for the Woodlawn Bioreactor Bioreactor) and the Crisps Creek Intermodal Facility (IMF); and
- PA 06_0239 (Schedule 4, Condition 5) for the Woodlawn Mechanical Biological Treatment Facility (MBT).

This AEMR details the environmental performance of the Bioreactor, which incorporates the Woodlawn Bioenergy Power Station (Power Station) and the Leachate Treatment Plant (LTP), the IMF and MBT for the reporting period as a summary of environmental monitoring conducted in keeping with the PAs, as well as corrective actions resulting from any non-compliances identified and/or other findings from regulatory inspections, external and internal audit programs.

This Report covers the period of 9 September 2021 to 8 September 2022 as the anniversary date from the commencement of expanded operations at the Bioreactor.

Part 1 Introduction

1.1 Eco-Precinct Overview

Veolia Australia and New Zealand (Veolia) own and operate the Woodlawn Eco-Precinct (Eco Precinct), which is located approximately 40 kilometres (km) south of Goulburn and 50 km north of Canberra, comprising the Bioreactor, the Power Station, the LTP, the IMF, the MBT, as depicted in **Appendix 1** and a solar farm.

1.1.1 Woodlawn Bioreactor

The Bioreactor was the first stage of the Eco Precinct developed by Veolia and has been in operation since September 2004. The Bioreactor is approved to accept a maximum input of 1.13 million tonnes per annum (tpa) of putrescible waste.

Waste is deposited into the void of a remnant open cut mine, approximately 33 million cubic metres (m^3) in capacity. With the use of optimal moisture and temperature conditions, the Bioreactor achieves enhanced degradation to produce landfill gas, collected through a vast network of infrastructure within the landfill.

Methane is extracted from the landfill gas within the Power Station, which commenced operating in 2008, for conversion and supply as electricity into the energy grid.

Waste to the Bioreactor comes from the Sydney Metropolitan Region (SMA) via the IMF, also owned and operated by Veolia and via road from neighbouring councils and businesses.

1.1.2 Crisps Creek Intermodal Facility

The IMF forms an integral part of the logistical operations of the Eco-Precinct, and is located 8km from the Bioreactor in the township of Tarago, adjacent to the Goulburn- Bombala Railway line.

Waste from the SMA is transported, in shipping containers,via rail to the IMF, where they are unloaded and transferred to the Bioreactor by road trailers. The IMF is approved to accept 900,000tpa from Sydney.

1.1.3 Woodlawn Leachate Treatment Plant

The LTP, which commenced operations in 2018, extracts and treats leachate from the Bioreactor using a reverse osmosis and chemical process. Treated leachate is then transferred to the ED1 Coffer Dam located within the Eco Precinct. The LTPfacilitates an improvement in environmental and operational performance by:

- allowing the extraction and treatment of greater volumes of leachate from the landfill void
- helping reduce the generation of odour from untreated leachate, and
- enabling more efficient gas extraction to maximise the waste to energy benefits of the Power Station.

1.1.4 Woodlawn Mechanical Biological Treatment Facility

The MBT Facility, which is located to the north-west of the Bioreactor, has been operating since 2017 and is approved to accept 280,000 tpa of mixed waste (240,000 tpa of mixed waste and 40,000 tpa of garden waste). Approximately 143,000 tpa of mixed waste is accepted from an amalgamation of councils in the SMA, namely the Southern and Northern Sydney Regions of Councils.

The waste is containerised and loaded onto rail wagons for transportation from Sydney to the Woodlawn Eco-Precinct Site (also owned and operated by Veolia) in the Southern Tablelands (approximately 250 kilometres southwest of Sydney) for processing in two separate streams including Municipal Solid Waste (MSW) and Food Organics Garden Organics (FOGO) for the production of compost.

Incoming waste is processed to extract recyclable materials or produce compost . The Mixed Waste Organic Output (MWOO) compost is matured on site with the intention to rehabilitate the remnant Woodlawn mine through application under a Resource Recovery Order (RRO) and Exemption (RRE) however a ban imposed by the NSW Environment Protection Authority (EPA) in October 2018 forbids the application to land of this type of material.

Consequently, Veolia was granted a revised RRO and RRE on 14 May 2020, permitting a trial of the use of Woodlawn Organic Outputs (WOO) in the rehabilitation of tailings dams at the neighbouring Woodlawn Zinc Copper mine. The trial commenced in February 2021.

1.1.5 Woodlawn Solar Farm

A 2.3 megawatt (MW) solar farm, operational since 2019, is located adjacent to the MBT Facility. The electricity generated from this installment is directly utilised in MBT operations, and excess distributed for the Bioreactor operations. This infrastructure follows Veolia's commitment towards increasing resource recovery and energy efficiency at the Eco Precinct.

1.2 Key Eco Precinct Personnel

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1.3 Legislative Requirements

The main legislative instruments governing the environmental performance and activities undertaken at the various facilities within the Eco Precinct include the *Environmental Planning and Assessment Act 1979* (the

EP&A Act) administered by the DPE, and the *Protection of the Environment Operations Act 1997* (POEO Act) administered by the EPA, as well as their respective associated regulations.

In addition to the 2 PAs, 3 Environment Protection Licences (EPLs) issued by the EPA, under the POEO Act, regulate the operational activities conducted at the Bioreactor, IMF and MBT respectively. Monitoring activities undertaken at all these facilities are reflected in the EPLs, consistent with PA requirements.

Environmental Management Plans (EMP) have also been prepared and approved by DPE to reflect the requirements of the PAs and EPLs for the operation of these facilities as follows:

- *Landfill Environmental Management Plan for the Woodlawn Bioreactor* (LEMP) (Veolia, August 2018)
- *Environmental Management Plan for Crisps Creek Intermodal Facility* (EMP) (Veolia, September 2016)
- *Operational Environmental Management Plan for Woodlawn Mechanical Biological Treatment Facility* (OEMP) (Veolia, January 2017)

These 3 documents concentrate on key environmental issues identified in the environmental assessment undertaken for the 3 facilities and set out the criteria for managing and monitoring environmental parameters such as water quality, waste, traffic, air quality, greenhouse gases, noise, landscape and vegetation and emergency response.

The above requirements stipulate the performance standards that need to be met to maintain compliance at the 3 facilities, and those relevant to the preparation of this AEMR are provided in **Table 1.3.1** and **Table 1.3.2** below.

***Table 1.3.1* Bioreactor and IMF conditions relevant for the preparation of this AEMR**

Schedule 7 - Environmental Management, Reporting and Auditing	
Condition	**Annual Environment Management Review**
5	One (1) year after the commencement of expanded operations, and annually thereafter, the Proponent shall prepare an Annual Environmental Management Report (AEMR) to review the environmental performance of the project to the satisfaction of the Director-General. This review must: **a)** describe the operations that were carried out in the past year; **b)** analyse the monitoring results and complaints records of the Project over the past year, which includes a comparison of these results against the • relevant statutory requirements, limits or performance measures/criteria; • monitoring results of previous years; and • relevant predictions in the EA; **c)** identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; **d)** identify any trends in the monitoring data over the life of the Project; and **e)** describe what measures will be implemented over the next year to improve the environmental performance of the Project.

Table 1.3.2 **MBT conditions relevant for the preparation of this AEMR**

Schedule 4 - Environmental Management, Reporting and Auditing	
Condition	**Annual Reporting**
5	Every year from the date of this approval, unless the Director-General agrees otherwise, the Proponent shall submit an AEMR to the Director-General and relevant agencies. The AEMR shall: **a)** identify the standards and performance measures that apply to the development; **b)** include a summary of the complaints received during the past year, and compare this to the complaints received in previous years; **c)** include a summary of the monitoring results for the development during the past year; **d)** include an analysis of these monitoring results against the relevant: • Impact assessment criteria; • Monitoring results from previous years; and • Predictions in the EIS; **e)** identify any trends in the monitoring results over the life of the development; **f)** identify any non-compliance during the previous year; and **g)** describe what actions were, or are being taken to ensure compliance.

Table 1.3.3 summarises the list of environmental approvals in place for the Bioreactor, IMF and MBT.

Table 1.3.3 **Environmental Approvals**

Description	Permit Number
Conditions of Development Consent: The Woodlawn Waste Management Facility (issued by DPE) and subsequent modifications.	31-02-99
Project Approval: *Woodlawn Waste Expansion Project* (issued by DPE) and subsequent modifications.	10_0012
Project Approval: *Woodlawn Alternative Waste Technology Project* (issued by DPE) and subsequent modification.	PA 06_0239
Special (Crown & Private Lands) Lease 20 (SML 20) (issued by the Department of Primary Industries)	SML 20
Woodlawn Bioreactor Environment Protection Licence (issued by EPA)	11436
Crisps Creek IMF Environment Protection Licence (issued by EPA)	11455
Woodlawn MBT Environment Protection Licence (issued by EPA)	20476
Woodlawn Organic Outputs Acid Mine Tailings Trial Exemption 2020 (issued by EPA)	N/A
Woodlawn Organic Outputs Acid Mine Tailings Trial Order 2020 (issued by EPA)	N/A
Water Access Licence: Willeroo Borefield (issued by Water NSW)	40WA411642
NSW Phylloxera Exclusion Zone Permit	OUT11/5415

1.4 Responsibilities

- Environmental monitoring was undertaken and/or supervised by Ark Du (Landfill Engineer), Marea Rakete (Woodlawn Environmental Officer), Christian Chang (Power Station Manager) and Reza Rafiee (MBT Process Engineer) in this reporting period.
- Environmental reporting for the Bioreactor, IMF and MBT was undertaken and/or supervised by Marea Rakete (Woodlawn Environmental Officer), Christian Chang (MBT Process Engineer) and Tobias Stanley (Woodlawn Bioreactor and Bioenergy Manager).
- Analysis of collected samples were performed at Australian Laboratory Services Pty Ltd (ALS), a NATA accredited laboratory.
- The Odour Unit Pty Ltd (TOU) was appointed to conduct the annual Independent Odour Audit for the Bioreactor, IMF and MBT during the reporting period. The audit team was approved by the DPE.
- Jackson Environment and Planning Pty Ltd (JEP) was appointed to conduct the annual Independent Leachate and Water Management System Audit for the Bioreactor, IMF and MBT during the reporting period. The audit team was approved by the DPE.
- Ramboll Consulting was appointed to conduct the 3-yearly Independent Environmental Audit for the MBT Facility during the reporting period. The audit team was approved by the DPE.

Part 2 Environmental Monitoring and Management

2.1 Environmental Management

This section presents the monitoring undertaken at the Bioreactor, IMF and MBT throughout the reporting period in accordance with the requirements of the PAs, as detailed in the respective EMPs. Where specific monitoring requirements or locations were not stipulated by the PAs, the monitoring requirements under the respective EPLs have been adopted to measure performance of implemented site controls to manage the environmental risks parameters assessed for the Eco Precinct sites.

The Environmental Monitoring Programs (EMP) are used to facilitate monitoring requirements, which enable the continuous measuring and assessment of suitability, adequacy and effectiveness of on-site environmental management measures. These requirements are summarised in **Table 2.1.1**, **Table 2.1.2** and **Table 2.1.3** and discussed in the subsections below.

***Table 2.1.1* Bioreactor Monitoring Requirements**

PA/EMP Reference	Type of Monitoring	Frequency	Commentary
Schedule 4, Condition 3	Site Inspection	Daily	Ongoing basis
Schedule 4, Condition 7	Odour Audit	Annually	Condition satisfied , independent odour audit conducted March 2022
Schedule 4, Condition 11	Dust Monitoring	Monthly	Ongoing basis
Schedule 4, Condition 12/ Air Quality and Greenhouse management Plan	Odour – Site inspections	Daily or as required	Ongoing basis
Schedule 4, Condition 17/ Soil and Water management Plan/EPL	Surface water monitoring Groundwater monitoring Dam Level Survey	Quarterly/ Annually/ Monthly	Ongoing basis
Schedule 4, Condition 18/ Leachate Management Plan	Leachate pond and Leachate recirculation monitoring, Long-term Leachate Management Action Plan, LWMS Audit	Annually	Ongoing basis
Schedule 4, Condition 19/ Noise Management Plan	Noise Monitoring	As required	Not triggered
Schedule 4, Condition 22	Meteorological monitoring	Continuous	Ongoing basis

Schedule 4, Condition 23/ Landscaping and Vegetation Management Plan	Site Inspections	Weekly housekeeping	Ongoing basis
Schedule 4 Condition 24/ Pest ,Vermin & Noxious Weed Management	Site Inspections	Weekly housekeeping	Ongoing basis
Schedule 4, Condition 3	Site Inspection	Daily	Ongoing basis

Table 2.1.2 **Crisps Creek IMF Monitoring Requirements**

PA/EMP Reference	Type of Monitoring	Frequency	Commentary
Schedule 5, Condition 5	Litter control	Daily	Ongoing basis
Schedule 5 Condition 6/ Pest ,Vermin & Noxious Weed Management Plan	Site Inspections	Weekly housekeeping	Ongoing basis
Schedule 5, Condition 9	Odour Audit	Annually	Condition satisfied , independent odour audit conducted March 2022
Schedule 5, Condition 15	Noise Monitoring	As required	Not triggered

Table 2.1.3 **MBT Monitoring Requirements**

PA/EMP Reference	Type of Monitoring	Frequency	Commentary
Schedule 3, Condition 29 EPL Condition M4	Meteorological monitoring	Continuous	Ongoing basis
Schedule 3, Condition 23 & 24 EPL Condition M2.2	Depositional Dust Monitoring	Monthly	Ongoing basis
Schedule 3, Condition 25 & 26 EPL Condition L4	Operational noise monitoring	As required	Condition satisfied
Schedule 3, Condition 20 EPL Condition M2.3	Surface Water Monitoring	Quarterly	Ongoing basis
Schedule 3, Condition 20 EPL Condition M2.3	Groundwater Quality Monitoring	Quarterly	Ongoing basis
Schedule 3, Condition 20 EPL Condition M2.3	Leachate Monitoring	Six monthly	Ongoing basis
Schedule 3, Condition 6 EPL Condition L3.1	Waste volume monitoring	Daily	Ongoing basis
Schedule 3, Condition 9	Site Inspection and Housekeeping	Weekly	Ongoing basis
Schedule 3, Condition 10	Pest and Vermin Checks	Every two months	Ongoing basis

Schedule 3, Condition 29 EPL Condition M4	Meteorological monitoring	Continuous	Ongoing basis

2.2 Environmental Performance Measurement

Based on the risk predictions in the environmental assessments undertaken for the 3 facilities, the implemented control measures described in the EMPs have become the criteria to determine the environmental performance of the respective operations. These are summarised in **Table 2.2.1.**

***Table 2.2.1* Performance Criteria**

Environmental Parameter	Issue	Risk	Control Measure(s)
Air quality (dust and odour)	Emission of air pollutants and odour above the EPA guidelines.	Low level of risk for MBT based on EIS modelling Large buffer distance between the MBT, Bioreactor and sensitive receptors Moderate - High risk for IMF and Bioreactor Sealed containers only at the IMF and full containers not stored Landfill gas emissions	Monthly Dust monitoring and daily use of water cart. Annual Independent Odour Audits including leachate samples for odour assessment. Evaporation Systems. LTP treating all leachate extracted from the void. Monthly surface gas monitoring programme
Greenhouse gas emissions and energy use	Excessive energy consumption and related GHG emissions compared to similar facilities.	Offset through generation of electricity from methane produced at the Bioreactor. Installation of a solar farm as offset for energy consumption at the MBT	Extraction & monitoring of the gas for green energy generation. Renewable energy Compliance reporting under the National Greenhouse and Energy Scheme.
Surface Water	Contamination of surface water due to; Leachate Stored Chemicals	Possible without control measures, but unlikely due to existing approved Surface Water Management Scheme.	Ongoing Surface and Groundwater monitoring, Leachate monitoring. Dam integrity inspections. Dam freeboard control.
Groundwater	Contamination of groundwater.	Possible without control measures, however	

		unlikely due to the use of leachate barrier systems and existing Groundwater Management Scheme.	Leachate Barrier system. 3 monitoring bores were added to the existing groundwater monitoring network and scheduled to mitigate any risk from dam leakage. Stormwater management system.
Noise	Increased noise impacts above the EPA guidelines. Impacts on local residents.	Rare due to the large buffer distance between the Bioreactor and MBT sensitive receivers.	In the event a noise complaint is received, noise monitoring is carried out at the site. All waste processing carried out indoors at MBT Facility. Permitted Operational Hours.
Pest, disease and agriculture related impacts	Introduction of pests and the spread of disease as a result of the proposed expansion.	Possible without control measures, however unlikely due to existing approved, operational management measures.	Routine Site Inspections Vermin control measures in place for Bioreactor, MBT & IMF.
Traffic and transport	Significant impacts on the local Tarago community, impacting levels of service and traffic flow.	The risk is rare due to the relatively low level of truck movements.	Limit the transfer of waste within approved operational hours and implementation of a Transport Code of Conduct. All drivers trained in National Heavy Vehicle Regulatory CoR modules.
Socio economic and visual amenity	Negative impact on existing social conditions and on the economic vitality of the Tarago district; visual amenity impacts to sensitive receptors	Rare as the Eco Precinct generates employment while amenity impacts are low.	Veolia has well established mechanisms for addressing community concerns and engaging with the community to manage any issues raised. A 24hr feedback line exists.

			Veolia has implemented the Veolia Mulwaree Trust which provides grant funding to Not for Profit organizations in the local region. Location of the site well away from the local road network and from neighbouring properties.
Hazardous Substances	Increased risk to human health and the environment from expansion, especially from dangerous materials and gases.	Rare, as hazardous substances may not be received at the Bioreactor and IMF. Possible as LTP has stores of hazardous substances but unlikely due to controls in place.	All known hazards are understood and managed by Veolia with any incidents dealt with as part of the Emergency Response Plan (ERP) including PIRMP. Dangerous Goods and Hazardous Substance Register/Inventory. All hazardous substances stored according to Australian Standards. Inspection and testing of chemical management infrastructure

2.3 Environmental Monitoring

Veolia undertakes an environmental monitoring program in accordance with the requirements in EPL's 11436, 11455 and 20476. Environmental monitoring is completed in accordance with Veolia's environmental monitoring procedures, which specify the relevant standards and methodologies. EPL monitoring location plans are included in **Appendix 3**.

All monitoring data collected during this reporting period is summarised in **Sections 3.1, 4.1 and 5.1** and tabulated in **Appendix 5**. 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 **Appendix 5**.

2.3.1 Air Quality

Air quality monitoring, pertaining to odour and dust, was undertaken in accordance with the relevant EMPs to determine whether activities conducted at the Bioreactor, Crisps Creek IMF and MBT affected ambient air quality.

All operations and activities were carried out in a manner to minimise dust at the boundary of the Eco Precinct. These included all access roads from the IMF to the Bioreactor and MBT, 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.

The active tipping face in the waste void is kept to a minimum surface area possible to reduce potential fugitive odour emissions.

Landfill gas (LFG) capture network has been installed and expanded in accordance with the Woodlawn Infrastructure Plan. Biofiltration system is installed along the rock/waste interface to minimize odour emission. Leachate extraction from the waste is maintained to reduce the impact of leachate on LFG capture. Maintain evaporation of stored leachate on site to reduce the odour footprint. All leachate from the void is treated via the LTP to achieve higher effluent quality and minimize odour potential.

All operational buildings at the Woodlawn MBT facility are enclosed and equipped with Odour Control ducting connected to Biofilters. The Biofilters are inspected on a regular basis in accordance with the O&M manuals to maintain suitable moisture, air flow rate and pressure of the air from the buildings for maximum air quality and odour control.

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 3 auxiliary flares as back up treatment of landfill gas emissions captured. The generators and flares satisfy the design, installation and operational requirements within the Bioreactor PA and EPL.

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.

2.3.2 Noise

Any noise emissions from the site with the potential to impact on nearby sensitive receivers remain within the criteria specified in the Projects Consent Conditions. Veolia have implemented a number of noise minimising measures below:

- Waste filling operations below the ground levels
- Road Transport – Code of Conduct
- Waste operations within the approved specified hours
- Acoustic enclosures
- Use of hearing protection in restricted areas

Any noise emission incidents or complaints received will be managed and the appropriate corrective actions applied as outlined in the noise monitoring and management protocol within the NMMP.

2.3.3 Soil, Water & Leachate

The processes and management of water quality is documented and implemented on site in accordance with each facility's respective EMP. The EMPs provide 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, as required under the Bioreactor and MBT Projects Approvals.

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 transferred for storage in the Evaporation Dam (ED1) Coffer Dam for evaporation and potential use as process water for Develop when they recommence mining operations. The existing leachate aeration dam is used as a contingency. 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.

Treated leachate is transferred to Evaporation Dams, including ED 3 North (ED3N), ED3SS and ED1 cofferdam #1 for evaporation. 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.

Soil monitoring is not undertaken as there is minimal risk of further contamination from water sources given the degraded nature of the disturbed mine site. However, erosion and sediment control measures have been implemented onsite to ensure storage water storages are protected from contaminated run-off.

2.3.4.1 Leachate Treatment System

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).

The Woodlawn Leachate Treatment Plant (LTP) commenced operations in 2018, treating leachate from the Bioreactor using an ultrafiltration membrane bioreactor. Treated leachate is then transferred to the ED1 Coffer Dam, constructed within the footprint of ED1. The LTP facilitates an improvement in environmental and operational performance

by:

- Allowing the extraction and treatment of greater volumes of leachate from the landfill void;
- Helping reduce the generation of odour from untreated leachate, and
- Enabling more efficient gas extraction to maximise the waste to energy benefits of the Power Station.

Leachate from waste via Veolia's Sydney transfer facilities continued to be the only liquid imported into the void during this reporting period and was processed through the leachate treatment system as approved by the EPA.

In accordance with Schedule 4, Condition 18M of MP 10_0012 for the Woodlawn Expansion Project, updates on volumes and remaining storage volumes of leachate within ED3S-S and ED1 Coffer Dam are reported to the DPE on a quarterly basis.

2.3.4.2 Water Balance

The Woodlawn Bioreactor water balance is a complete and tightly coupled system. It is important to focus on all elements of the water balance as a collective when considering any actions to be taken in order to achieve the overall purpose of the facility which is to maximise gas capture.

The elements of the Woodlawn Bioreactor water balance can impact each other and ultimately the effectiveness of gas generation and collection include:

- Leachate generation - Liquid inputs to waste (storm water, waste, groundwater ingress);
- Stormwater interception (rock walls and surface of waste);
- Leachate absorption (waste absorption capacity);
- Leachate removal (treatment);
- Leachate treatment (Leachate Treatment Dam (LTD) and Leachate Treatment Plant (LTP)); and
- Liquid storage (Stormwater, LTD treated leachate and LTP permeate).

The Independent Leachate and Water Management System audit carried out during the reporting period determined that the 2017 water balance had not been a reliable predictor of rainfall, evaporation rates and levels in dams for the Woodlawn bioreactor landfill. As a consequence, inflows into the dam systems have exceeded outflows, leading to increasing dam levels which exceed freeboard levels.

Veolia is currently working with Engeny, an independent expert in the field, in developing and implementing short to medium, and long term leachate and water management strategies for rectifying and improving the sites overall water management in accordance with the Development Control Order issued to Veolia by the Department on 1 April 2022.

2.3.4 Waste Management

All waste received as part of the expanded operations was in accordance with the waste types permitted in the Bioreactor and MBT PA and EPL. Acceptance and screening of waste prior to final disposal was in accordance with the requirements of the Woodlawn Receipt of Non-Conforming Waste Work Instruction to ensure only conforming waste is received.

Visual assessments of incoming waste were conducted by operators, as tipping/unloading occurred on the landfill surface. No records of non-conforming waste were recorded during this reporting period.

2.3.5 Meteorological Monitoring

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

In accordance with Schedule 4, Condition 22 of the Consent, 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):

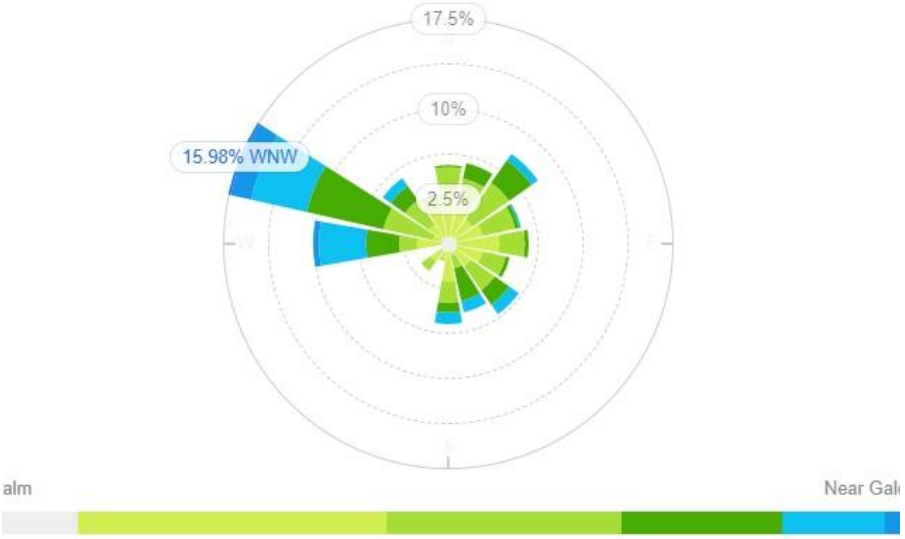
- Wind speed at 10m;
- Wind direction at 10m;
- Temperature at 2m;
- Temperature at 10m;
- Rainfall;
- Solar radiation; and
- Sigma theta at 10m

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 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 2020-21 reporting period (983.5mm).

Part 3 Woodlawn Bioreactor

3.1 Bioreactor Monitoring Results

3.1.1 Bioreactor Landfill Gas Monitoring Results

Gas monitoring is a critical component of the Bioreactor's landfill and subsurface gas monitoring regime.

Gas monitors (PGM's) and gas analysers, such as the GEM5000 and TDL Landfill Gas Analyzer, are used to conduct spot readings, measure landfill conditions moment by moment, and verify monthly landfill surface gas surveys and subsurface gas monitoring in-house. Consulting Earth Scientists (CES) have been engaged to perform the EPL monthly monitoring of landfill surface gas in accordance with the special methodology and landfill gas emissions trigger action response plan.

The findings from Landfill gas monitoring required under the Bioreactor PA and EPL is summarised in **Table 3.1.1** below.

***Table 3.1.1* Bioreactor Landfill Gas Monitoring Results**

<table>
<tr><th>Parameter</th><th>Results/Discussion</th></tr>
<tr><td>Subsurface Gas</td><td>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:

Table 1.5.1.1: Subsurface Gas Monitoring Result
<table><tr><th rowspan="2">Monitoring Bore ID</th><th colspan="4">Purged Methane Reading (%)</th></tr><tr><th>20/12/2021</th><th>03/02/2022</th><th>28/04/2022</th><th>25/08/2022</th></tr><tr><td>GMBH1</td><td>0</td><td>0</td><td>0</td><td>0</td></tr><tr><td>GMBH2</td><td>0</td><td>0</td><td>0</td><td><0.1</td></tr><tr><td>GMBH4</td><td>0</td><td>0</td><td>0</td><td>0</td></tr></table>
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).

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.

The monitoring data for each of the subsurface gas monitoring bores is provided in Tables 1.1 to 1.3 (refer Appendix 5).</td></tr>
</table>

Landfill Gas Extraction Booster

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:

Table 1.5.1.2: Landfill Gas Extraction Booster Monitoring Results Summary

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

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 5**).

Surface Gas

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 5**).

Table 1.5.1.3: Surface Gas Monitoring Results Summary

Parameter (ppm)	Minimum	Average	Maximum
Methane	2	54	95
Hydrogen Sulfide	0.00	0.0083	1.20

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.

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 *Environmental Guidelines for Solid Waste Landfills* (EPA, 2016).

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).

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.

Landfill Gas Flare

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.

Monitoring was continuously performed during this reporting period, an average of which is summarised in **Table 1.5.1.4** below.

Table 1.5.1.4: Landfill Gas Flare Monitoring Results

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

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.

Landfill Gas Engine Exhaust Point(s)

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 5**).

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.

- Nitrogen Oxides;
- Hydrogen Sulphide;
- Volatile Organic Compounds;
- Sulphuric Acid Mist; and
- Sulphur Trioxide.

Table 1.5.1.5: Landfill Gas Engine Exhaust Point Monitoring

Concentration (mg/m^3)	Maximum	Result
Hydrogen Sulphide	5	<0.7
Sulfuric acid mist and sulfur trioxide (as SO3)	100	0.87
Nitrogen Oxides	450	290

3.1.2 Bioreactor 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 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

- 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.

The criteria for deposited dust at the Woodlawn Bioreactor is assessed as insoluble solids and provided in **Table 3.1.2.1.**

***Table 3.1.2.1* Bioreactor Depositional Dust Long Term Criteria**

Pollutant	Averaging Period	Maximum Increase	Maximum Total Level
[c]Deposited Dust	Annual	[b]2 g/m²/month	[a]4 g/m²/month

Criteria Notes:

[a]Total 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

[d]Excludes 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 3.1.2.2**.

***Table 3.1.2.2* Bioreactor Dust Monitoring Results**

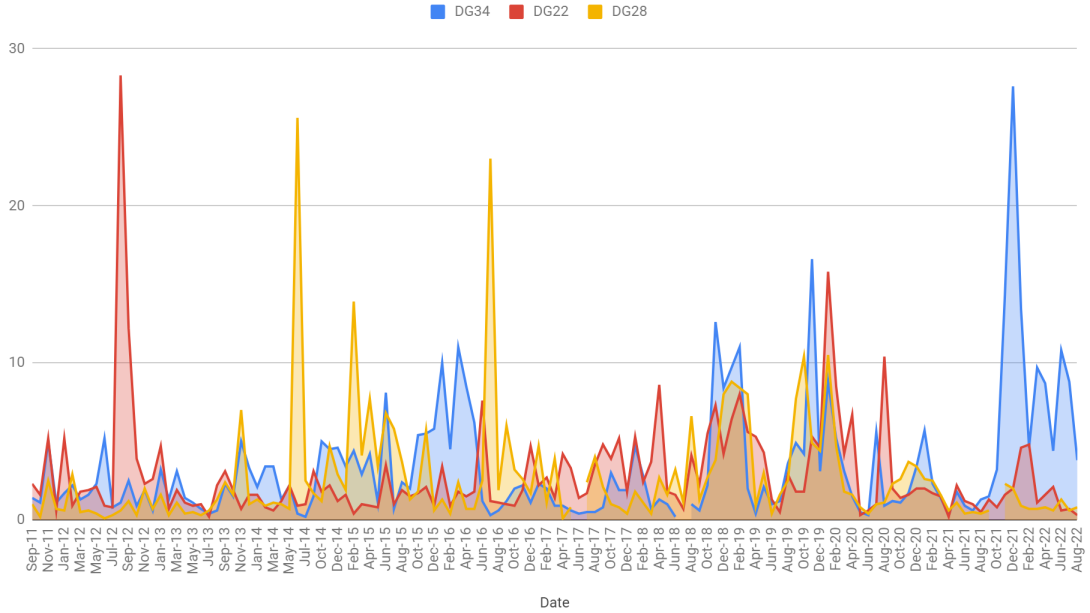
<table>
<tr><th>Parameter</th><th>Results/Discussion</th></tr>
<tr><td>Particulates/ Dust Monitoring</td><td>All twelve monthly monitoring samples were undertaken during the reporting period, with the exception of DG28, where in October 2021 the dust jar was broken in transit to the Laboratory for analysis.

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 5).

Table 1.5.2.1: Dust Monitoring Results
<table><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><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></table>
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.</td></tr>
</table>

	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.

Figure 3.1.2.3 **Bioreactor Dust Monitoring Results**



3.1.3 Bioreactor Surface Water Monitoring Results

A surface water monitoring program is established to detect potential pollution of offsite surface water by leachate or sediment-laden stormwater from the landfill. 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.

The findings from water quality monitoring of surface water locations required under Bioreactor PA and EPL is summarised in **Table 3.1.3** below with detailed data provided in **Tables 6.1 - 6.11** (refer **Appendix 5**). Key quality indicators selected to identify likely impacts from the Bioreactor include:

- pH,
- Electrical conductivity (EC),
- Ammonia (NH_3),
- Total organic carbon (TOC),
- Potassium (K)
- Sulphate (SO_4), and
- Zinc (Zn).

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

Table 3.1.3 **Bioreactor Surface Water Monitoring Results**

Parameter	Results/Discussion
Site 115 – Allianoyonyiga Creek	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 5**), the pollutant concentration trends from previous monitoring periods are generally consistent. • Mean pH at 7.99 for this location indicates slightly alkaline water; • EC at 1675 µS/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. While the indicator trends for this location indicate some variability over time, this is not uncommon when sampling intermittent streams.
Spring 2	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. 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 5**), is consistent with water quality from historical monitoring records. • 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 µS/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. No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.
Site 105 – Crisps Creek	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 5**) are consistent with previous monitoring results. • pH (7.7) is within the overall range of 7.06 - 7.96 for this location, indicating relatively neutral water; • EC (1660 µS/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; • Zn and K remain consistent averaging 0.15 mg/L and 5.9 mg/L respectively, consistent with historical results. 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.
WM200 - Raw Water Dam	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 5**), the results for WM200 remain generally consistent with the previous reporting periods. • pH (average 7.7) indicates slightly alkaline water; • EC (average 747µS/cm) is slightly lower but overall consistent with historical results; • SO_4 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; • NH_3 at an average of 0.08 mg/L is consistent with historical results.

	No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.
WM201 – Entrance Road Culvert	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 WM2011, based on the results provided in **Table 6.5** (refer **Appendix 5**). • 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; • NH_3 (0.2 mg/L) concentration are consistent with historical trends; • K (average 9 mg/L) is slightly lower than historical levels. Veolia will continue monitoring this location in the next reporting period for any runoff impacts.
ED3SS – Lagoon 5	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 5**), for ED3SS, the following can be confirmed: • 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; • SO_4 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; • NH_3 concentrations (average 173 mg/L) lower than previous monitoring periods; • TOC (average 2678 mg/L) trends downwards from previous reporting periods. 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.
WM203 – Evaporation Dam 3 North	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 5**), for WM203, the following can be confirmed: • 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; • SO_4 averages (4383 mg/L) is lower than previous reporting periods; • Zn levels (average 73.9 mg/L) is consistent with historical levels; • NH_3 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.

	No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.
Pond 5	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 5**). These water quality results are consistent with previous reporting periods. • 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; • SO_4 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; • NH_3 (average 8.33 mg/L) and TOC (average 19 mg/L) both mirror a similar trend which appears quite variable over historical monitoring results. These results and trends are deemed representative of the stormwater quality captured from the walls of the void.
WM202 – ED3S	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 5**). • 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; • SO_4 (average 2866 mg/L) is lower than previous reporting periods; • EC (average 3590 µS/cm) is indicating a downward trend. Both SO_4 and EC concentrations reflect the signature for Acid Mine Drainage (AMD) contaminated waters from remnant mining operations stored in Evaporation Dam 3 South; • NH_3 concentrations (average 33.2 mg/L) is also lower than previous reporting periods. 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.

Evaporation Dam 1 (ED1)	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 5**), for ED1, the following can be confirmed: • 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; • NH_3 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. 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.
ED1 Coffer Dam	Evaporation Dam 1 (ED1) coffer 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 5**), for ED1 coffer dam, the following can be confirmed: • 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; • NH_3 concentrations (average 6.8 mg/L) remained stable over the reporting period; • Chloride averages (2882 mg/L) remained stable however declining over the reporting period. 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.

3.1.4 Bioreactor Leachate Monitoring Results

Leachate quality monitoring is undertaken annually at 2 monitoring locations in the Bioreactor as required by the EPL. Effluent quality from the Leachate Treatment Plant is also monitored and sampled.

The findings from this reporting period are summarised in **Table 3.1.4** below with the detailed data provided in **Tables 7.1** and **7.2** (refer **Appendix 5**). 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 (SO_4),
- Lead (Pb),

- Zinc (Zn),
- Ammonia ($NH_{3)}$, 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 3.1.4 Bioreactor Leachate Monitoring Results

Parameter	Results/Discussion
Leachate Dam	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 5**), the characteristics of the leachate are: • pH (8.41) and EC (17696 µS/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. No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.
Leachate Recirculation System	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 5**). 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: • pH (8.42) is generally consistent with previous reporting period; • EC (14991µS/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. No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.
Effluent from LTP	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 5**), the water quality at this location can be described as:

	• pH (average 7.93) consistent with throughout reporting period and meets proposed Targets; • EC (average 11218 µS/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; No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.

3.1.5 Bioreactor Groundwater Monitoring Results

Groundwater quality monitoring at 22 locations was undertaken in this reporting period as required by the EPL, comprising 1 annual and 3 quarterly rounds of monitoring for 19 of the 22 locations. The results of which are summarised in **Table 3.1.5** 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 (SO_4),
- Lead (Pb),
- Zinc (Zn),
- Ammonia ($NH_{3)}$, and
- Total Organic Carbon (TOC).
- Copper (Cu)

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

Table 3.1.5 **Bioreactor Groundwater Monitoring Results**

Parameter	Results/Discussion
MB1	MB1 is located down gradient of the landfill void. Based on the results provided in **Table 9.1** (refer **Appendix 5**), the groundwater quality at this location can be described as: • 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;

	• SO_4 (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; • NH_3 (average 0.08) is consistent with previous reporting periods; • 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. 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.
MB2	MB2 is located upstream of Evaporation Dam 2. Based on the results provided in **Table 9.2** (refer **Appendix 5**), the groundwater quality at this location can be described as: • 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 SO_4 (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; • NH_3 (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. 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.
MB3	MB3 is located upstream of the Bioreactor and mine site. Based on the results provided in **Table 9.3** (refer **Appendix 5**), the groundwater quality at this location can be described as: • 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; • SO_4 (average 32 mg/L) is stable; • Pb (0.024 mg/L) and Zn (0.2 mg/L) are stable and consistent with previous periods; • 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. All trends indicate fairly stable concentration and provide an indication of background groundwater concentrations.
MB4	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 5**), the groundwater quality at this location can be described as: • 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 µS/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. All trends indicate fairly stable concentrations and there is no indication of contamination from mining or Bioreactor activities.
MB6	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.
MB7	MB7 is located upstream of Evaporation Dam 3. Based on the results provided in **Table 9.6** (refer **Appendix 5**), the groundwater quality at this location can be described as: • 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 µS/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.

	All trends indicate fairly stable concentration and there is no indication of contamination from mining or Bioreactor activities.
MB10	MB10 is located adjacent to Evaporation Dam 1. Based on the results provided in **Table 9.7** (refer **Appendix 5**), the groundwater quality at this location can be described as: • SWL (average 782.3m RL) was consistent with previous monitoring periods; • pH (average 7.3) neutral is consistent with previous reporting periods; • EC (average 6070 µS/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. All trends indicate fairly stable concentrations and there is no indication of contamination from mining or Bioreactor activities.
ED3B	ED3B is located downstream of Evaporation Dam 3. Based on the results provided in **Table 9.8** (refer **Appendix 5**), the groundwater quality at this location can be described as: • 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 µS/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. All trends indicate fairly stable concentrations at this location with no evidence of contamination from mining or Bioreactor activities.
WM1	WM1 is located northeast of the landfill void. Based on the results provided in **Table 9.9** (refer **Appendix 5**), the groundwater quality at this location can be described as: • 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 µS/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; • TOC (4 mg/L) is consistent with previous monitoring period reflective of natural conditions; All trends indicate fairly stable concentrations at this location with no evidence of contamination from mining or Bioreactor activities.
WM5	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 5**), the groundwater quality at this location can be described as: • SWL (average 786.3mRL) is consistent with long term averages; • pH (average 7.2) neutral is consistent with the previous period; • EC (average 4610 µS/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 (0.1mg/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. No significant variations or anomalies were recorded for any analyte tested in this location during this monitoring period from the data available.
WM6	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 5**), the groundwater quality at this location can be described as: • 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 µS/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 0.1mg/L) is close to, or within, non-detection rates; • TOC (4 mg/L) is consistent with previous monitoring periods reflecting natural conditions. All trends are relatively consistent and there is no indication of contamination from mining or Bioreactor activities.

MW8S	MW8S is located on the northern side of ED3N. Based on the results provided in **Table 9.12** (refer **Appendix 5**), the groundwater quality at this location can be described as: • 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 µS/cm) shows a significant decrease from previous reporting period results; • SO_4 (average 3192 mg/L) shows a slight increase but is generally consistent with previous periods; • NH_3 (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. All trends indicate fairly stable concentrations with no evidence of contamination from mining or Bioreactor activities.
MW8D	MW8D is located adjacent to MW8S. Based on the results provided in **Table 9.13** (refer **Appendix 5**), the groundwater quality at this location can be described as: • 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; • SO_4 (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; • NH_3 (0.6 mg/L) is at non detection rates; • TOC (7 mg/L) is consistent with previous monitoring periods reflecting natural conditions. All trends indicate fairly stable concentrations with no evidence of contamination from mining or Bioreactor activities.
MW9S	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.
MW10S	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. No data is available to produce tables or graphs for this monitoring point.
MB28	MB28 is located downstream of ED1. Based on the results provided in **Table 9.16** (refer **Appendix 5**), the groundwater quality at this location can be described as: • 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; • SO_4 (average 739 mg/L) is consistent; • Pb (0.005 mg/L) and Zn (0.7mg/L) were both generally consistent in this reporting period;

	• NH_3 (0.1 mg/L) is at non detection rates; • TOC (5 mg/L) reflecting natural conditions is consistent throughout this reporting period. No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.
MB33	MB33 is a 75m deep groundwater monitoring bore to replace a waste covered well (WM4) in the Void. 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). Based on the results provided in **Table 9.17** (refer **Appendix 5**), the groundwater quality at this location can be described as: • SWL (average 753.4m RL) was consistent throughout this reporting period; • pH (average 11.5) showing an upward trend; • EC (average 1842 µS/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. No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.
MB34	MB34 is a deep groundwater monitoring bore installed as part of a groundwater monitoring network review in the vicinity of the landfill void. 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). Based on the results provided in **Table 9.21** (refer **Appendix 5**), the groundwater quality at this location can be described as: • SWL (average 760.4m RL) was consistent throughout this reporting period; • pH (average 7.2) showing consistent alkalinity; • EC (average 1518 µS/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.

	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.
MB35	MB35 is a deep groundwater monitoring bore installed as part of a groundwater monitoring network review in the vicinity of the landfill void. 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). Based on the results provided in **Table 9.22** (refer **Appendix 5**), the groundwater quality at this location can be described as: • 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; • SO_4 (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; • NH_3 (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. 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. 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.
SP2-MW1	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 5**), the groundwater quality at this location can be described as: • 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; • SO_4 (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. No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.

MW-FRC1	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 5**), the groundwater quality at this location can be described as: • SWL (average 779.1m); • pH (average 7.4) consistent throughout this reporting period; • EC (average 4285 µS/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. No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.
MB10S	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 5**), the groundwater quality at this location can be described as: • SWL (average 782.5m); • pH (averag7) consistent throughout this reporting period; • EC (average 3255 µS/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. No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.

3.1.6 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 3.1.6** below and detailed quarterly levels are provided in **Tables 10.1 – 10.5** (refer **Appendix 5**).

Table 3.1.6 **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 5**). • 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	P200 is located east of the void. Standing water levels are presented in **Table 10.2** (refer **Appendix 5**). • 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	P58 is located west of the void. Standing water levels are presented in **Table 10.3** (refer **Appendix 5**). • 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	P59 is located west of the void and to the south of P58. Standing water levels are presented in **Table 10.4** (refer **Appendix 5**). • 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	P100 is located northeast of the void. Standing water levels are presented in **Table 10.5** (refer **Appendix 5**). • 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.

3.1.7 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.

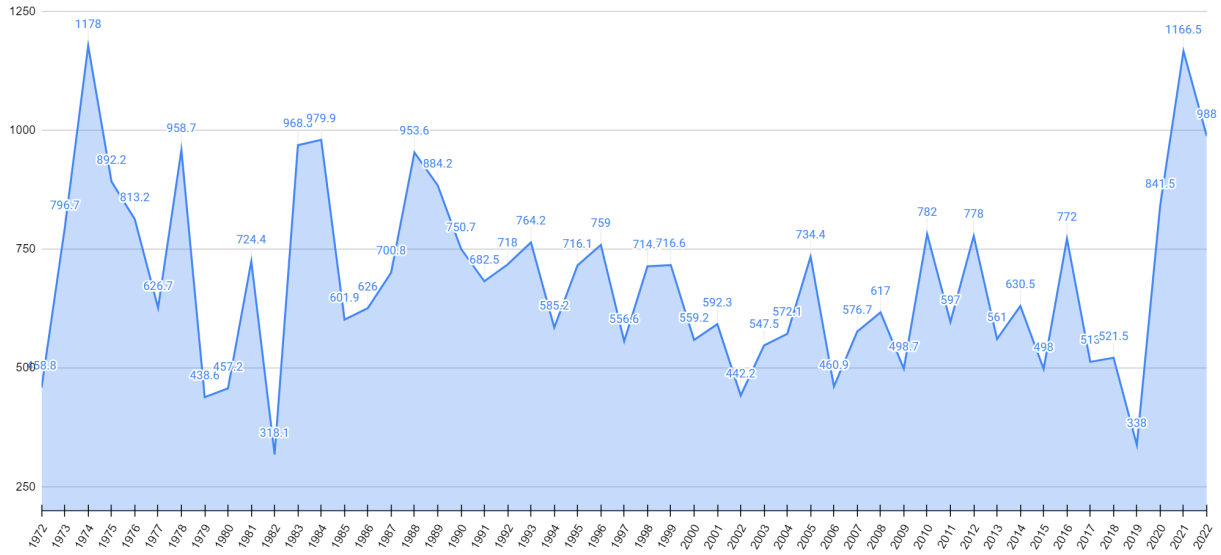


***Figure 1.5.7* 50 Year Rainfall Pattern**

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 reporting 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 3.1.7**, which shows the dam levels and required freeboard requirements. Additional monitoring is conducted for other dams managed by Veolia.

***Table 3.1.7* Bioreactor Evaporation Dam Volume Monitoring Results (RLs AHD)**

	ED3 SOUTH		ED3 NORTH				ED1
	ED3S	ED3S-S	ED3N-1	ED3N-2	ED3N-3	ED3N-4	Coffer Dam
Date	RL	RL	RL	RL	RL	RL	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).

3.1.8 Bioreactor Extraction of Water

Table 3.1.8 below provides the volume of the water extracted from the Willeroo Borefield of which an annual allocation of 600ML is available. Water Access Licence (Veolia Environmental Services (Australia) Pty Ltd) 28983 Lachlan Fold Belt Mdb Groundwater Source.

Table 3.1.8 **Willeroo Bore Field Extraction Volume**

Month	Usage Volume (kL)
September 2021	3013
October 2021	4938
November 2021	2746
December 2021	1345
January 2022	2844
February 2022	1977
March 2022	3954

April 2022	5136
May 2022	3262
June 2022	3493
July 2022	6933
August 2022	4543
TOTAL	**48,234 kL**

The neighboring mine site, now run and owned by Develop, also sources raw water from the Willeroo borefield as a primary source of water whilst in operations, utilising the allowance of a WAL owned by Veolia. Approximately 4733 kL of raw water was consumed by Develop during the reporting period.

3.1.9 Bioreactor Noise Monitoring

Operational activities at the Woodlawn Bioreactor are restricted to within the approved operating hours described in **Table 3.1.9** as per Conditions of Bioreactor PA.

Table 3.1.9 **Bioreactor & IMF Approved Hours of Operation**

Activity	Day	Hours
Operations	Monday - Saturday	6:00am - 10:00pm
	Sunday & Public Holiday	Nil

No noise complaints were received during this reporting period indicating that noise at the Bioreactor was likely maintained within the 35 dB(A) LAeq (15 minute) criteria at the nearest residential receiver. Noise monitoring will be undertaken by Veolia on the receipt of any such complaints.

3.1.10 Bioreactor Waste Volume Monitoring

The Bioreactor PA stipulates that the expanded operations must not exceed the maximum annual input rates in **Table 3.1.10.1**.

Table 3.1.10.1 **Maximum annual input rates for Woodlawn Bioreactor**

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

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.

Subsequently, 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 in which the interim approval was extended to 28 February 2023.

All waste received is recorded in the Systems, Applications and Products in Data Processing (SAP) software including details such as vehicle registration, the date and time of delivery, the gross and tare weight of the vehicle, as well as the nature and origin of the waste delivered by each contractor.

The data provided by SAP is used to track and monitor the amount of incoming waste in accordance with the limits of the Bioreactor PA.

Table 3.1.10.2 indicates that the Woodlawn Bioreactor has remained within the annual waste limit stipulated within the Bioreactor PA of 1.13Mtpa during the reporting period.

Table 3.1.10.2 **Incoming waste tonnage via rail from Sydney and regional waste by road at the Woodlawn Bioreactor 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
644,573.317 tpa	56,041.484 tpa	72,646.730 tpa

The forecasted tonnage (tpa) for the following reporting period is outlined in **Table 3.1.10.3**.

Table 3.1.10.3 **Forecast waste tonnages for the 2022-23 reporting period**

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

Part 4 Crisps Creek Intermodal Facility

4.1 Crisps Creek IMF Monitoring Results

4.1.1 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 4.1.1**. Detailed quality results are provided in **Tables 12.1** to **12.3** (refer **Appendix 5**). The key quality indicators selected to identify any contamination in the receiving surface waters from site operations include:

- pH,
- Electrical Conductivity (EC),
- Sulphate (SO_4),
- Zinc (Zn),
- Ammonia ($NH_{3)}$, 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 4.1.1 **IMF Surface Water Monitoring Results**

Parameter	Results/Discussion
Site 110 Upstream	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 5**) indicate the following trends: • 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; • SO_4 (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. • NH_3 an average of (0.08 mg/L) is also is consistent with previous reporting period;

	• TOC (average 20 mg/L) which is consistent with previous reporting periods. While the indicator trends for this location indicate some variability over time, this is not uncommon when sampling intermittent streams. Veolia will continue to endeavour to obtain samples when flow occurs during a rainfall event for low flow surface water points.
Site 150 – Mulwaree River	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 5**) indicate the following trends: • pH (average 7.57) is consistent with the previous reporting period; • EC (average 572 µS/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. These results are consistent with the trends for Site 110.
First Flush Stormwater Outlet	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 5**) indicate the following trends: • pH (average 7.79) is close to neutral, consistent with the previous reporting period; • EC (average 319 µS/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. No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.

4.1.2 IMF Dust Monitoring Results

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.

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 4.1.2** and detailed in **Table 13.1** (refer **Appendix 5**).

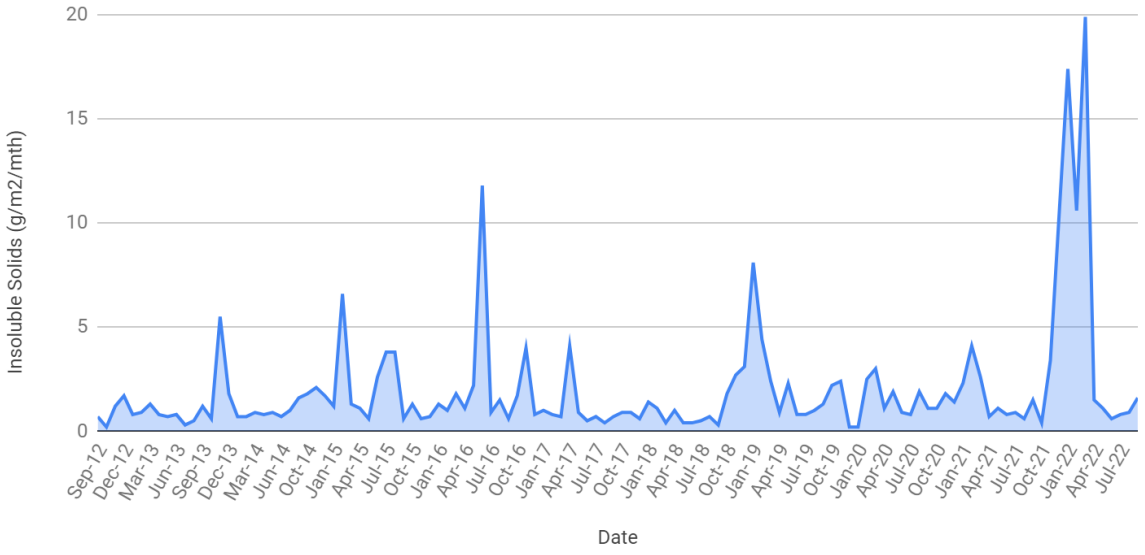
Table 4.1.2 **Dust Monitoring Results**

Summary Total Insoluble Solids (g/m²/month)			
Dust Gauge	**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/m^2/month, which is lower compared to overall historical trends as seen in the subsequent graph in **Figure 4.1.2.**

The results at DG18 indicate an average level of total insoluble solid matter is 5.7 g/m^2/month is consistent with historical trends 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 4.1.2 **Crisps Creek IMF Depositional Dust Levels**



4.1.3 IMF Waste Volume Monitoring

Schedule 3, Condition 8 stipulates that the facility must not exceed the annual throughout rate outlined to **Table 4.1.3** below.

Table 4.1.3 **Maximum annual input rates for Crisps Creek IMF**

Received by Rail from Sydney	Received by rail from Sydney for processing at the Woodlawn MBT
900,000 tpa	280,000 tpa

Veolia uses data provided by PWS to track and monitor the amount of incoming waste transported by rail from Sydney to Crisps Creek Intermodal Facility for processing at the Woodlawn Bioreactor and MBT Facilities. The Crisps Creek IMF has remained within the annual waste limit stipulated within the Bioreactor PA during the reporting period.

Table 4.1.3A indicates that inputs received by rail from Sydney have remained within the annual waste limit stipulated within the Bioreactor PA during the reporting period.

Table 4.1.3A **Incoming waste tonnage received by rail at the Crisps Creek (IMF) during 2021-22 reporting period**

Received by Rail from Sydney for processing at the Woodlawn Bioreactor	Received by rail from Sydney for processing at the Woodlawn MBT
644,573.317 tpa	110,857.589 tpa

Part 5 Woodlawn MBT Facility

5.1 MBT Monitoring Results

5.1.1 MBT Surface Water Monitoring Results

Quarterly surface water monitoring is carried out to monitor any potential surface water impacts of the project on the surrounding area. Baseline data for surface water has been obtained from historical water quality monitoring undertaken for monitoring location Site 115 - Allianoyonyiga Creek.

For results of the surface water monitoring point Site 115, refer to **Section 3.1.3** and **Table 6.1** (refer **Appendix 5**).

5.1.1.1 Discharge Monitoring Results

Surface water discharge monitoring is conducted at the MBT facility to determine whether surface water flowing off site could be contaminated as a result of operational activities. The results of discharge monitoring are assessed against discharge limits stipulated within the MBT PA and EPL 20476, which are described in **Table 5.1.1**.

***Table 5.1.1* Discharge Parameters and Performance Measures**

Parameter	Performance Measure	Standards	Statutory Requirements
pH	6.5-8.5	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW	EPL Condition L2.4
Total Suspended Solids (TSS)	50 mg/L		

Condition 19 of the MBT PA states the stormwater retention pond must capture and store all stormwater runoff generated at the premises during a 24-hour duration 1-in-100-year Average Recurrence Interval (ARI) rainfall event. Following the commencement of operations the facility must ensure it maintains a closed water management system, which ensures no discharge to the downstream environment.

The discharge point was sampled on thirty-one occasions in accordance with the EPL, and following heavy rainfall events during the reporting period. **Table 5.1.1A** below.

***Table 5.1.1A* MBT Discharge Point Monitoring Results**

Parameter	Results/Discussion
Site 140	Site 140 is located near the north western boundary of the facility collecting surface water runoff from the western and northern side of the MBT maturation pad. The

	pollutant concentration trends are generally consistent with previous sampling opportunities. • pH (7.95) is slightly highly than the previous period average (7.76), indicating slightly alkaline water; and • TSS (108 mg/L) is higher than previous results, a concentration reflecting slightly turbid water. Due to the extent of heavy rainfall experienced at the Premises, the discharge point was diligently monitored following every rainfall event. Veolia will continue monitoring this location in the next reporting period for any runoff impacts.

5.1.2 MBT Groundwater Water Monitoring Results

Four quarterly groundwater quality monitoring at WMBT Point 11 (MB32) was undertaken in this reporting period as required by the EPL. Results are summarised in **Table 5.1.2** below and depicted in **Figure 5.1.2.1** (refer **Appendix 5**).

The key quality indicators selected are the same as listed in **Section 3.1.5** to detect any pollutants in groundwater samples are the same as those deemed characteristic for leachate.

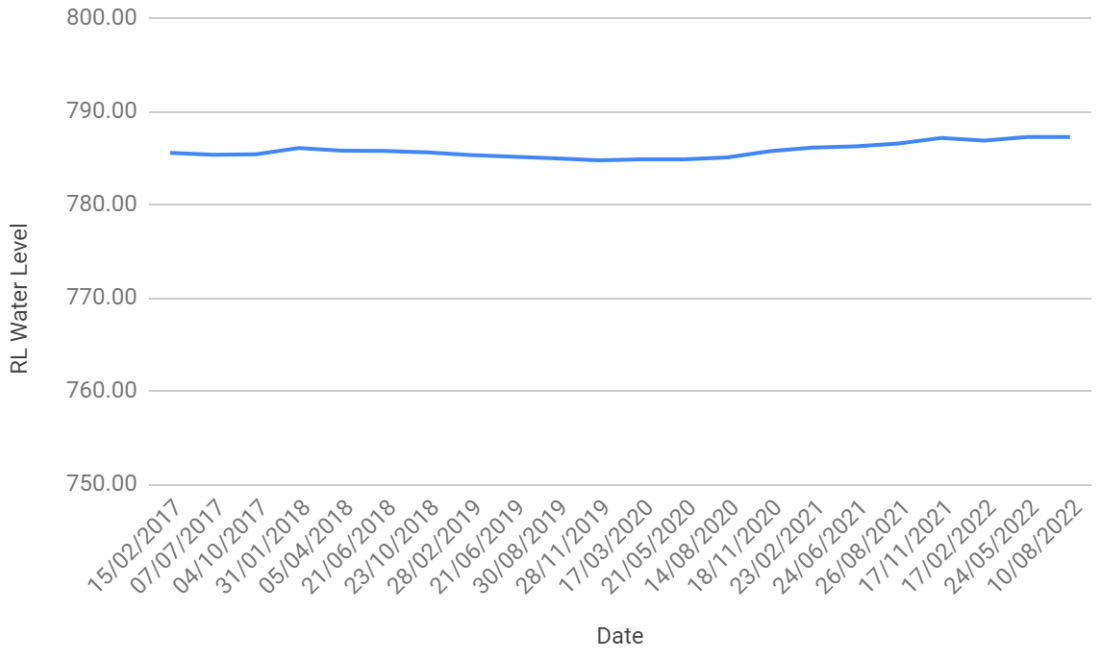
In addition to water quality monitoring, standing water levels (SWL) of the wells are also measured in metres relative to sea level (m RL) and are depicted in the subsequent graph **Figure 5.1.2.**

Table 5.1.2 **MBT Groundwater Monitoring Results**

Parameter	Results/Discussion
MB32	MB32 is located down gradient of the MBT leachate aeration dam. Based on the results provided in **Table 15.1** (refer to **Appendix 5**), the groundwater quality at this location can be described as: • SWL (average 787.1m RL) is consistent with the previous reporting period; • pH (average 7.36) and is slightly alkaline, showing a slight increase from the previous reporting period; • EC (average 11945 µS/cm) is lower than previous reporting period readings (average 13600 µS/cm); • SO_4 (average 537 mg/L) is consistent throughout this reporting period and lower of the previous period (563 mg/L); • Pb and Zn (average <0.002 mg/L and 0.05 mg/L respectively) are generally consistent with the previous period; and • NH_3 (average <0.07 mg/L) is lower than the previous reporting period; • TOC (6.75mg/L) is consistent with previous reporting periods (11 mg/L) with a slight decrease in concentration.

	All trends at this location indicate consistent concentration and there is no indication of contamination from leachate or MBT activities. No significant variations or anomalies were recorded for any analyte tested during this monitoring period.

Figure 5.1.2 **MBT Groundwater Levels - WMBT Point 11**



5.1.3 MBT Leachate Monitoring Results

Leachate quality monitoring is undertaken half-yearly at the MBT leachate aeration dam as detailed in the OEMP. The findings from this reporting period are summarised in **Table 5.1.3** below with the detailed data provided in **Table 15** (refer to **Appendix 5**). The trends are also depicted in **Figure 5.1.3.1** (refer **Appendix 5**).

In addition to chemical testing, the level of the water in the leachate aeration dam is also monitored on a weekly basis and after every rainfall event to ensure the freeboard is not exceeded as per Condition O5.3 of the EPL.

Table 5.1.3 **MBT Leachate Monitoring Results**

Parameter	Results/Discussion
MBT Leachate Aeration Dam	The leachate aeration dam is located at the northern side of the MBT facility where leachate collected from the facility is treated by aeration to oxidise organic compounds in leachate. Based on the results provided in **Table 16.1** (refer to **Appendix 5**), the characteristics of the leachate are:

	• pH average (8.3) is showing an increase in alkaline state from the previous reporting period result; • EC average (10,662 µS/cm) significantly lower than the overall average (21,050 µS/cm); • SO_4 average (20.43 mg/L) is significantly lower than the overall overage (396 mg/L). • Pb average decreased from 0.2865 mg/L(overall average to 0.132 mg/L, Zn also decreased from 9.9 mg/L(overall average) to 2.7 mg/L from the previous reporting period; • NH_3 average (566 mg/L) is lower compared to previous overall average (754 mg/L); and • TOC average (3553 mg/L) is lower compared to previous overall average (8555 mg/L). Affected by weather conditions during this reporting period, a decrease in overall concentrations was observed during the reporting period due to the significant rainfall experienced at the start of the period. A new aeration system was installed during the reporting period, which has decreased biological parameters such as Total Organic Carbon significantly.

5.1.4 MBT Air Quality Monitoring Results

5.1.4.1 MBT Dust Monitoring

Dust monitoring is undertaken monthly at the MBT facility in accordance with the MBT PA and EPL. A summary of this reporting period is provided in **Table 5.1.4.1** below and detailed in **Table 5** and **Table 15** (refer to **Appendix 5**).

***Table 5.1.4.1* MBT Air Quality Monitoring Results**

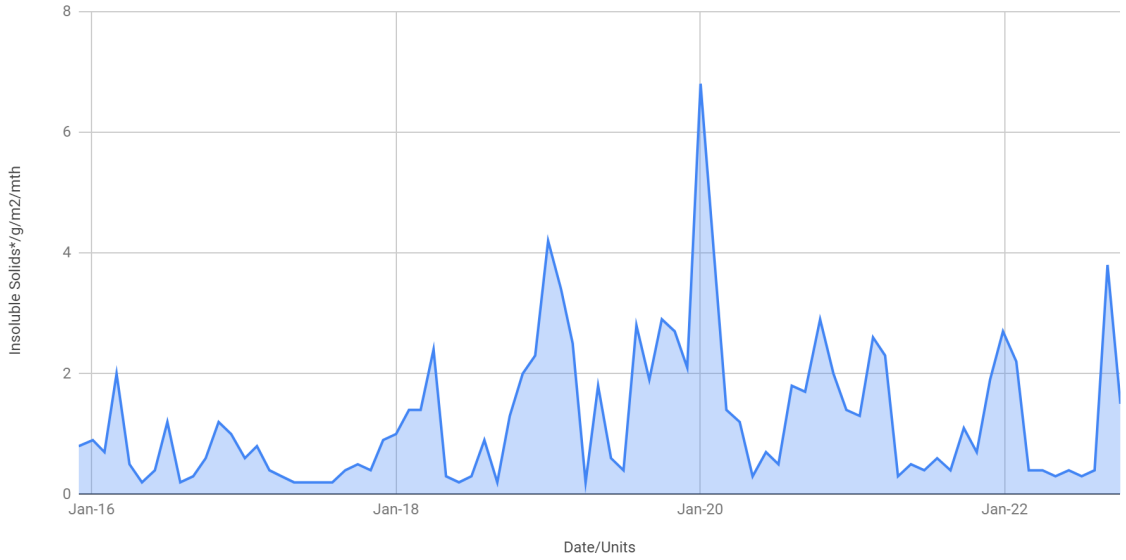
Parameter	Results/Discussion
Particulates/ Dust Monitoring	Monitoring of 3 depositional dust gauges (DG) was completed on a monthly basis as required under the MBT PA and EPL, the results of which are generally consistent with previously reporting periods. MBT shares 2 depositional dust gauges with the Bioreactor, which include Pylara (DG28) and West Void (DG 34), which are summarised in **Section 3.1.2**. In addition, there is a dust gauge (DG 33) close to the MBT facility. A summary of this reporting period at the dust gauge is provided in **Table 5.1.4.1** and detailed in **Table 5** and **Table 17.1**(refer to **Appendix 5**).

Table 5.1.4.1: Dust Monitoring Results

Dust Gauge	Summary Total Insoluble Solids (g/m²/month)		
	Minimum	Maximum	Average
DG 33 (Point 7)	0.3	2.7	0.9

	The average level of total insoluble solid matter is generally consistent with long term historical trends. The maximum dust level recorded during the reporting period was 2.7 g/m^2/month in December 2021, showing a significant decrease from the maximum concentration of 6.8 g/m^2/month reported in the 2019-20 reporting period resulting from the bushfire and dust storm events occurring between November 2019 and January 2020.

Figure 5.1.4 **MBT Depositional Dust Levels – DG33**



5.1.4.2 MBT Odour Monitoring

The air quality impact assessment (AIA) prepared by SLR, predicted that MBT Facility operations would comply with relevant air quality goals and are not expected to generate offensive or nuisance odours at nearby sensitive receivers.

The adopted odour criterion of 6 OU was predicted to be achieved at all receptors with the exception of the TriAusMin (now Heron) administration building, which was predicted to experience a 99th percentile odour concentration of 8.5 OU.

Table 5.1.4.2 **Odour Emission Performance Criteria**

Parameter	Measure	Standards	Statutory Requirement
Odour Emissions	6 OU	German Standard VDI 3940 'Determination of Odorants in Ambient Air by Field Inspections'	OEMP

This concentration was predicted to be dominated by the existing source of the Bioreactor, rather than the operation of the Facility, which was predicted to result in a 99th percentile concentration of 1.7 OU when modelled alone.

The management of odour emissions from each of the proposed processing stages is maintained by the use of biofilter pollution control mechanisms which use living material to biologically degrade and filter pollutants which may cause odours. These pollutants are absorbed into the biofilter material whereby it is broken down by microorganisms. No odour complaints were received in this reporting period.

5.1.5 MBT Noise Monitoring Results

The performance of the facility in managing potential noise emissions was assessed on the receipt of any noise complaints. No noise complaints were received in this reporting period.

Operational activities at the MBT are restricted within the approved operating hours described in **Table 5.1.5** as per Schedule 3, Condition 27 of the MBT PA, as well as all processing confined to enclosed areas.

***Table 5.1.5* Agreed Hours of Construction & Operation**

Activity	Day	Hours
Operation Hours	Monday - Saturday	6:00am – 10:00pm
Emergency Hours	Monday - Sunday	Anytime

Note: Operation of BRS Drums and associated infrastructure is permitted over 24 hours.

Noise limits are stipulated in the MBT PA to ensure the site does not generate nuisance noise emissions as a result of operational activities.

5.1.5.1 Operational Noise

Ambient noise measurements were conducted at the two locations as identified as the nearest residences on privately owned land, as specified in Condition 25 of the MBT PA.

The results of the operator-attended measurements confirm the noise impact assessment criteria (Refer to **Table 5.1.5.1**) is complied with at the nearest residences on privately-owned land, with LAeq (15minute) noise levels recorded below 35 dBA at both locations. The operator-attended measurements also recorded levels higher than LAeq (15minute) 35 dBA, and in these instances the ambient noise environment was due to natural sounds such as birds, insects and frogs.

Table 5.1.5.1 **Noise Impact Assessment Criteria dB(A)**

Parameter	Performance Measure	Standards	Statutory Requirement
Residences on privately owned land (during construction)	Laeq (15min) = 40dB	NSW Industrial Noise Policy (EPA)	Schedule 3, Condition 25
Residences on privately owned land (during operations)	Laeq (15min) = 35 dB		
Traffic Noise on privately owned land	Laeq (1 hour) = 60dB	Environmental Criteria for Road Traffic Noise (DECC)	Schedule 3, Condition 26

5.1.5.2 Traffic Noise

Traffic noise levels were calculated at the nearest residence to the road between the Crisps Creek Intermodal Terminal and Woodlawn MBT, for comparison with the Traffic Noise Impact Assessment Criteria specified in the approval. The results of the operator-attended measurements and calculation confirm the Project Approval (06_0239) noise criteria is complied with at the nearest residence on privately-owned land.

5.1.6 MBT Waste Volume Monitoring

5.1.6.1 Waste Acceptance and Screening

Waste is screened at the Clyde Transfer Terminal and Banksmeadow Transfer Terminal sites before the loading of waste into containers for the transportation to the MBT Facility. If any waste is detected that is not acceptable through the screening process, it is rejected and cannot be loaded into the containers.

Once received at the facility, the operator of the grapple crane inspects the waste as it is discharged from the vehicle to check for non-conforming waste. In the event that any easily extractable, bulk recyclable waste is detected, it is separated from the general waste stream and set aside for removal from the facility to another facility licensed to receive this type of waste for processing or recycling. This includes waste types identified as less desirable to processing operations. No records of non-conforming waste were recorded during this reporting period.

5.1.6.2 Waste Volume Monitoring

Schedule 3, Condition 2 of the MBT PA stipulates that the facility must not receive or process more than 240,000 TPA of mixed waste and 40,000 TPA of garden waste. Under the facility operations (Stage 1), the site currently accepts and treats 184,000 TPA, which includes 144,000 TPA of mixed waste and 40,000 TPA of garden waste in accordance with the EPA licence. The WRVCP details the Waste Monitoring Program used to monitor and record incoming waste at the facility.

The MBT PA stipulates that the waste received on site from the Crisps Creek IMF must not exceed the maximum annual input rates in **Table 5.1.6.2**.

***Table 5.1.6.2* Maximum annual input rates for Woodlawn MBT Facility**

Mixed Waste received by rail from Sydney	Garden Waste received by rail from Sydney
240,000 tpa	40,000 tpa

Veolia utilises the data provided by the onsite Paperless Weighbridge System (PWS) to track and monitor the amount of incoming waste transported by rail to Crisps Creek Intermodal Facility and transferred to the MBT Facility.

Table 5.1.6.2A indicates that the MBT Facility has remained within the annual waste limit stipulated within the MBT PA during the reporting period and Veolia will continue to monitor incoming waste tonnages at the facility for the following operational year.

***Table 5.1.6.2A* Total incoming waste tonnages during the 2021-22 reporting period at MBT**

Mixed Waste received by rail from Sydney	Garden Waste received by rail from Sydney *Including FO/GO
103,319.596 tpa	7,537.993 tpa

The forecasted tonnage (tpa) for the following reporting period is outlined in **Table 5.1.6.2B** below.

***Table 5.1.6.2B* MBT Forecast mixed waste tonnages for the 2022-23 reporting period**

Source	Waste Type	Total TPA
Sydney	Mixed Waste	144,000
	Garden Waste (FO/GO)	40,000
TOTAL		**184,000**

Part 6 Environmental Performance

6.1 Independent Audit Findings

In consultation with both the EPA and DPE the Independent Audits below were conducted during the reporting period. All identified non-conformances and proposed corrective actions were reported to the DPE during the reporting period.

6.1.1 Leachate and Water Management System (LWMS) 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 6.1.1.** More detail on Veolia's specific implementation actions and corresponding implementation timelines were submitted to the Department during the reporting period.

Table 6.1.1 **2021 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 Coffer Dam 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 Coffer Dam#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.

6.1.2 Independent Odour Audit

In accordance with the requirements of Condition 7 of Schedule 4 of MP 10_0012, Veolia is required to carry out an annual independent odour audit. This was the tenth Independent Odour Audit (IOA) commissioned by Veolia since the Woodlawn Waste Expansion project approval was granted and encompasses the Woodlawn Bioreactor, Crisps Creek Intermodal Facility and Woodlawn MBT facility.

A number of recommendations were developed as a result and discussed in **Table 6.1.2** below. More detail on Veolia's specific implementation actions and corresponding implementation timelines were submitted to the Department during the reporting period.

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Table 6.1.2 **2021 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.	Develop and implement a site specific Odour Management Plan with the key objective of the updated Odour Management Plan will be 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.	Implement the gas systems described in WIP 2020 including: ● Expansion of the gas capture system to promote gas collection: ○ Install and commission a additional flare and blower in order to manage excess landfill gas extraction; and ○ Install additional wells and extend the existing gas capture pipework accordingly.

		• Improve leachate treatment capacity and efficiency;
		  ○ Install an additional UF train at Leachate Treatment Plant; and
		  ○ Hire a boiler unit to maintain heat during the winter;
		• Improve balancing of leachate quality in LTD prior to going to LTP;
		  ○ Refurbish and install additional aerators; and
		  ○ Reconfigure the delivery recirculation pipework.
		• Improve management and maintenance of intermediate cover:
		  ○ Carry out maintenance of the interface between the waste and the rock face by compacting clay and maintaining biofilters; and
		  ○ Modify the tipping slope grade for long exposure batter to achieve better intermediate cover.
		• Improve stormwater interception and reduced leachate production by redesigning the waste surface;
		  ○ Design and implement a gable shape on the waste surface for easier collection and extraction of stormwater.
		• Design and implement leachate infrastructure in a low lying area to maximise leachate extraction and increase gas capture;
		  ○ Install subsurface drainage channels for leachate; and
		  ○ Design and construct new leachate transfer infrastructure (Western Unity Area).
		• Enhance maintenance and compaction of gas well and surface cover interfaces:
		  ○ Using a wheel compactor attachment for excavators to compact around wells; and
		  ○ Develop and implement a program to identify and address interface issues at wells as part of an ongoing routine maintenance program.

		• Optimise gas well suction pressure to maximize gas capture rates;
		  ○ Install double suction line for gas wells with high LFG production performance to assure sufficient collection capacity and minimise fugitive emission.
		• Ensure timely identification and rectification of fugitive emissions using daily and monthly surface gas monitoring:
		  ○ Conduct monthly landfill surface gas surveys using an independent expert;
		  ○ Conduct daily inspections of the landfill void; and
		  ○ Develop and implement a Trigger action response plan in consultation with the EPA,

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 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.	Implement 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.

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.	Pursue and materialise the performance goals outlined in the Woodlawn Infrastructure Plan (WIP) 2020 and minimise leachate generation ny:
		  ○ Maintaining the existing stormwater diversion program;
		  ○ Establishing acceptable limits for the rapid diversion of contaminated but highly diluted stormwater to stormwater storage during high rainfall events and submitting to the EPA for approval.

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.	Develop strategies for the minimising of the exposed active tipping face surface area, inclusive of details in the WIP 2020. Following the completion of the gable profile, consideration will be given to an east to west slope to allow stormwater removal.
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.	Continue to progress with its community engagement and liaison process by way of: • Quarterly CLC meetings; • Monthly Tarago Times articles; • Quarterly Newsletter; and • Veolia website updates. Undertake the calibration and training of Veolia staff to conduct field ambient odour assessment surveillance surveys.
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.	Identify any community members who are professionally trained to implement and use the odour diary program. If no members are professionally trained to use the diary, remove the odour diary from use.
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 uncontrolled gas emission release points from the surface of the Void at the Woodlawn Facility.	Veolia has engaged a suitably qualified expert for the undertaking of this analysis and will utilise the gas composition 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 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.	Seek contextualisation of the EPA's H2S monitoring data as part of a separate study to the Audit, and completed by March 2023 and before the next IOA.

6.1.3 Independent Environmental Audit

In accordance with the requirements of Condition 6 and 7 of Schedule 4 of MP 06_0239, every three (3) years after the first Independent Odour Audit required of this approval, Veolia is required to carry out an independent environmental audit. The 3-yearly Independent Environmental Audit was undertaken for the Woodlawn MBT Facility during this reporting period.

A number of recommendations were developed as a result and discussed in **Table 6.1.5** below. More detail on Veolia's specific implementation actions and corresponding implementation timelines were submitted to the Department during the reporting period.

***Table 6.1.5* 2021 Independent Environmental Audit Recommendations**

Item	Observation/Recommendation	Implemented/Proposed Action
1.	Relating to freeboard limit monitoring Veolia should: • Specify the methodology and recording of freeboard limit monitoring in the SWLMP so that the method(s) of measurement (visual, instrumentation), the units, frequency, and any calculations are clearly provided; • Ensure that the continuous level monitor is checked, serviced and maintained so that the data can be relied upon as a critical control for the Leachate monitoring system. As a critical control, the level monitor instrument should be in VAMS and maintained appropriately as a critical control.	Veolia has already implemented improvements to measure leachate dam levels, including installation of level sensor and remote monitoring system using SCADA, and will continue to maintain this system using Veolia's Asset Management System (VAMS). This process will be updated in the Soil Water Leachate Management Plan (SWLMP).
2.	Review and revise Section 4.1 Soil Management comprising soil erosion and sediment controls in order to improve the effectiveness of the control measures to prevent TSS exceedances.	Veolia will review and revise Section 4.1 of the SWLMP, and incorporate an Erosion and Sediment Control Plan to address TSS management. Veolia has assessed the risks of implementing the contingency in the SWLMP to pump liquid to the Reception Building pit at the time of the incident. It was determined, based on several factors, that this was not the action with the best environmental outcome. Consequently, the SWLMP is being reviewed and updated in light of learnings from the incident, and in consultation with relevant stakeholders. The updated SWLMP will be submitted to DPE for approval.

3.	Consider whether dust suppression controls at the MBT and across the Woodlawn Eco-Precinct require improvement, recognising that external circumstances such as seasonal bushfires and dust storms are not within Veolia's control.	Veolia will develop a Trigger Action Response Plan to ensure appropriate dust suppression controls are implemented subject to operational activities and changing external circumstances and monitor effectiveness. Veolia will continue to implement existing dust suppression controls at the MBT and overall Eco-Precinct to ensure operational activities mitigated the emission of dust.
4.	Investigate the reason(s) why the report was not issued within 6 days of notifying the Department. Implement a more robust process to ensure that the Department is notified in accordance with this condition in the event that another incident occurs.	Veolia will investigate and review its processes and procedures with respect to incident reporting. Following this review, Veolia will make any updates identified as being required by the review, and provide refresher training to relevant Veolia staff.

6.2 Community Engagement

6.2.1 Complaints

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

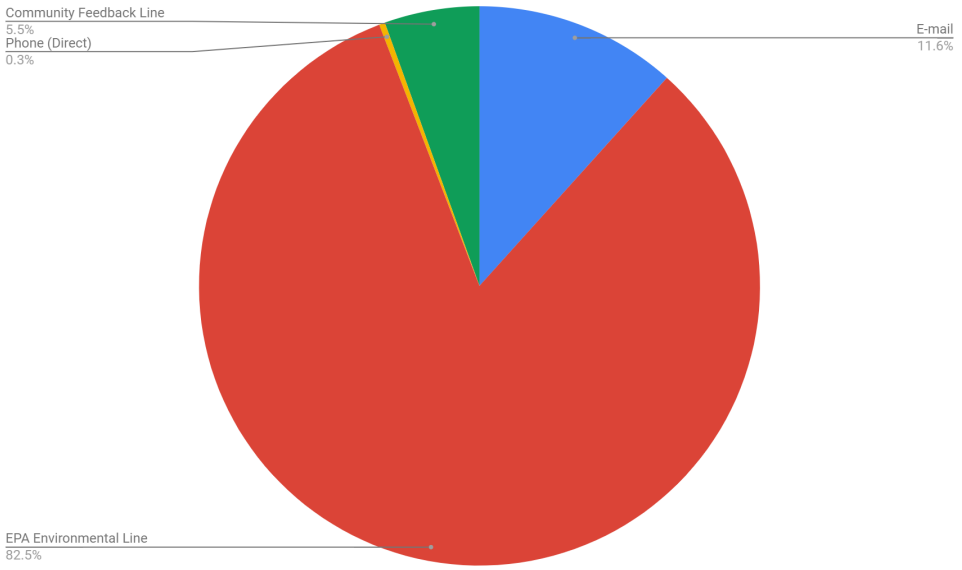
In order to proactively engage in effective odour management, Veolia participates in regular community liaisons to encourage and gather feedback from the local residents regarding the odour performance at the Bioreactor.

In accordance with Condition 1 and 2 of Schedule 7 (PA 10_0012), a Community Liaison Committee (CLC) operates for the Woodlawn Project consisting of an Independent Chair, representatives from Goulburn Mulwaree and Queanbeyan Palerang Regional Council, a TADPAI representative, and five community members. The CLC aims to meet up to four times per year.

Veolia recorded a total of 292 complaints relating to odour which is fairly consistent with the previous reporting year (302). Complaints received in the reporting period are detailed in **Table 6.1** (refer **Appendix 6**).

The majority of odour complaints were reported using the EPA Environmental Line as demonstrated in the graph below (**Figure 6.2.2)** below**.**

Figure 6.2.2 **Woodlawn Eco-Precinct Odour Complaint Locations**



Veolia manages and minimises odour emissions 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. The configuration of the landfill gas collection system during placement of waste, and the waste lift design ensures consistent gas and leachate extraction.

Gas capture was improved significantly during this reporting period with hourly extraction rates at some of their highest levels ever. This has resulted in a notable reduction in overall odour complaints.

6.2.2 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/H_2S 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.

6.3 Rehabilitation

6.3.1 Woodlawn Mine

Rehabilitation of the mine void through landfilling is a continuous process. Final rehabilitation works shall be completed in accordance with the Rehabilitation and Closure Plan.

The areas to be rehabilitated include but is not limited to:

- The Bioreactor
- Former Mineral Processing Area - Plant Area
- Evaporation Dam 3
- Evaporation Dam 1
- Power Station
- Office and car park areas
- Crisps Creek IMF and Mulwaree River
- MBT Facility

Veolia has undertaken vegetation monitoring and tree planting programs at the Eco-Precinct site and continues to seek out ways to continuously improve and rehabilitate the overall natural amenity of the site.

6.3.2 Woodlawn Tailings Dams

Develop operate the Woodlawn Zinc-Copper Project within Special (Crown and Private Lands) Lease 120, issued pursuant to the NSW Mining Act 1992. Several conditions exist under their Lease to prevent, minimise and/or offset adverse environmental impacts, and to ensure that areas disturbed by mineral production and exploration activities are appropriately rehabilitated.

Developed under the approval conditions Develop's Mining Operations Plan (MOP) includes a Rehabilitation Strategy which describes the proposed rehabilitation strategy for the four tailings dams on site.

In May 2020, the Environment Protection Authority (EPA) through a NSW Resource Recovery Exemption, permitted the application of the Woodlawn organic outputs (WOO) (MBT organic output derived from mixed waste) to land for trials for the rehabilitation of acid mine tailings in the tailings dams of the Woodlawn Zinc-Copper Project Mine site. The trial began in February 2021 and is ongoing.

Veolia will consult with EPA on the final rehabilitation plans and plant species to be adopted within the rehabilitation areas, once a suitable rehabilitation design is selected and additional detail is developed.

Part 7 Conclusion

7.1 Environmental Performance Improvements

A number of improvements to the environmental management of the Woodlawn Eco-Precinct have been implemented during this reporting period. These improvements were identified as a result of the recommendations and findings identified by independent environmental audits, regulatory inspections as well as Veolia's internal assurance program.

7.1.1 Improvements Implemented

Table 7.1.1 outlines the improvements identified in the 2020-21 AEMR and implemented in the reporting year for the Woodlawn Bioreactor, Crisp Creek IMF and Woodlawn MBT facility.

***Table 7.1.1* 2021-22 Improvements Implemented**

Item	Improvement	Implemented Action
1.	Improve stormwater management efficiencies for periods of high rainfall.	Investigate evaporative technologies to reduce our reliance on natural and mechanically assisted evaporation during periods of high rainfall.
2.	Develop and implement throughput contingency for the Leachate Treatment Plant.	Install an additional Ultrafiltration (UF) train at the Leachate Treatment Plant to optimise the throughput of the plant by July 2022.
3.	In accordance with EPL Condition O6.31 develop and implement an Odour Management Plan that includes the use of MWOO as alternate daily cover (ADC).	Incorporate an Odour Management Plan into the Woodlawn Air Quality and Greenhouse Gases Management Plan in consultation with the EPA for submission to the Department for approval.
4.	Increase the landfill gas extraction infrastructure.	Install additional manifold to the waste surface in the south west corner to improve gas extraction within the void.
5.	Develop strategy for removal of mildly contaminated stormwater from within the void.	Develop transfer of contaminated stormwater work instruction for the transfer of contaminated stormwater from the Woodlawn Landfill Void to treated leachate storage dams in consultation with the EPA.
7.	Implement a robust container maintenance programme ensuring prevention of emission of offensive odour and leakage from containers during transport and handling activities.	Implement an improved container inspection and monitoring program using an automated plant maintenance management system to

		ensure containers are managed and maintained efficiently.
8.	Install and optimise additional infrastructure for Woodlawn MBT evaporation dam.	New Evaporation system to be installed and commissioned to increase leachate evaporation.
9.	Develop processes for business reporting to include monitoring of waste received in ongoing reporting periods against the three separate streams outlined in Schedule 3, Condition 5.	Design and implement a waste stream monitoring dashboard collating relevant data to provide real time visual feedback.

7.1.2 Improvements Proposed

Veolia is committed to continuous improvement. As a result of the previous 2 years of well above average rainfall, the improvements are largely focused on stormwater and leachate management which also impact gas capture.

Table 7.1.2 outlines the improvements proposed for the 2022-23 reporting year for the Woodlawn Bioreactor, Crisp Creek IMF and Woodlawn MBT facility.

***Table 7.1.2* 2022-23 Improvement Recommendations**

Item	Improvement	Proposed Action
1.	Install and optimise additional infrastructure for dam evaporation. This was originally proposed for implementation in the previous reporting period, however was not completed.	Install an evaporation system on ED3S. The evaporation system will take water from the dam and evaporate it on various sections of the void walls.
2.	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.
3.	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 within the approved timeframes.
4.	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.
5.	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.
6.	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.

7.2 Non-Compliances

Table 7.2.1 outlines the non-compliances identified during the 2021-22 reporting year for the Woodlawn Bioreactor, Crisp Creek IMF and Woodlawn MBT facility.

Table 7.2.1 **Woodlawn Bioreactor Non-Compliances and Crisps Creek IMF Non-Compliances (MP10_0012 and DA 31-02-99)**

Condition	Non-compliance	Proposed Action / Action undertaken
4.17 4.18 4.18P of MP10_0012 & 70R of DA 31-02-99	Coffer Dam 1 within ED1 (ED1 Coffer Dam) reached 80% capacity prior to condition 18P(a) or condition 18P(b) being met. 0.5m freeboard was reached at ED1 Coffer Dam, ED3S, ED3N-2, ED3N-4 and ED3S-S. Diversion of stormwater from ED3S to ED1.	Veolia submitted an updated Leachate Management Plan to the DPE on 05 January 2022 to take into account the significant level of rainfall received at the Premises in recent years. Veolia is in the process of implementing a number of short term and medium term measures to increase the liquid storage capacity at the Premises, as a result of the significant level of rainfall received at the Premises in recent years. This is being undertaken with regular and ongoing consultation with the DPE and the EPA. Additionally, Veolia has engaged an independent consultant to prepare short to medium term strategies, and long term strategies, with respect to liquid management at the Premises, in accordance with a Development Consent Order issued by the DPE. Whilst this is being undertaken, Veolia continues to implement the short term and medium term measures referred to above.

4.11 of MP10_0012	Exceedance of monthly depositional dust monthly monitoring criteria	Veolia will develop a Trigger Action Response Plan to ensure appropriate dust suppression controls are implemented subject to operational activities and changing external circumstances and monitor effectiveness. Veolia will continue to implement existing dust suppression controls throughout the Eco-Precinct to ensure operational activities mitigated the emission of dust
4.18J & 4.18Q of MP10_0012 Condition 70L and 70S of DA 31-02-99	Treated leachate from the Leachate Treatment Plan (LTP) diverted from Coffer Dam 1 into the outer section of ED1 as an emergency contingency measure to ensure the Premises remains a zero discharge site.	Veolia is in the process of implementing a number of short term and medium term measures to increase the liquid storage capacity at the Premises, as a result of the significant level of rainfall received at the Premises in recent years. This is being undertaken with regular and ongoing consultation with the DPE and the EPA. Additionally, Veolia has engaged an independent consultant to prepare short to medium term strategies, and long term strategies, with respect to liquid management at the Premises, in accordance with a Development Consent Order issued by the DPE. Whilst this is being undertaken, Veolia continues to implement the short term and medium term measures referred to above.
Schedule 5, condition 8 of MP10_0012	292 Odour complaints were received during this reporting period. Whilst not all complaints have been verified as resulting from the operations at the Premises, all complaints have been reported out of an abundance of caution.	A number of actions have been taken, and further actions are planned, including improvements in the biofiltration media, and in the design and configuration of the gas collection and extraction system, which has increased the ability of the system to extract gas. Veolia also communicates with the community via newspaper publications and quarterly community liaison meetings. Strategies implemented to manage odour in this reporting period have proved effective in decreasing the number of complaints received.

		Actions include (in addition to those described above): - controls to ensure all potential odour sources identified at the Facility are managed; - site odour surveys and inspections; - Annual independent odour audits - analysis of the weather conditions - assessment of operational factors contributing to reports of odours.
Schedule 5, condition 17 of MP10_0012	Operational activities occurred at Crisps Creek IMF on public holidays where the Woodlawn Bioreactor site is permitted to operate under EPL 11436. Due to an administrative oversight, written approval from the EPA was not received to operate on these public holidays. There were no adverse effects as operations are permitted under EPL.11436 (for the Woodlawn Bioreactor facility) and, in order for the Woodlawn Bioreactor facility to operate effectively, the Crisps Creek facility is also required to operate. In addition, no community complaints were received regarding this incident.	Veolia will seek a variation to EPL 11455 (for the Crisps Creek IMF) to ensure that it is consistent with condition L5.1 of EPL.11436 (for the Woodlawn Bioreactor facility). Veolia is awaiting the EPA's response to this proposed variation.
Condition 18 of DA 31-02-99	Conditions Compliance Report has not yet been issued to meet the required frequency in 2022.	An extension has been sought from DPE, and Veolia intends to submit this report in early 2023
Condition 18 of DA 31-02-99 & Schedule 5, Condition 3 of MP10_0012	Storage of containers containing waste overnight was required on one occasion during this reporting period, due to late train arrivals, in order to ensure staff safety and proper fatigue management.	Veolia sent email notification to the EPA (OEH), as well as the Community Liaison Committee and the Council to inform them of the storage on-site and allow for any questions or concerns to be addressed 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.

Table 7.2.2 **MBT Facility Non-Compliances (MP 06_0239)**

Condition	Non-compliance	Proposed Action / Action undertaken
Schedule 3, Condition 7	The 0.5 m freeboard in the leachate pond was reached.	Veolia has implemented improvements to measure leachate dam levels, including installation of level sensor and remote monitoring system using SCADA, and will continue to maintain this system using Veolia's Asset Management System (VAMS). The Soil Water Leachate Management Plan (SWLMP) is in the process of being reviewed and updated and, once finalised, will be submitted to DPE for approval.
Schedule 3, Condition 16	Leachate was transferred to ED3S-S on the Bioreactor site on10 December 2021, rather than to the Reception Building pit, to manage leachate levels at the MBT site following an extremely high rainfall event. At the time, Veolia undertook an assessment of the risks of implementing the contingency in the SWLMP to pump liquid to the Reception Building pit. It was determined, based on several factors, that this was not the action with the best environmental outcome. It was identified that, given the already "wet" waste being received from our transfer facilities in Sydney, pumping additional liquid from the Pond into the Reception Building pit would have caused significant operational issues downstream of the Site's treatment processes, including spills on the conveyors and other processing buildings, as well as affecting the quality of the organic outputs, potential hazardous exposure to our workers, and likely result in increase in odour. Soil stabilisation and erosion controls have not been sufficiently effective to prevent TSS exceedances at EPA Point 8.	The SWLMP is in the process of being reviewed and updated, in consultation with relevant stakeholders, to remove the contingency of pumping liquid to the Reception Building pit. The updated SWLMP will be submitted to DPE for approval, once finalised.

Schedule 3, Condition 23	Exceedance of monthly depositional dust monthly monitoring criteria	Veolia will develop a Trigger Action Response Plan to ensure appropriate dust suppression controls are implemented subject to operational activities and changing external circumstances and monitor effectiveness. Veolia will continue to implement existing dust suppression controls at the MBT and overall Eco-Precinct to ensure operational activities mitigated the emission of dust.
Schedule 4, Condition 4	Veolia issued an incident report to the EPA and the Department with respect to this non-compliance. The report issued to DPE following the incident was not issued within 6 days of notifying the Department in accordance with this condition.	Veolia will investigate and review its processes and procedures with respect to incident reporting. Following this review, Veolia will make any updates identified as being required by the review, and provide refresher training to relevant Veolia staff.

Reference and Related Documents

Document Name
URS Australia Pty Ltd, Veolia Environmental Services Environment Assessment: Woodlawn Expansion Project Volume 1 – Main Report, August 2010
URS Australia Pty Ltd, Veolia Environmental Services Environment Assessment: Woodlawn Expansion Project Volume 2 – Appendices, August 2010
EPA, Waste Classification Guidelines Part 1: Classifying Waste, November 2014;
EPA, Environmental Guidelines: Solid Waste Landfills Second Edition, 2016, April 2016
Veolia, WL - Bioreactor Landfill Environmental Management Plan (LEMP), 30 August 2018
Veolia, WL - Bioreactor infrastructure Plan (WIP) 2020, 13 October 2020
Veolia, WL - MBT Operational Environmental Management Plan (OEMP), 19 January 2017
Veolia, WL - Crisps Creek IMF Environmental Management Plan (EMP), 2 September 2016
Veolia, WL - Bioreactor Receipt of Non-Conforming Waste Work Instruction, 28 August 2019
Ramboll Australia Pty Ltd, Independent Environmental Audit, May 2022
The Odour Unit Pty Ltd, Woodlawn Bioreactor Expansion Project Independent Odour Audit #10, October 2022
Jackson Environment Pty Ltd, Independent Audit Leachate and Water Management System, July 2022

Appendices

Appendix 1 Site Location Map

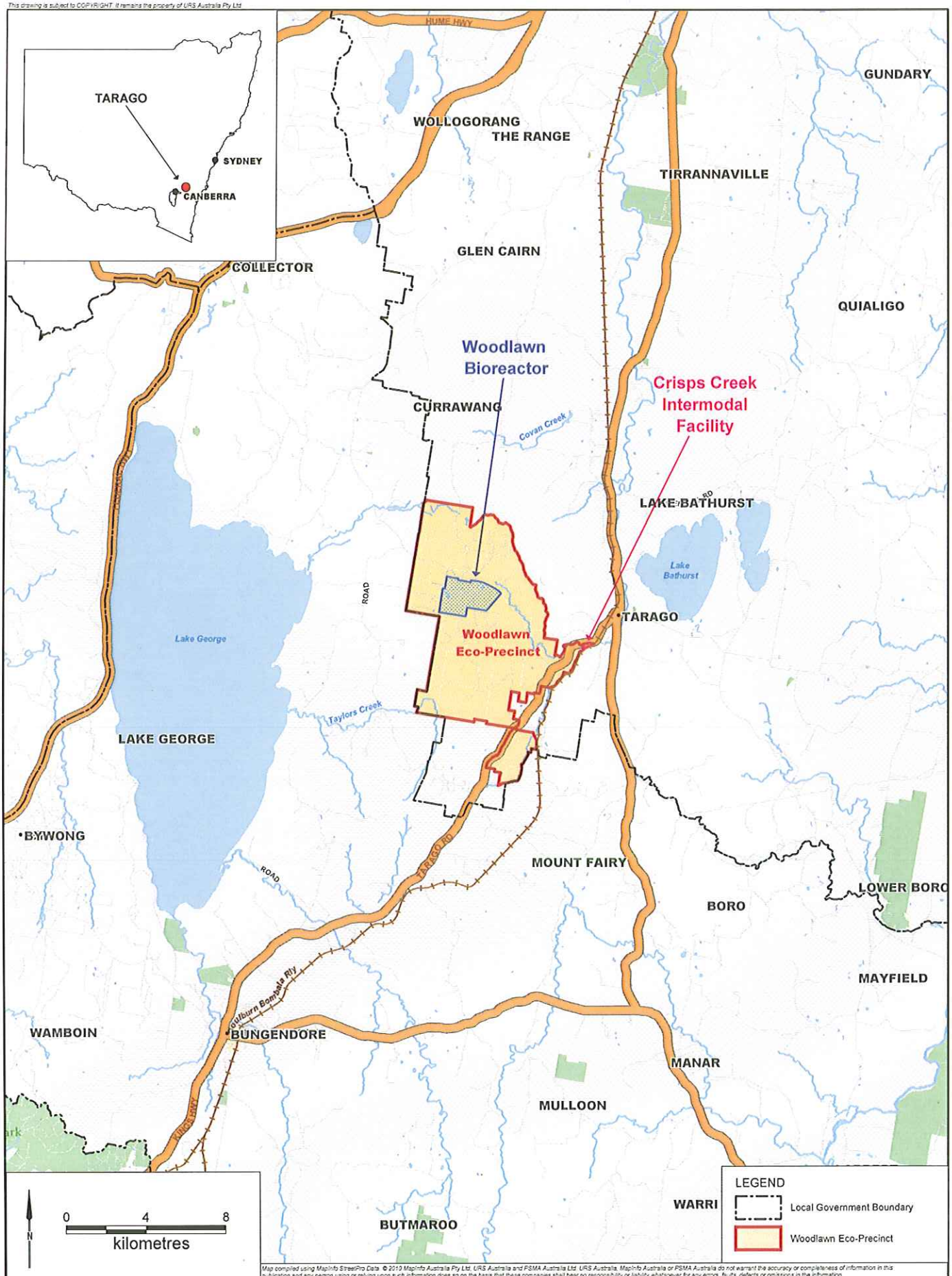
Appendix 2 EPL Boundary Map

Appendix 3 Monitoring Location Maps

Appendix 4 Monitoring Trends

Appendix 5 Tabulated Monitoring Data

Appendix 6 Complaints Register



Client	Project	Title
VEOLIA ENVIRONMENTAL SERVICES PTY LTD	WOODLAWN EXPANSION PROJECT	WOODLAWN ECO-PRECINCT LOCATION

URS

Drawn: SB	Approved: LO	Date: 06/08/2010
Job No: 43177703	File No: 43177703.018.wor	

Figure: 1.1

MGA

1
DP 126600

87
DP 754919

96
DP 754919

16
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DP 180491

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DP 830765

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DP 754919

MB3

90
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115

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DP 754919

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9
DP 534616

MW-FRC1

SPRING2

SP2-MW1

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6
DP 830765

MB10

MB10S

MB2

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DP 830765

33
DP 754919

5 DP 830765

ED1

MB28

30
DP 754919

GMBH2

1
DP 1179305

MW9S

ED1 COFFER DAM

MB1

25
DP 754919

21
DP 827588

MET STN

WM201

LANDFILL GAS FLARE

LANDFILL GAS ENGINE EXHAUST

MW8S

MW10S

WM6

MB7

MW8D

MB33

P100A

P100B

WM200

LEACHATE POND

DG28

LRS

WM5

WM202

WM203

LC1 TRANSFER TANK

POND 5

GMBH1

69
DP 754919

DG34

MB6

P58A

P58B

ED3B

ED3SS

LANDFILL SURFACE

WM1

DG22

2
DP 1179305

91
DP 754919

P59A

P59B

88
DP 754919

P200A

P200B

MB4

GMBH4

GAS EXTRACTION BOOSTER

P38A

P38B

5 DP 830765

20
DP 827588

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DP 754919

92
DP 754919

14
DP 754919

86
DP 754919

105

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DP 534616

4
DP 534616

1
DP 313

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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VEOLIA ENVIRONMENTAL SERVICES

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LandTeam

A1 SHEET

VEOLIA ENVIRONMENTAL SERVICES

WOODLAWN BIOREACTOR
COLLECTOR ROAD, TARAGO

WOODLAWN
ENVIRONMENTAL PROTECTION LICENCE
SITE MONITORING LOCATIONS

DESIGNED: N/A
DRAWN: MK
CHECKED: JK
ISSUE A

DRAWING No. 16800-225

DATUM AHD | CONTOUR INTERVAL 10m | DATE 15/04/2020

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DP 180491

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DP 830765

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DP 754919

MB3

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DP 754919

115

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DP 754919

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DP 830765

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DP 534616

MW-FRC1

SPRING2

SP2-MW1

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DP 754919

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MB10

MB10S

MB2

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DP 754919

5 DP 830765

ED1

MB28

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DP 754919

GMBH2

1
DP 1179305

MW9S

ED1 COFFER DAM

MB1

21
DP 827588

25
DP 754919

MET STN

WM201

MW8S

MW10S

LANDFILL GAS FLARE

LANDFILL GAS ENGINE EXHAUST

WM6

MB7

MW8D

MB33

P100A

P100B

WM200

LEACHATE POND

WM5

WM202

DG28

LRS

69
DP 754919

DG34

WM203

LC1 TRANSFER TANK

POND 5

GMBH1

MB6

MB35

P58A

P58B

LANDFILL SURFACE

WM1

DG22

2
DP 1179305

ED3B

ED3SS

91
DP 754919

P59A

P59B

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DP 754919

P200A

P200B

MB4

GMBH4

GAS EXTRACTION BOOSTER

MB34

P38A

P38B

5 DP 830765

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105

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DP 534616

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DP 754919

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DP 754919

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DP 534616

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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A1 SHEET

VEOLIA ENVIRONMENTAL SERVICES

WOODLAWN BIOREACTOR
COLLECTOR ROAD, TARAGO

WOODLAWN
ENVIRONMENTAL PROTECTION LICENCE
SITE MONITORING LOCATIONS

DESIGNED: N/A
DRAWN: MK
CHECKED: JK
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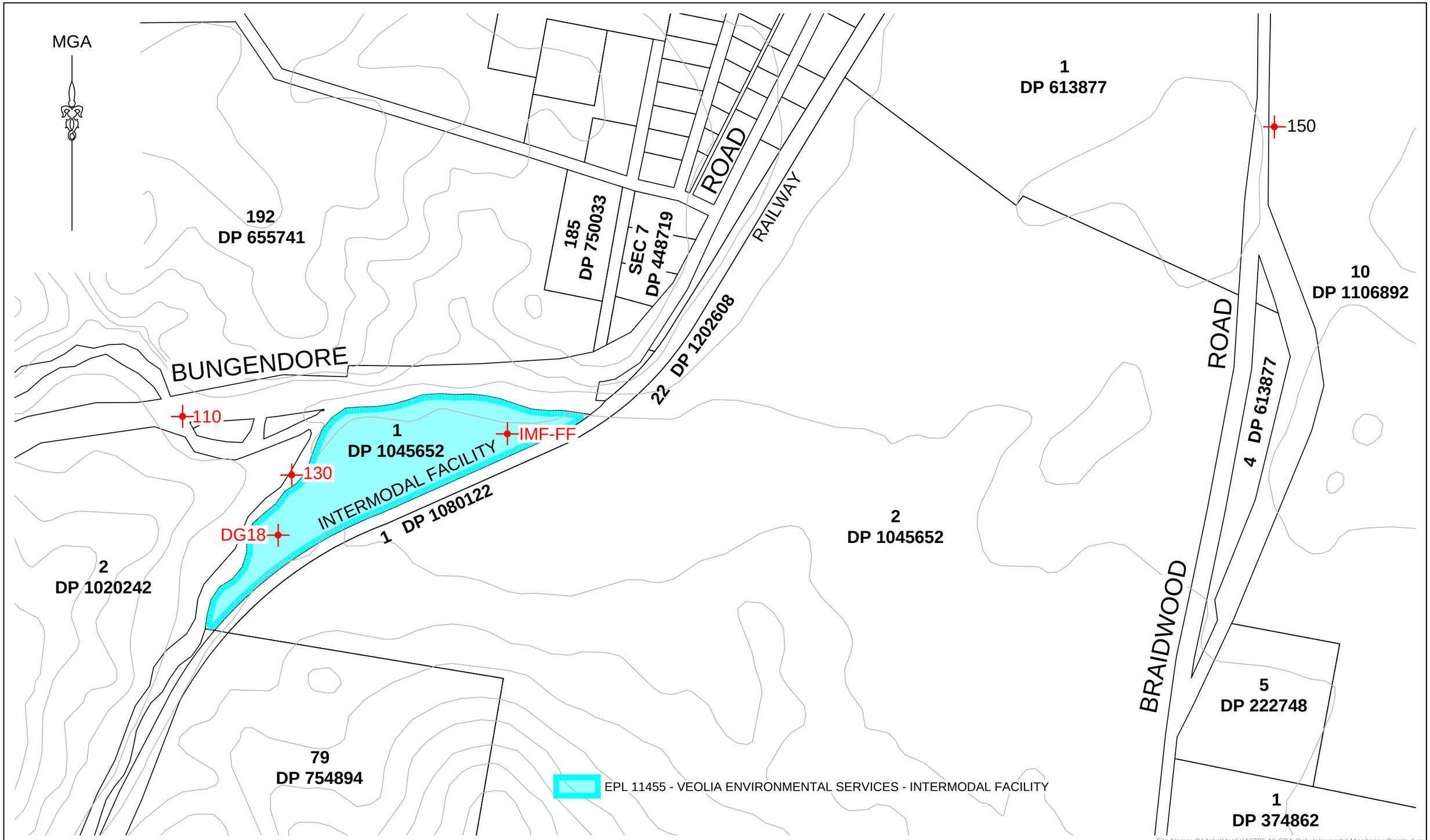

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VEOLIA ENVIRONMENTAL SERVICES

ENVIRONMENTAL PROTECTION LICENCE
SITE MONITORING LOCATIONS
VEOLIA INTERMODAL FACILITY
BUNGENDORE ROAD, TARAGO

DATUM AHD | CONTOUR INTERVAL 10m

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DRAWN: MK
CHECKED: JK
ISSUE A

DRAWING No. 16735-16

MGA

TO COLLECTOR

COLLECTOR

ROAD

TO TARAGO

1
DP 180491

Pt 97
DP 754919

MB13
E 731858 N 6118412

EPL 20476 POINT 1
ALLIANOYONYIGA CREEK
E 731952 N 6118394

MB12
E 732775 N 6118274

MB11
E 732774 N 6118272

34
DP 754919

5
DP 830765

4
DP 830765

Pt 6
DP 830765

33
DP 754919

EXISTING EVAPORATION
DAM 2

EXISTING EVAPORATION
DAM 1

EPL 20476 POINT 8
DISCHARGE MONITORING
E 7332919 N 6117841

SITE BOUNDARY 4
E 732768 N 6117847

EXISTING
DRAINAGE
CHANNEL

EPL 20476 POINT 11
MB32 GROUNDWATER
E 733079 N 6117706

SITE BOUNDARY 3
E 733099 N 6117702

APPROVED
BOUNDARY

APPROVED
BOUNDARY

EPL 20476 POINT 12
LEACHATE AERATION POND
E 733062 N 6117682

MBT
FACILITY

PROPOSED STAGE 2
DEVELOPMENT

STORMWATER
PONDS

SITE BOUNDARY 1
E 732639 N 6117576

WM6
E 733346 N 6117412

EXISTING EVAPORATION
DAM 3

30
DP 754919

25
DP 754919

ACCESS ROAD TO SITE
(CONSTRUCTION STAGE ONLY)

MAIN FACILTY
ACCESS

PERMANENT SITE
ACCESS

EXISTING
ADMINISTRATION
BUILDING

SITE BOUNDARY 2
E 732889 N 6117451

MB7
E 733204 N 6117329

SITE ENTRY 1
E 733306 N 6117398

EPL 20476 POINT 6
WEST VOID
E 733866 N 6117237

69
DP 754919

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DP 830765

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DP 754919

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DP 754919

2
DP 1179305

21
DP 827588

POINT	EASTING	NORTHING
SITE ENTRY 1	733306	6117398
SITE BOUNDARY 1	732639	6117576
SITE BOUNDARY 2	732889	6117453
SITE BOUNDARY 3	733099	6117702
SITE BOUNDARY 4	732768	6117847
EPL 20476 POINT 1 ALLIANOYONYIGA CREEK	731952	6118394
EPL 20476 POINT 6 WEST VOID	733866	6117237
EPL 20476 POINT 7 LOT 69	732756	6116360
EPL 20476 POINT 8 DISCHARGE MONITORING	732919	6117841
EPL 20476 POINT 11 MB32 GROUNDWATER	733079	6117706
EPL 20476 POINT 12 LEACHATE AERATION POND	733062	6117682
MB7	733204	6117329
MB11	732774	6118272
MB12	732775	6118274
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WM6	733346	6117412
"TOROKINA" HOMESTEAD	731338	6114923

DIAGRAM

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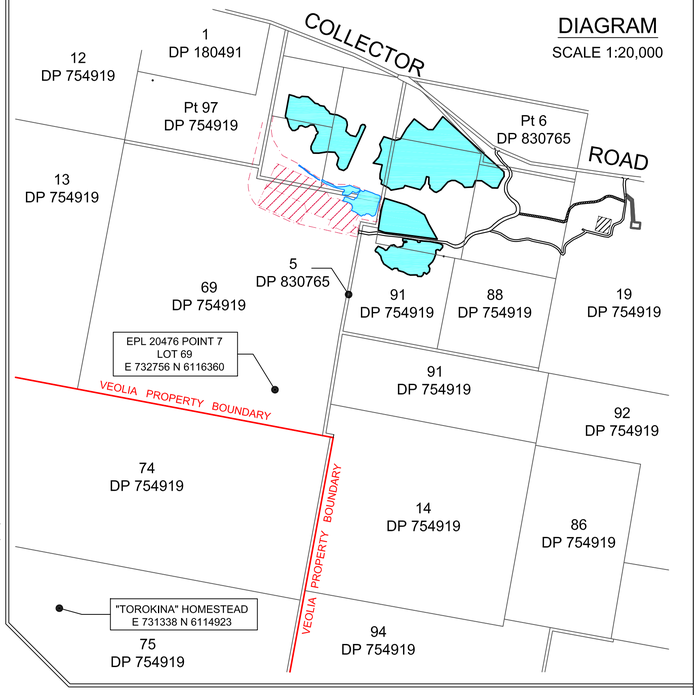

VEOLIA ENVIRONMENTAL SERVICES

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A	INITIAL ISSUE	MK	12/09/2014
B	MONITORING POINT AMENDMENTS	MK	17/09/2014
C	GENERAL REVISION & AMENDMENTS	MK	6/02/2017
D	LEACHATE AERATION POND ENHANCED	MK	8/02/2017
E	DISCHARGE MONITORING POINT & MB32 AMENDED	MK	15/02/2017
F	STORMWATER PONDS ADDED	MK	20/02/2017

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VEOLIA ENVIRONMENTAL SERVICES

WOODLAWN BIOREACTOR AND MBT FACILITY COLLECTOR ROAD, TARAGO

PLAN SHOWING SITE LAYOUT AND ENVIRONMENTAL MONITORING POINTS WOODLAWN MBT FACILITY COLLECTOR ROAD, TARAGO

DRAWN: MK | ISSUE F
CHECKED: JK
APPROVED: VEOLIA
DRAWING No. 204543-30

DATUM | N/A | CONTOUR INTERVAL | N/A | DATE | 20/02/2017

J:\Surveyors\Jobs\Veolia\204543 WASP Detail\CAD\204543-30 MBT Facility Plans Issue F.dwg

Figure 1.5.3.1 Site 115 - Allianoyonyiga Creek

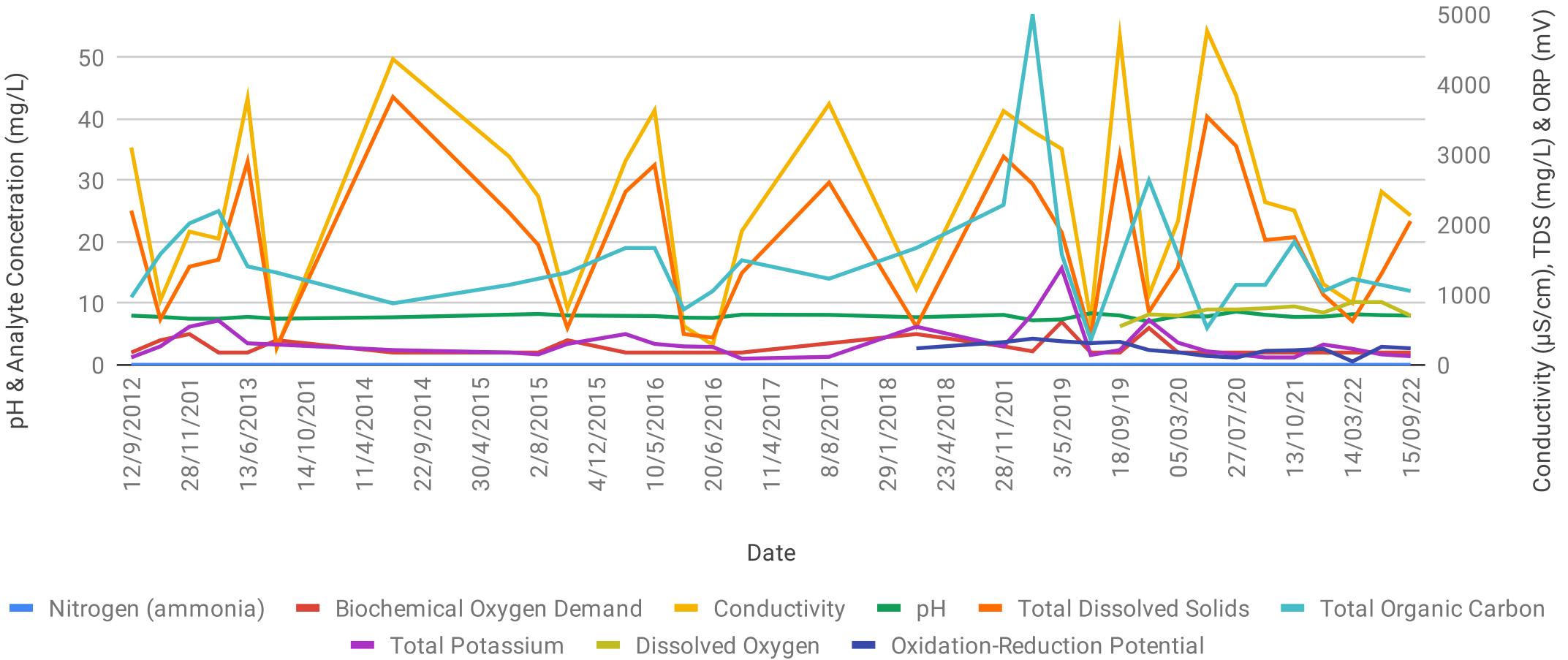


Figure 1.5.3.2 Spring 2

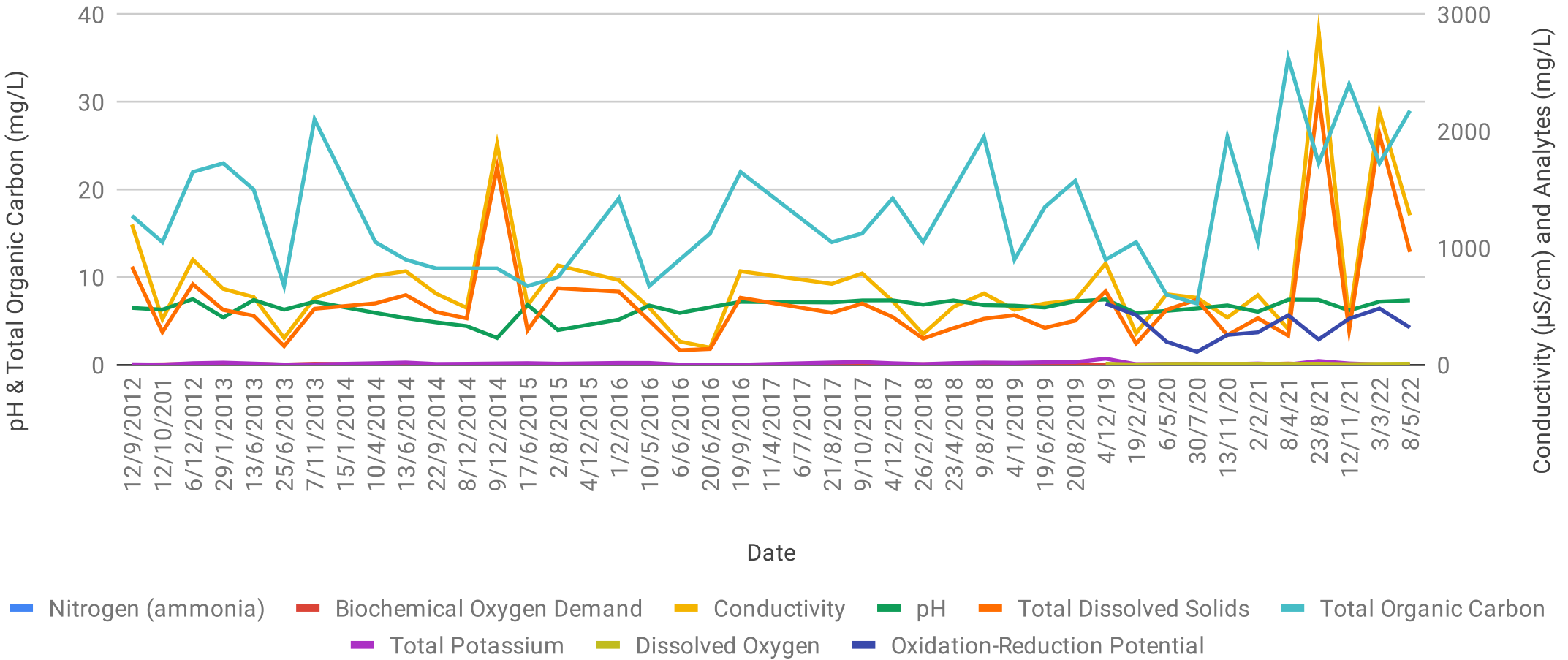


Figure 1.5.3.3 Site 105 - Crisps Creek

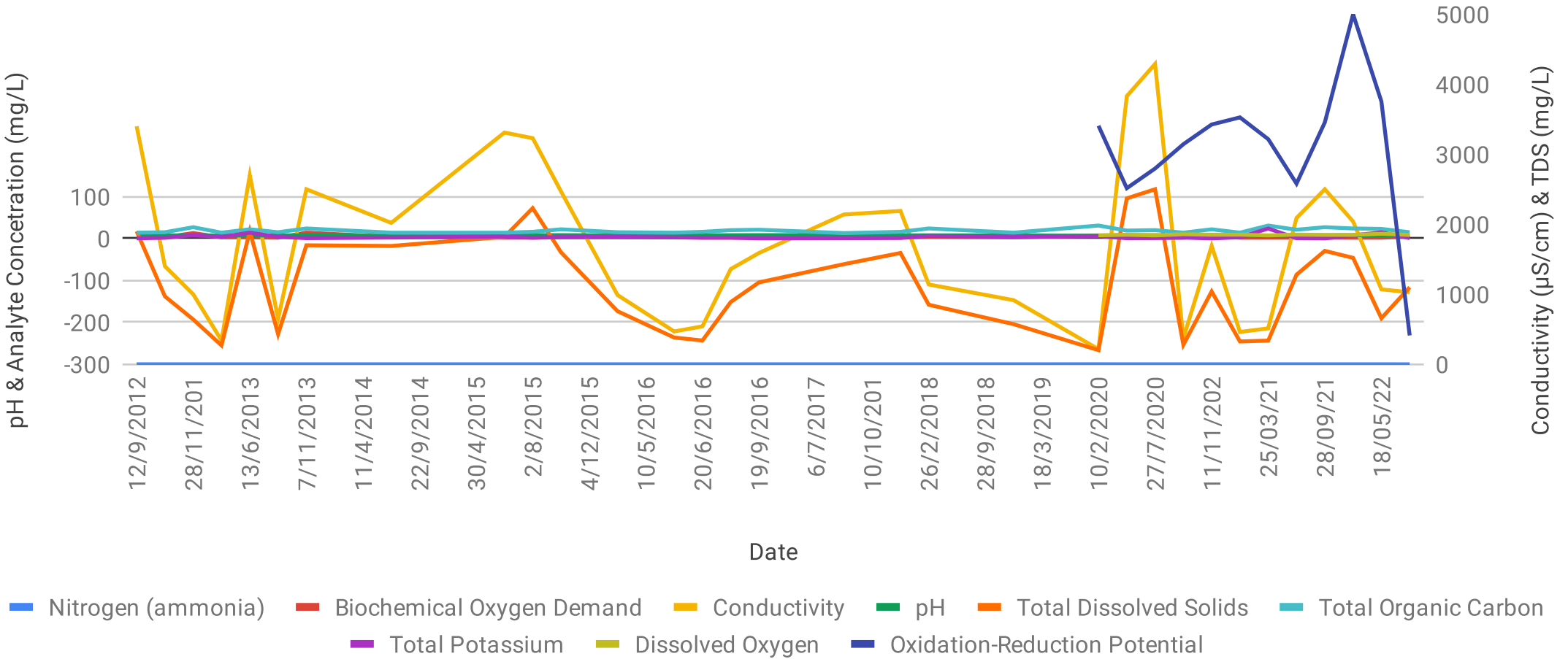


Figure 1.5.3.4 WM200 - Raw Water Dam

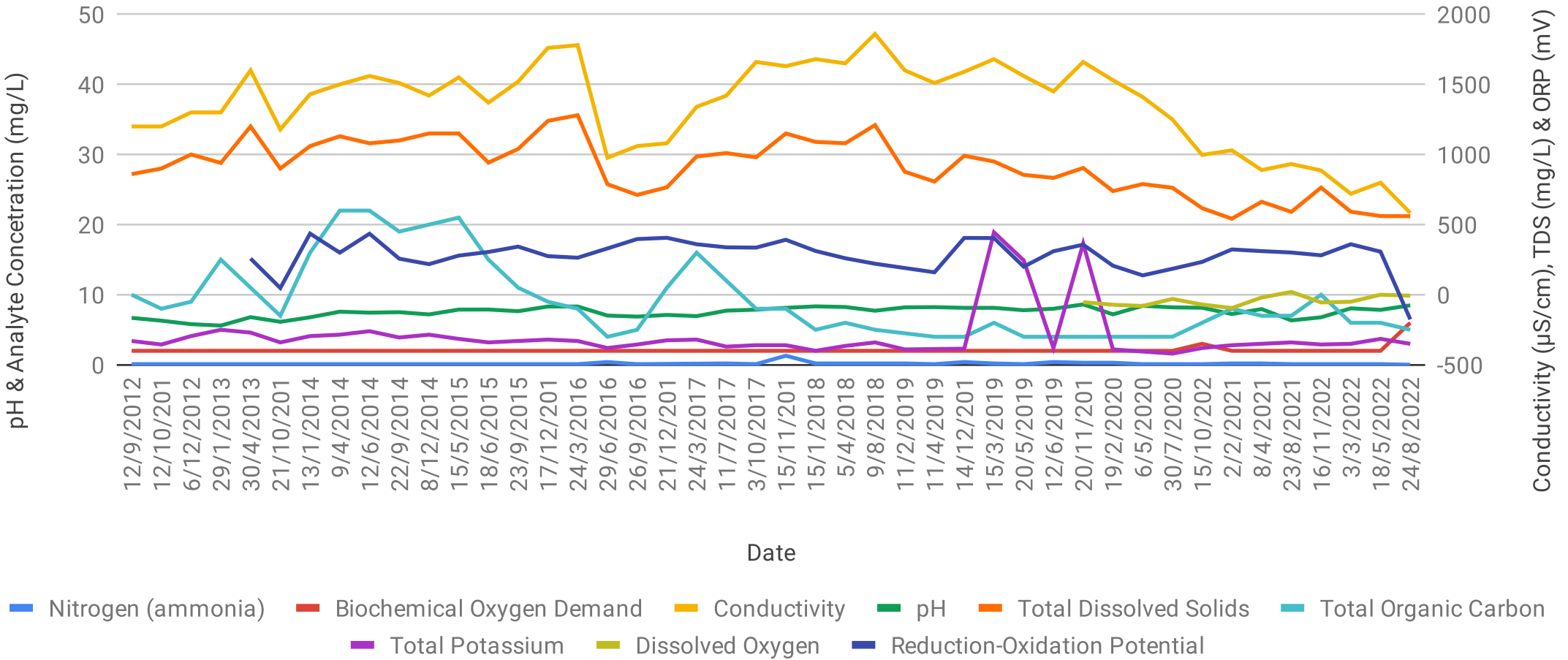


Figure 1.5.3.5 WM201 - Entrance Road Culvert

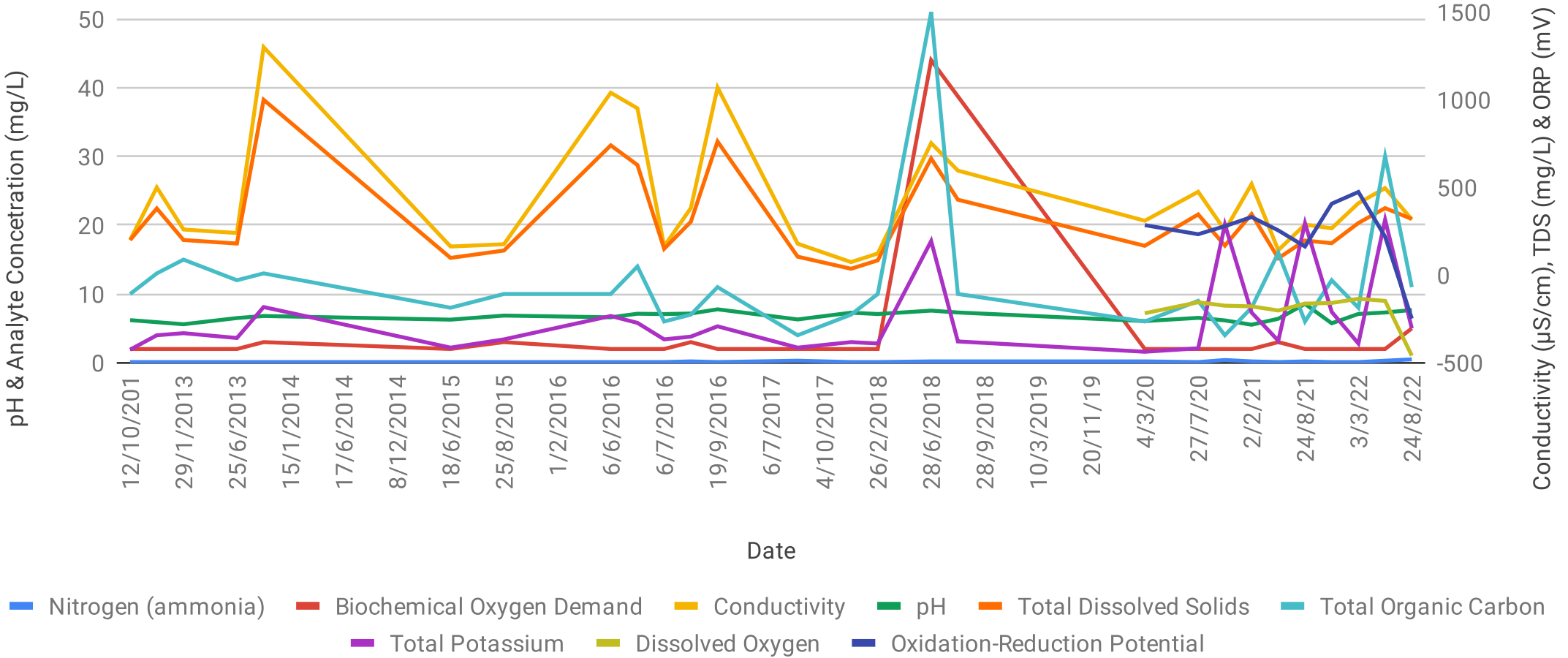


Figure 1.5.3.6 ED3SS - Lagoon 5

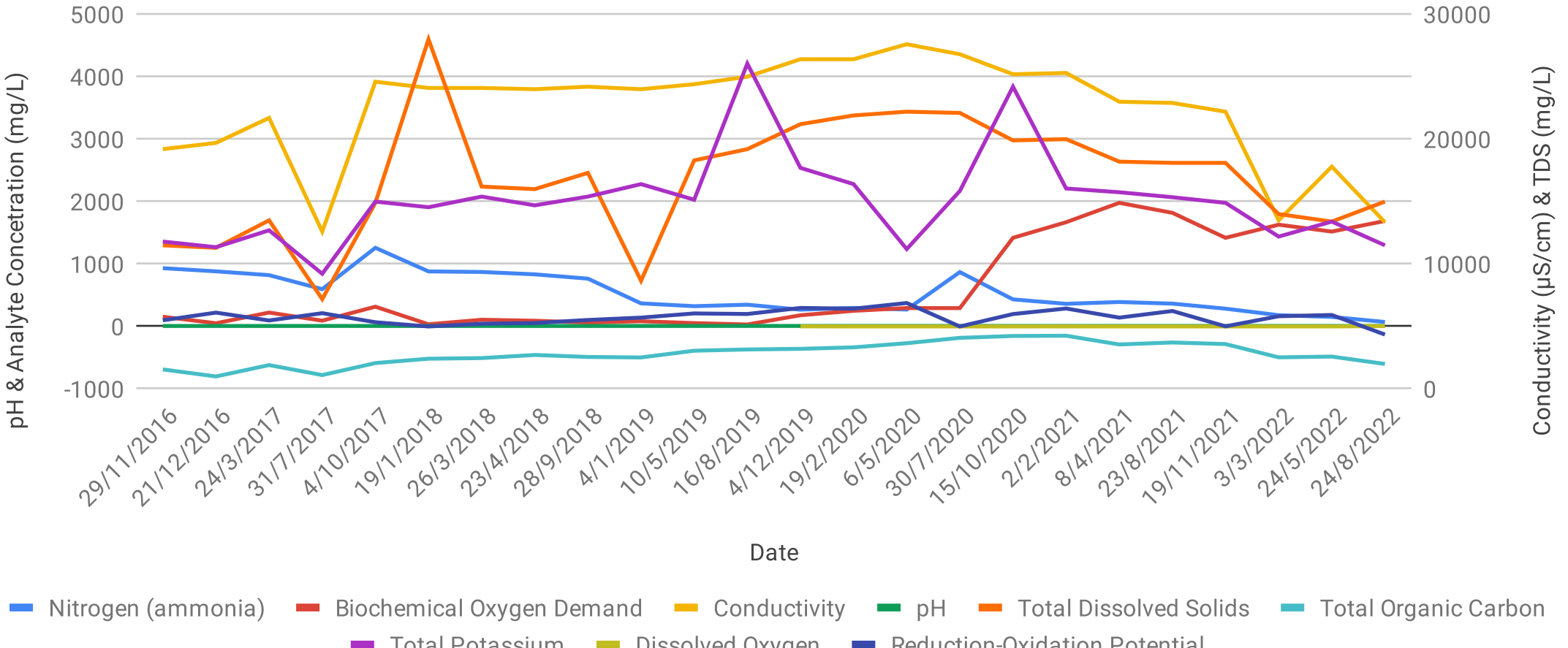


Figure 1.5.3.7 WM203 - ED3N

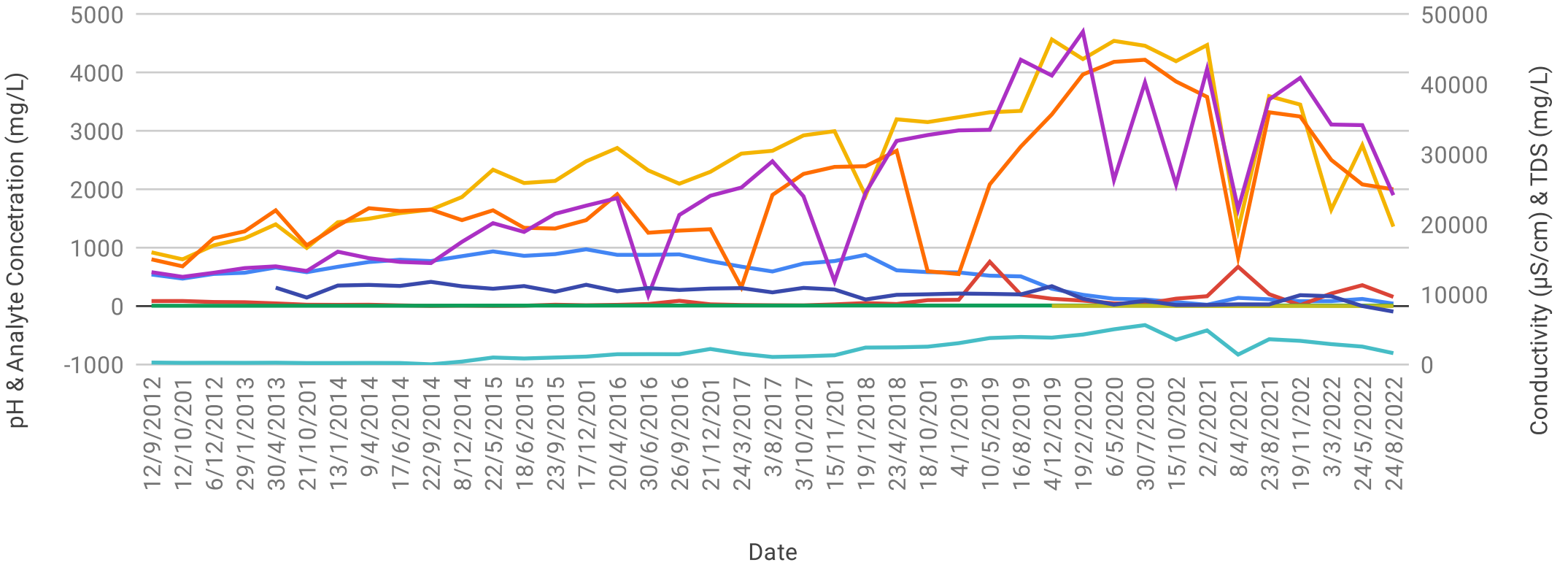


Figure 1.5.3.8 Pond 5

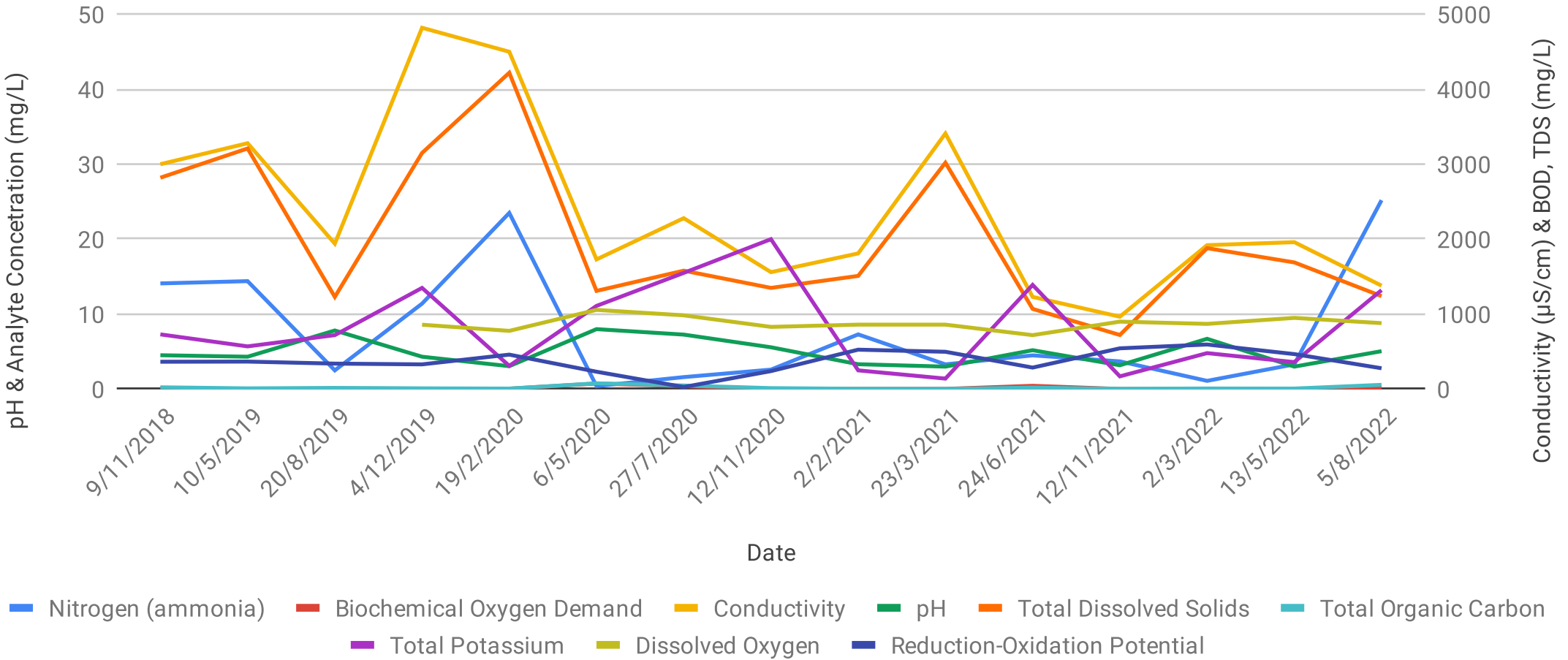


Figure 1.5.3.9 WM202 - ED3S

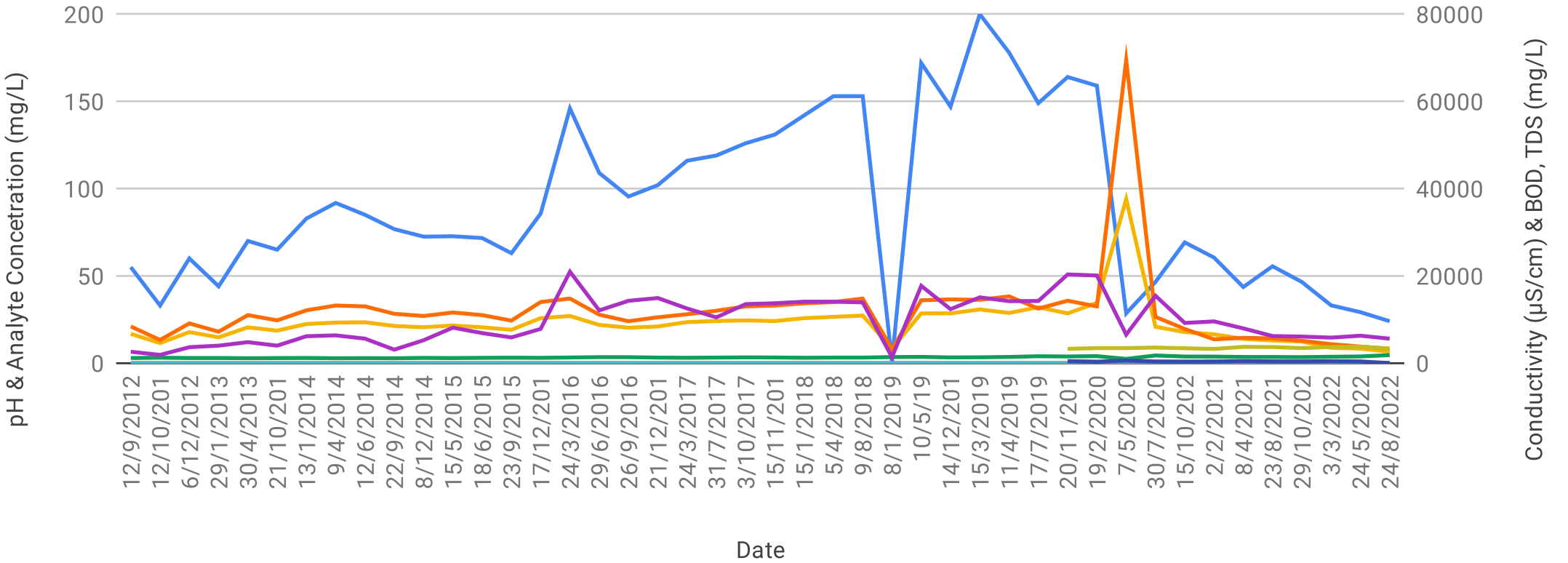


Figure 1.5.3.10 ED1

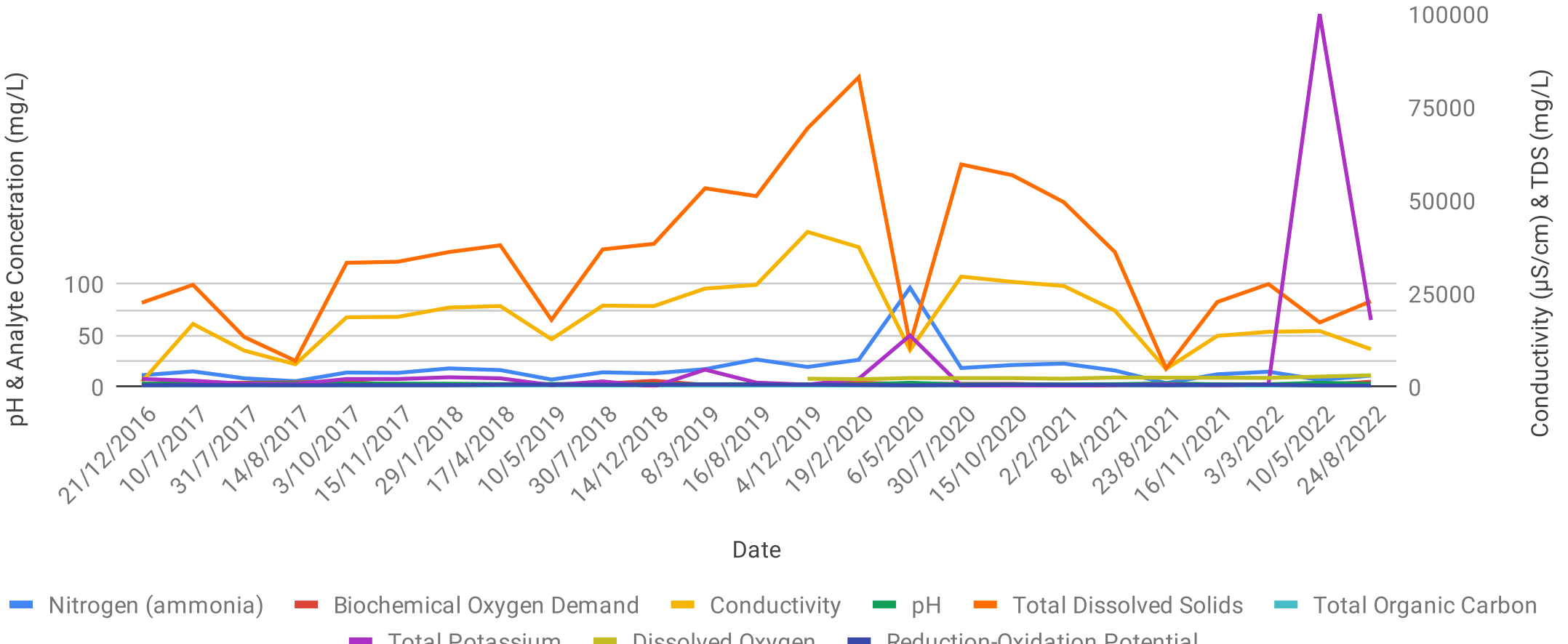


Figure 1.5.3.11 ED1 Coffer Dam

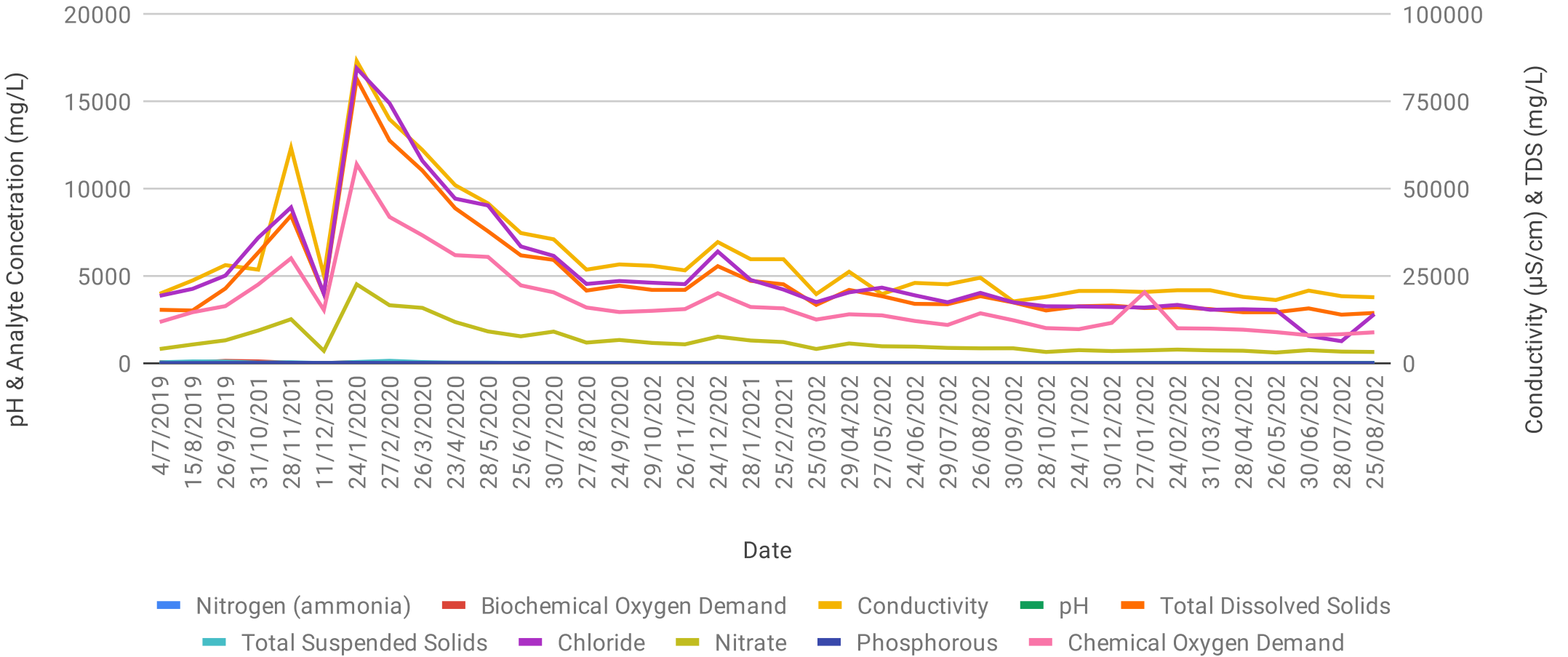


Figure 1.5.5.1 MB1

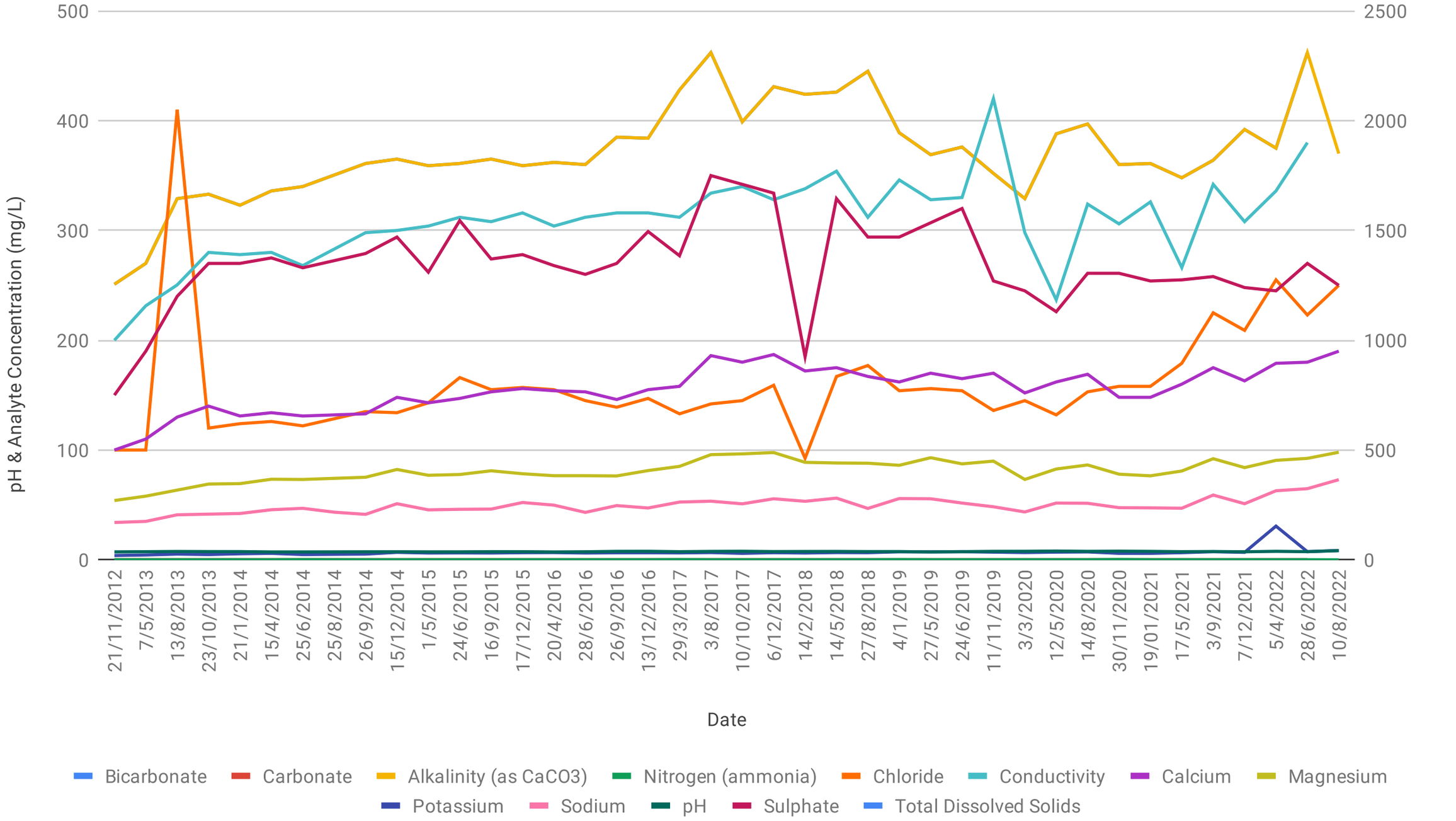
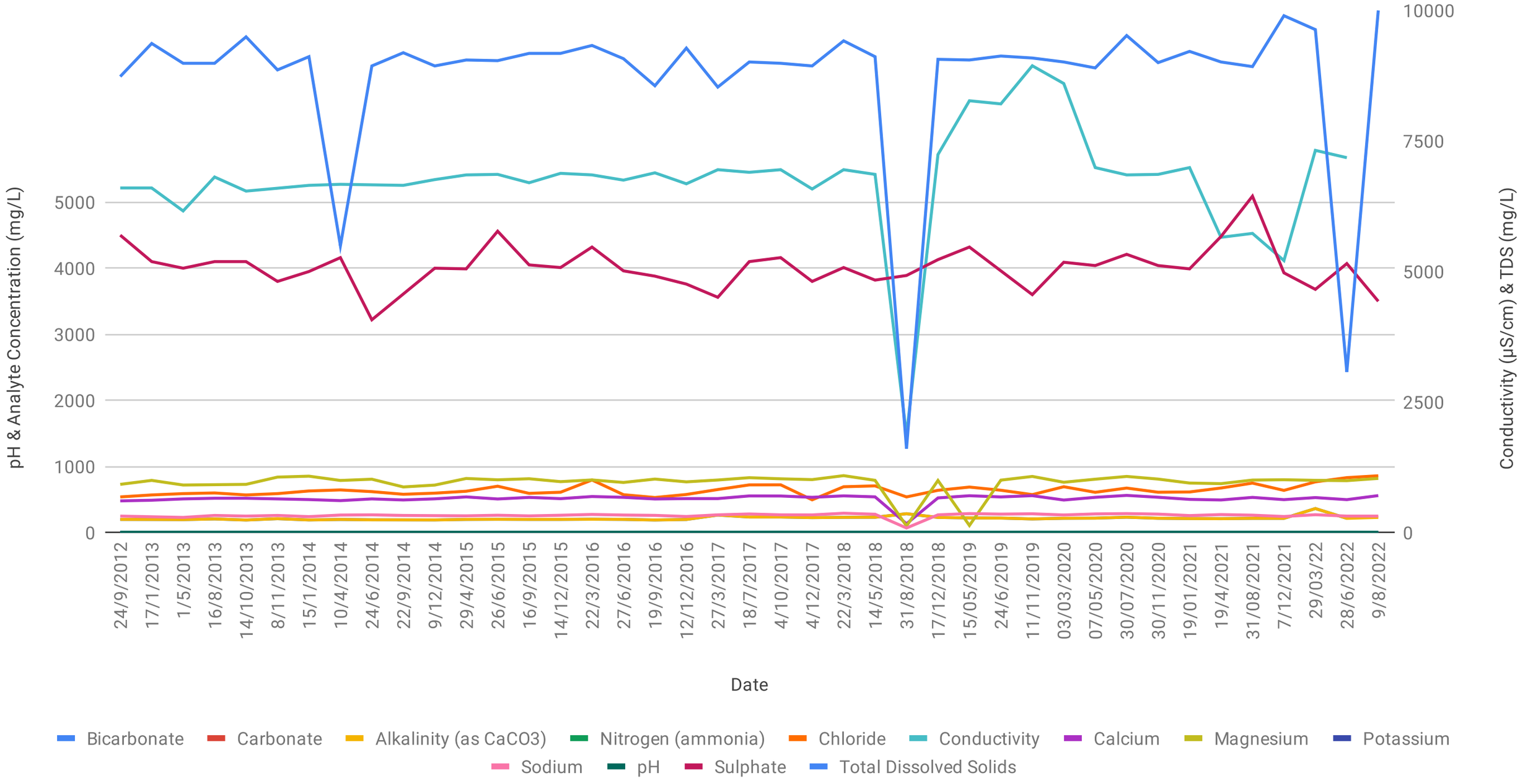


Figure 1.5.5.2 MB2



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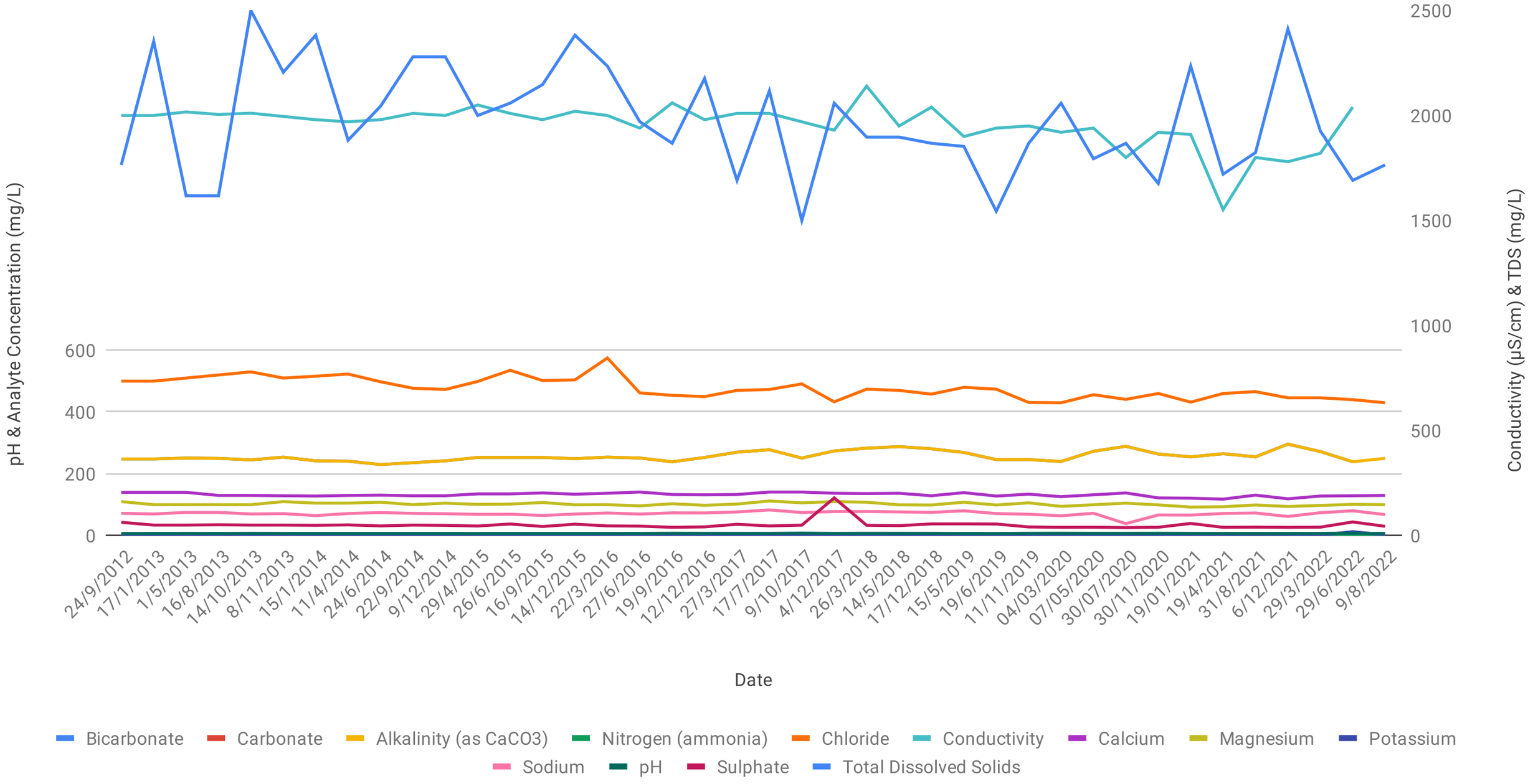


Figure 1.5.5.4 MB4

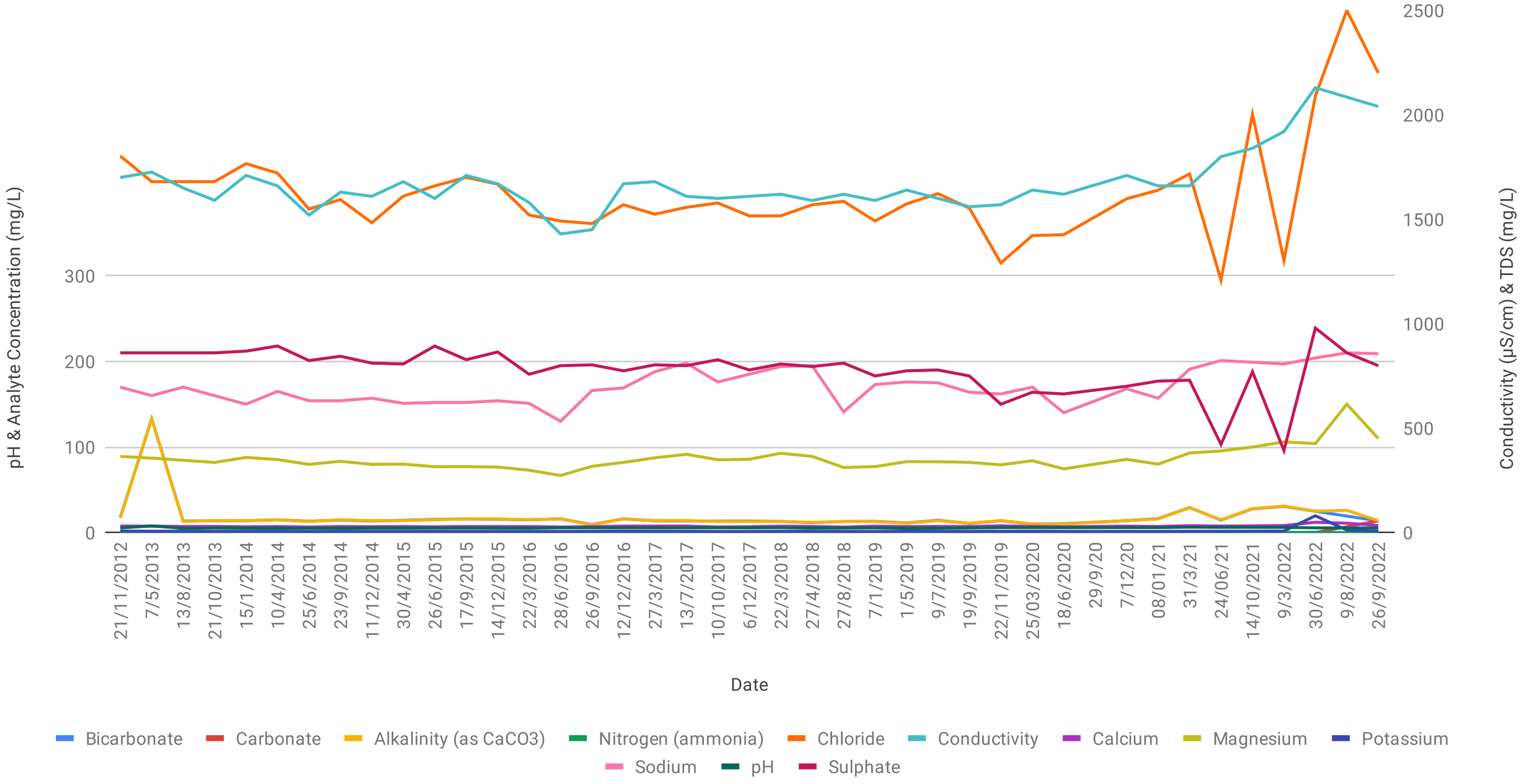


Figure 1.5.5.5 MB6

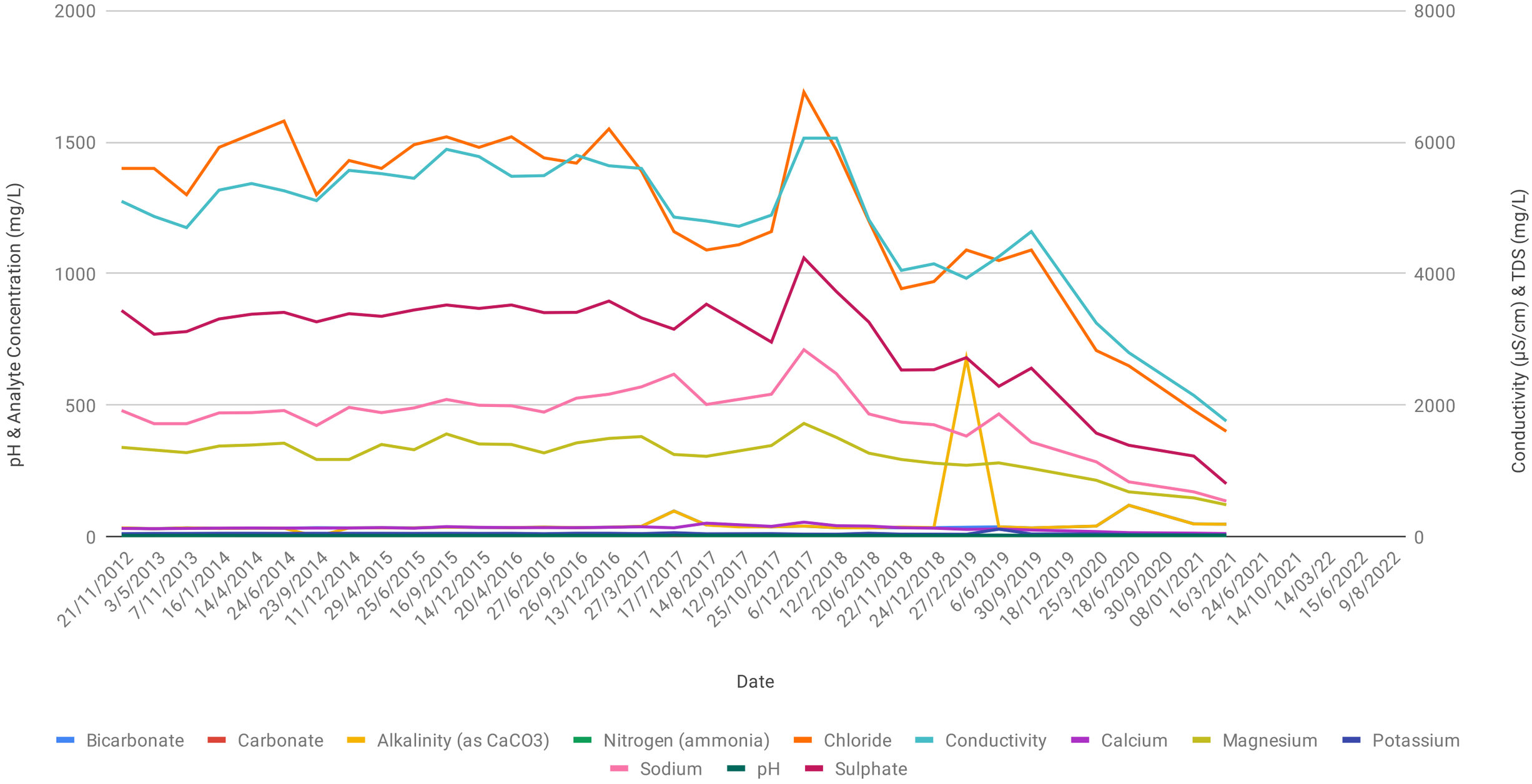


Figure 1.5.5.6 MB7

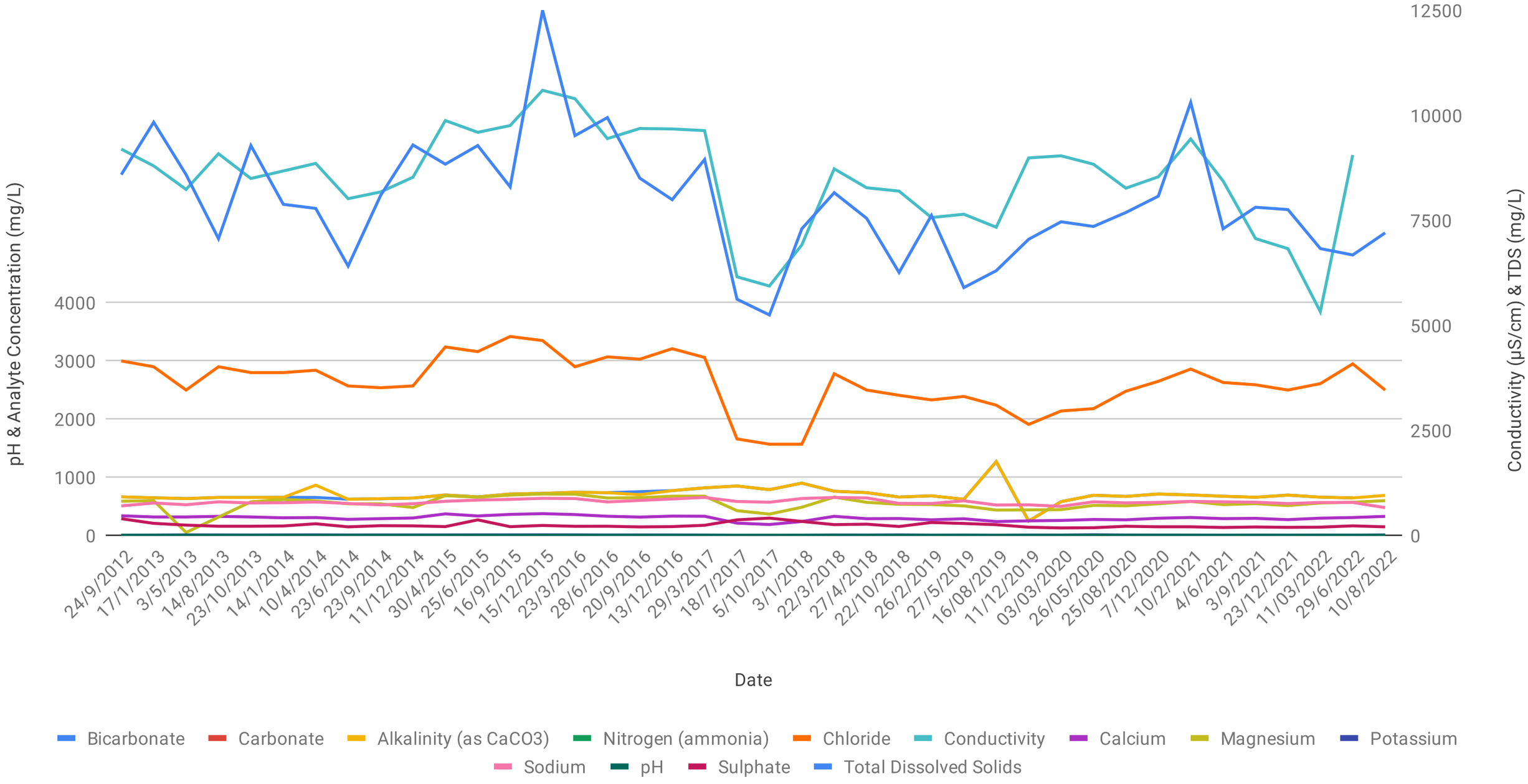


Figure 1.5.5.7 MB10

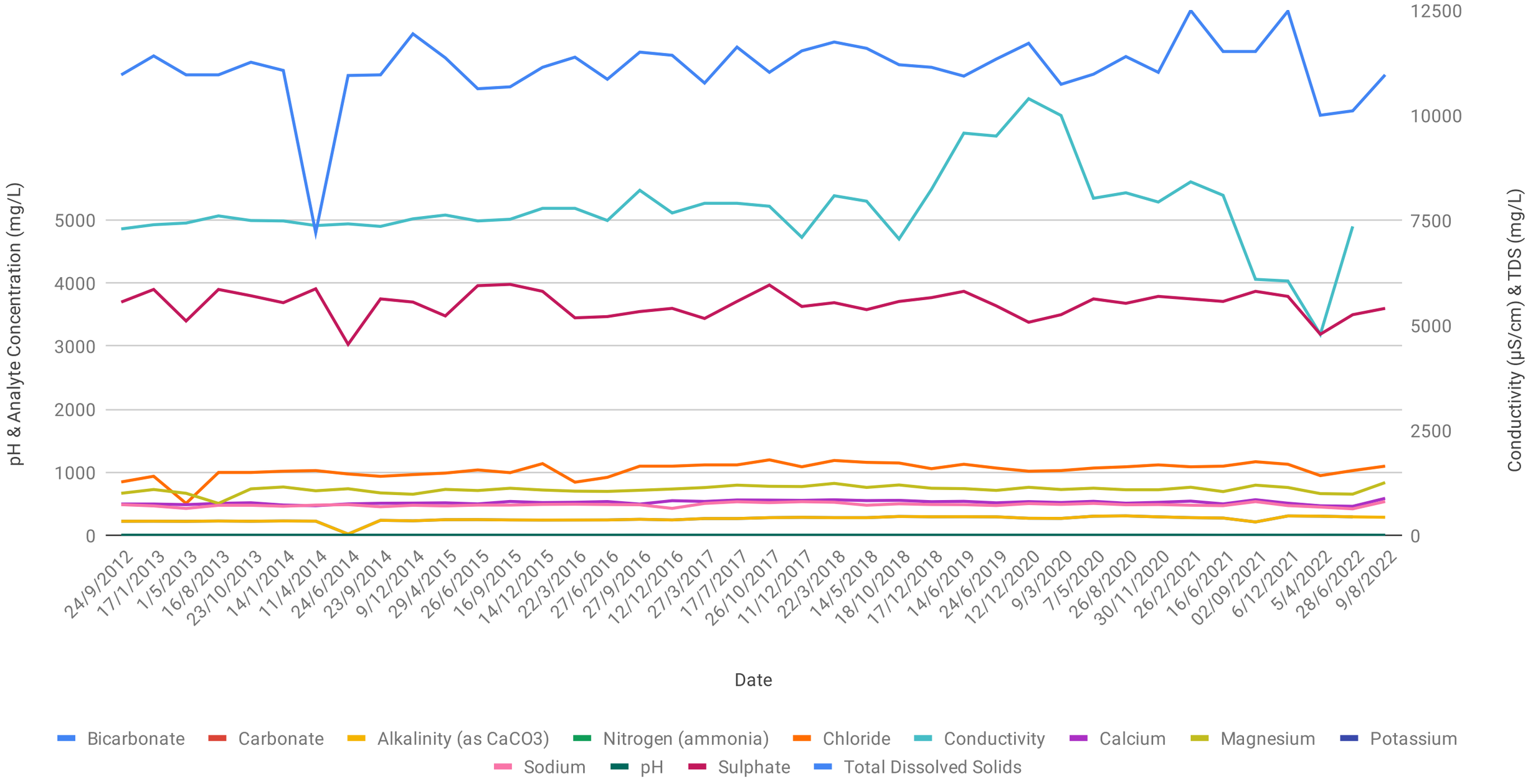


Figure 1.5.5.8 ED3B

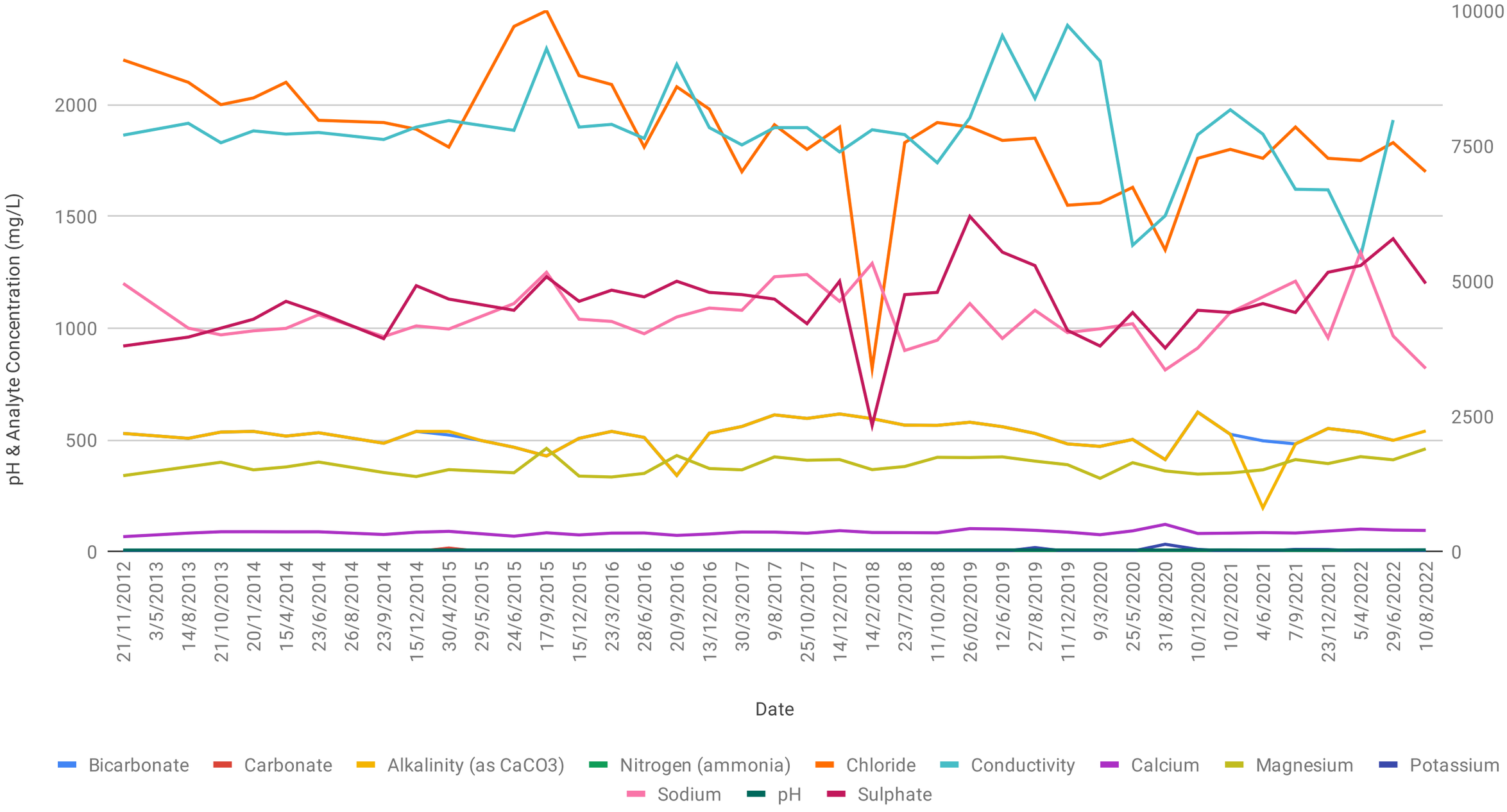


Figure 1.5.5.9 WM1

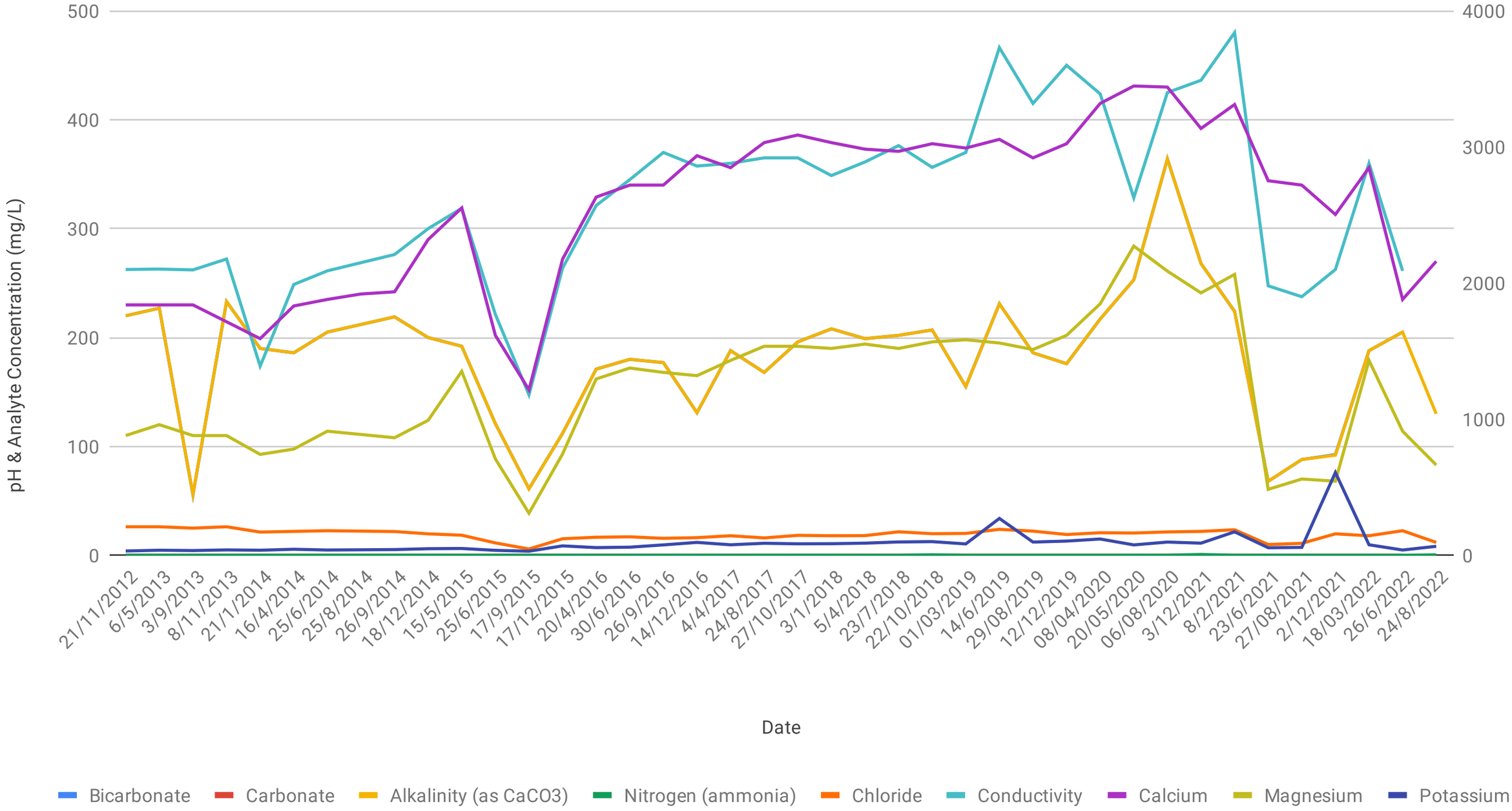


Figure 1.5.5.10 WM5

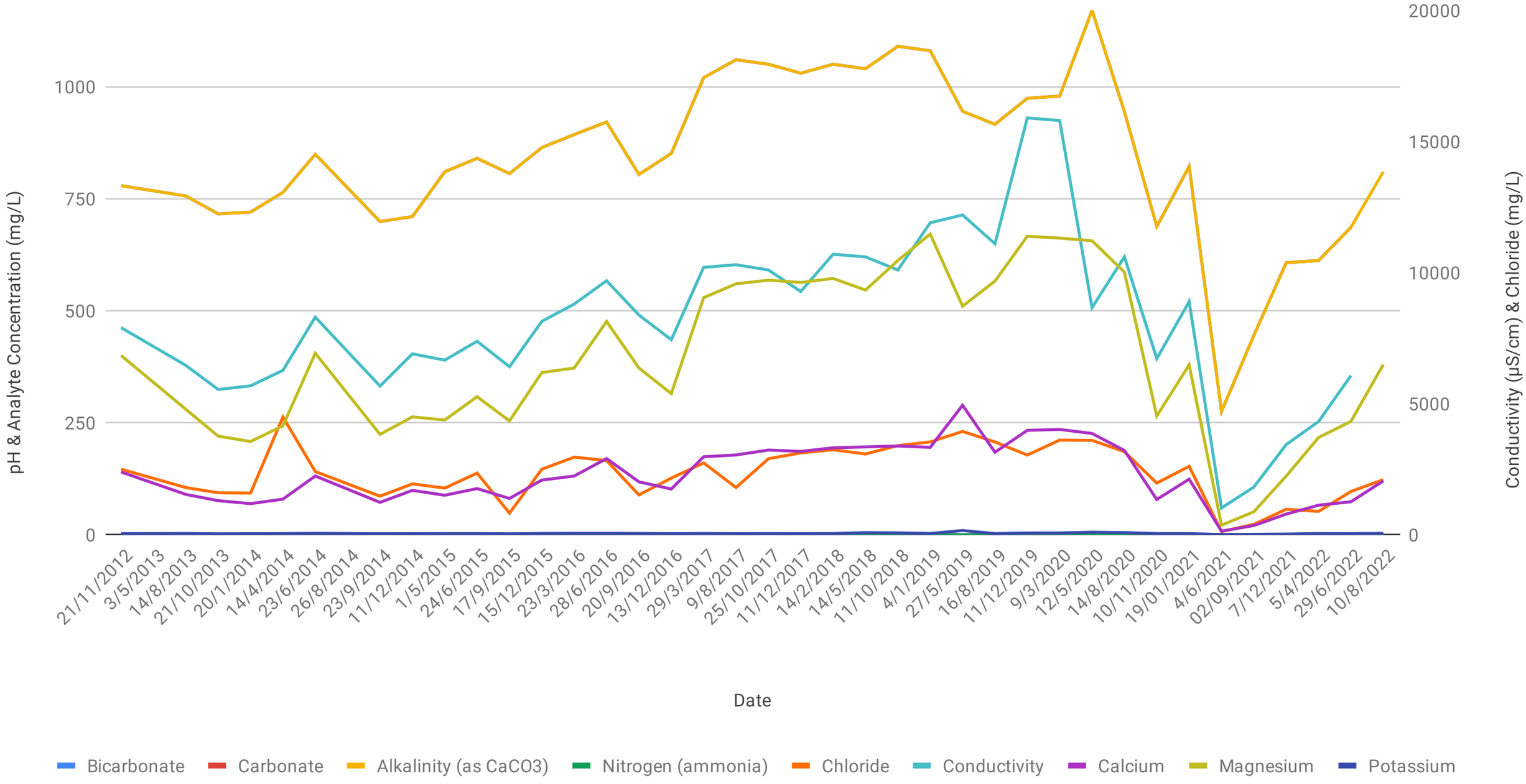


Figure 1.5.5.11 WM6

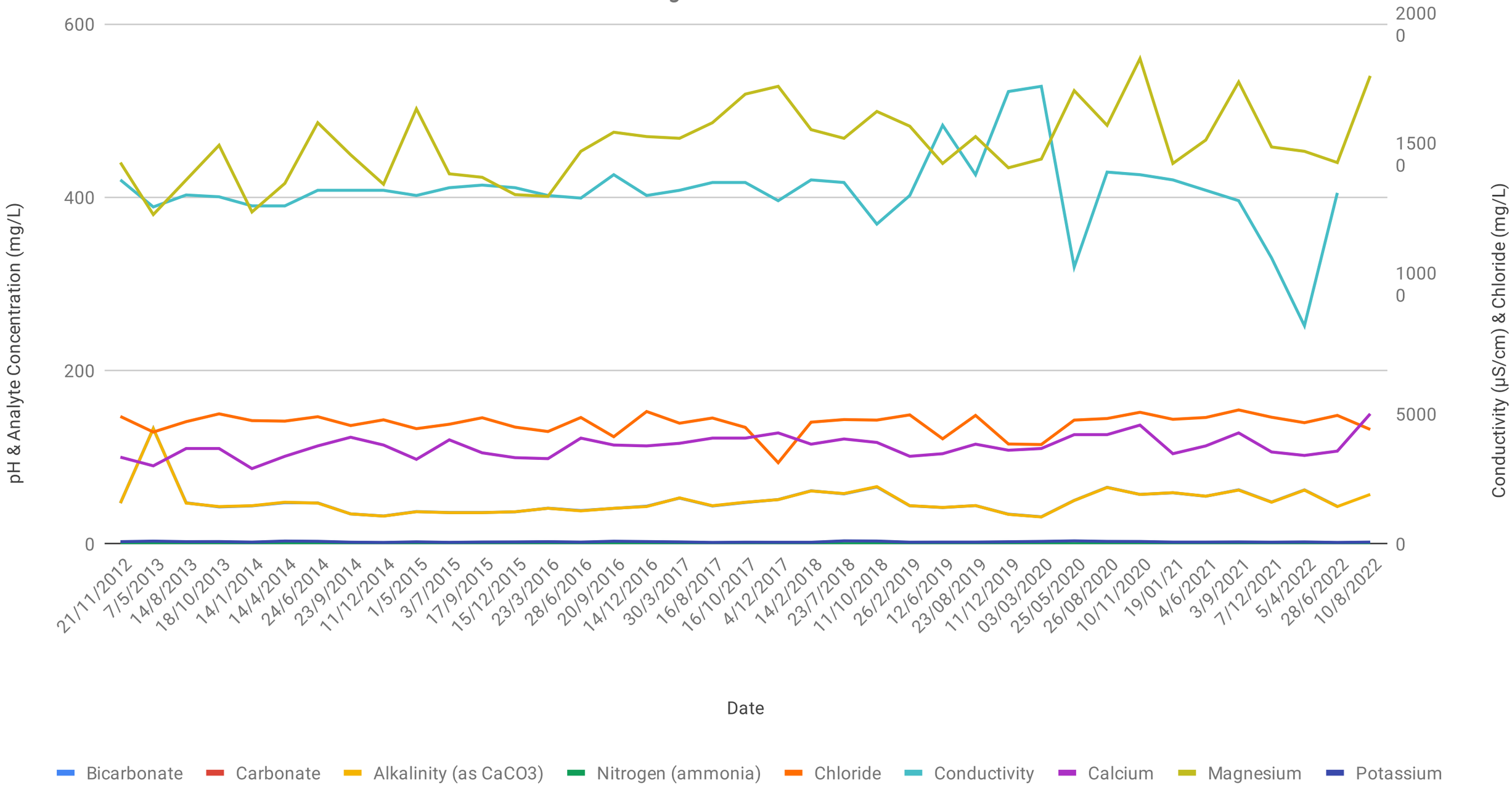


Figure 1.5.5.12 MW8S

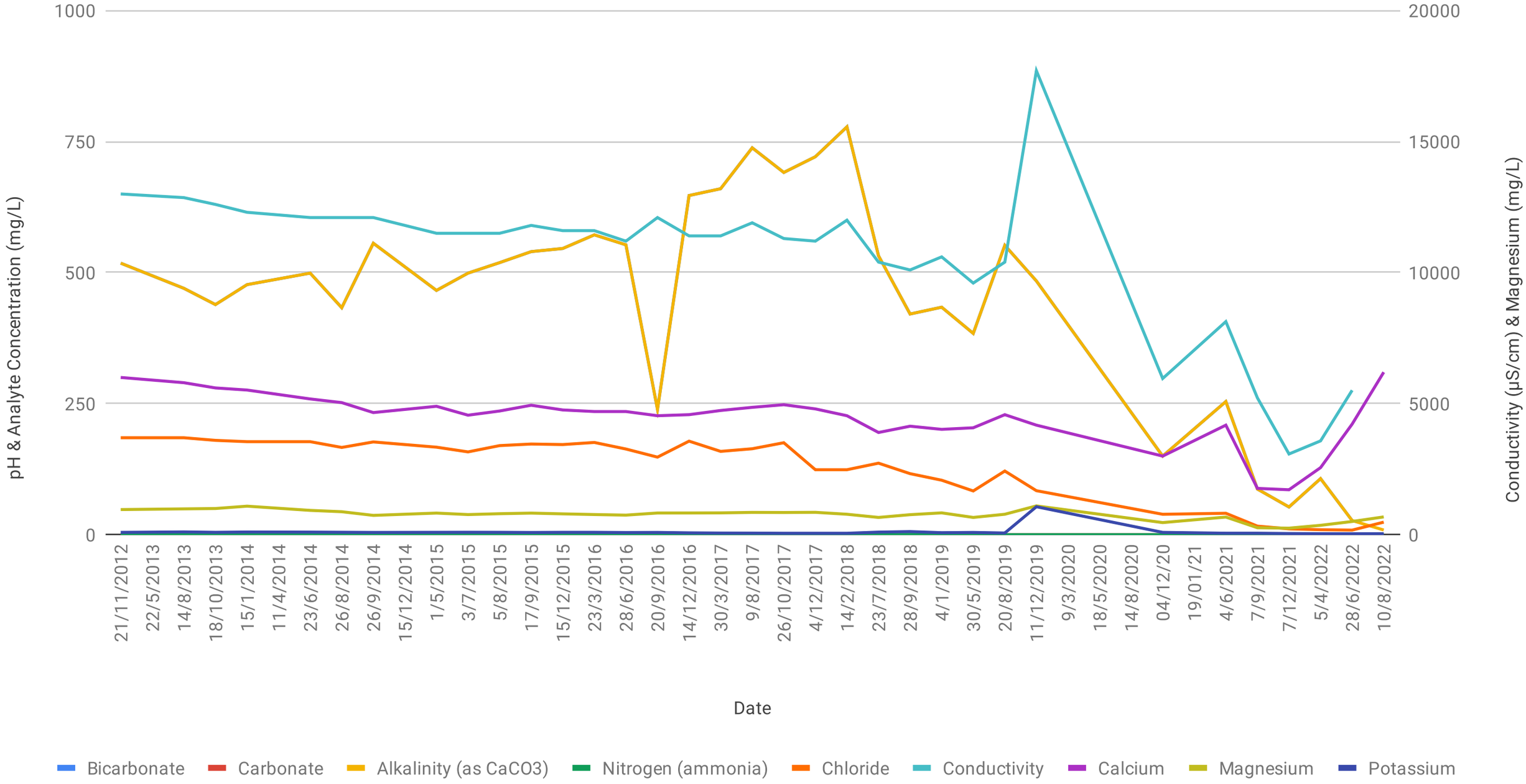
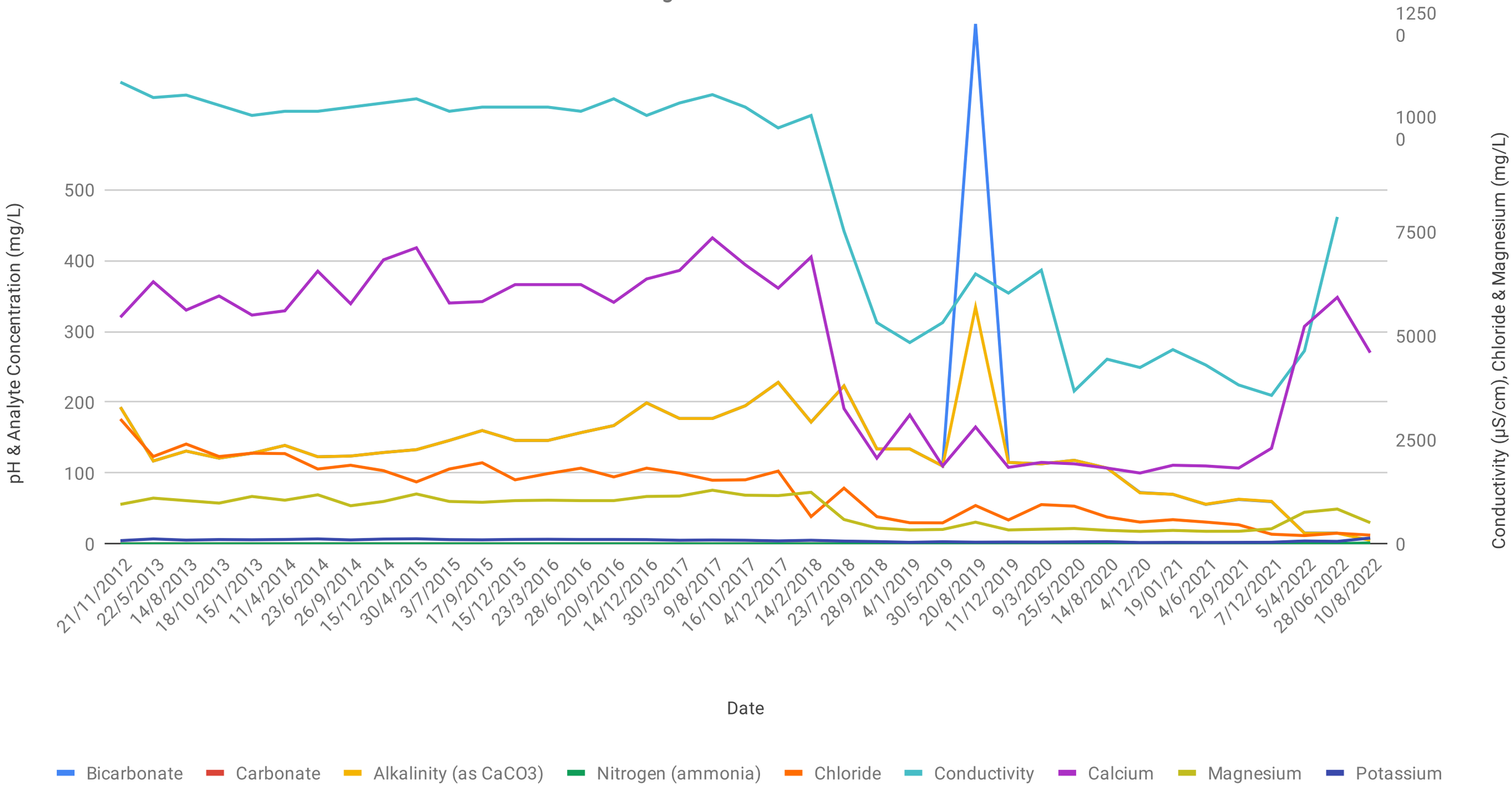


Figure 1.5.5.13 MW8D



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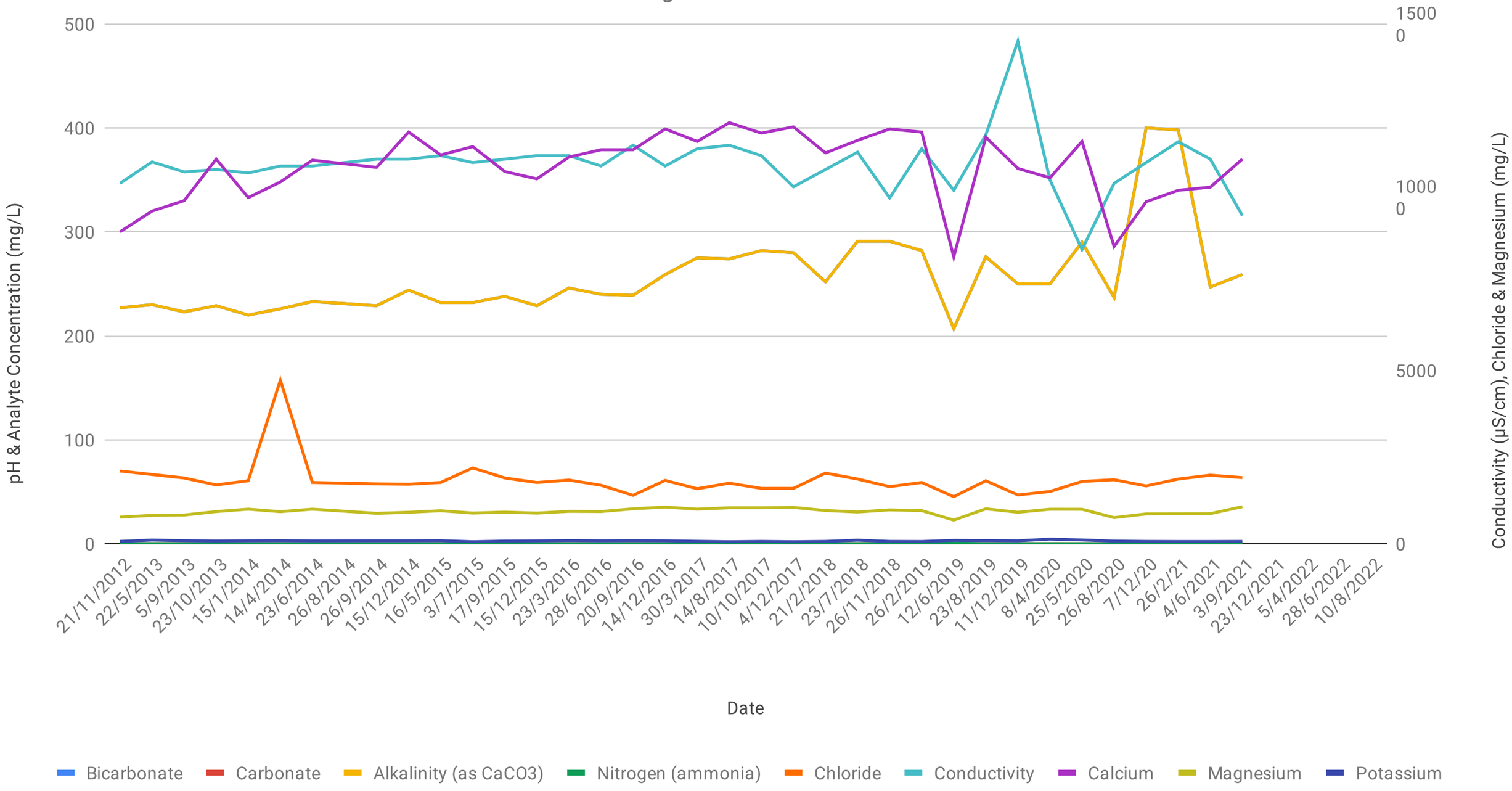

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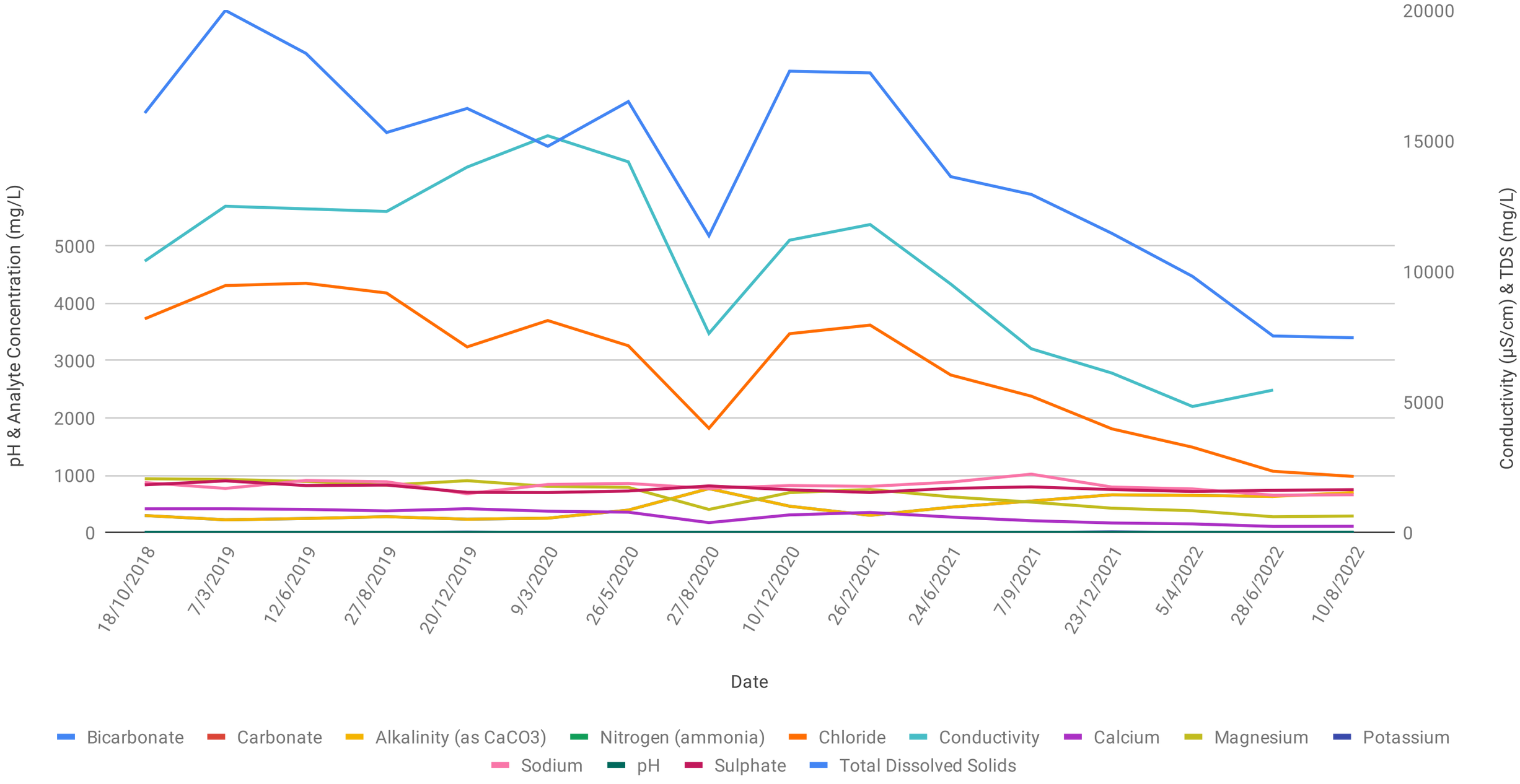

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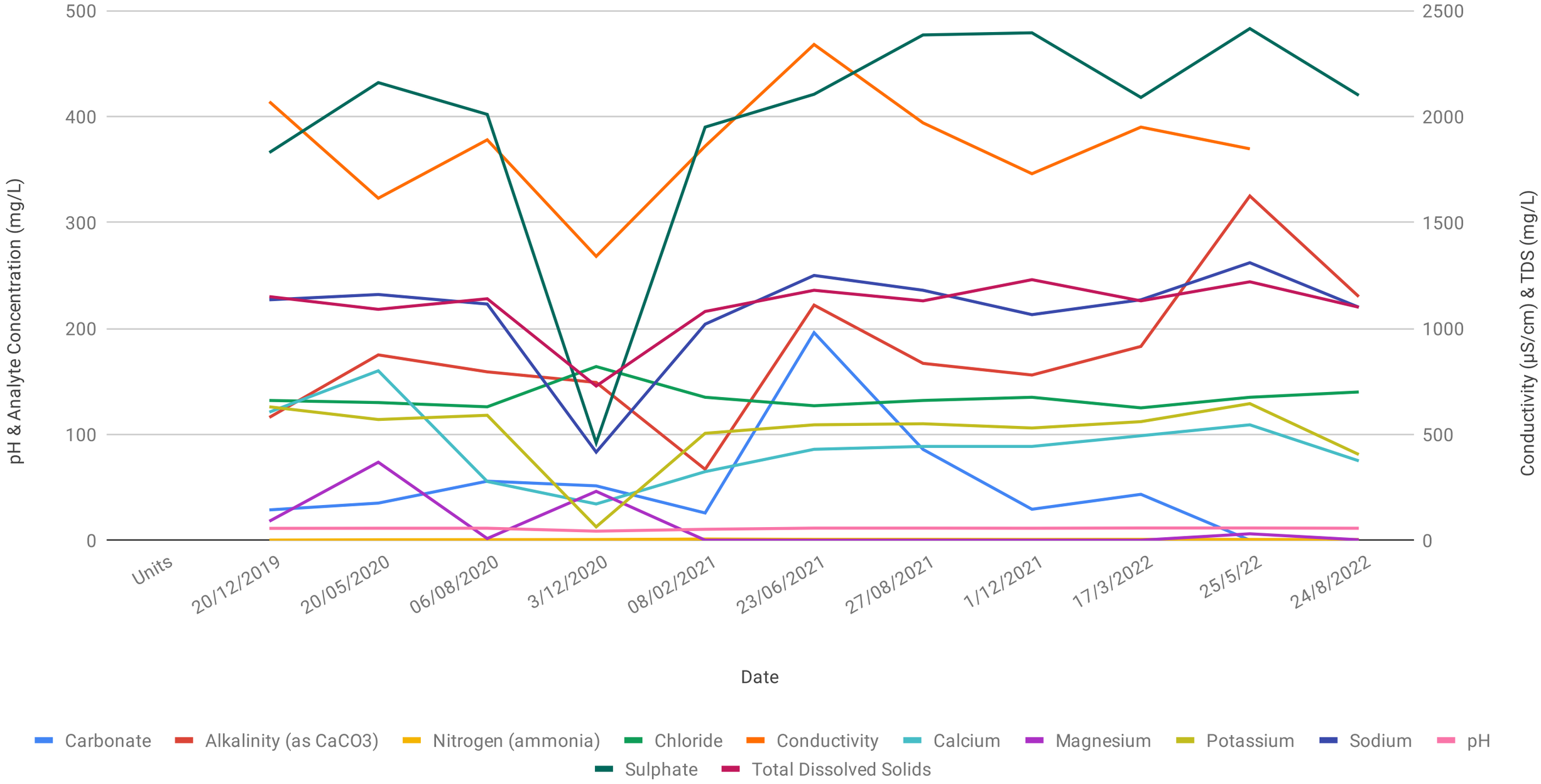


Figure 1.5.5.17 SP2-MW1

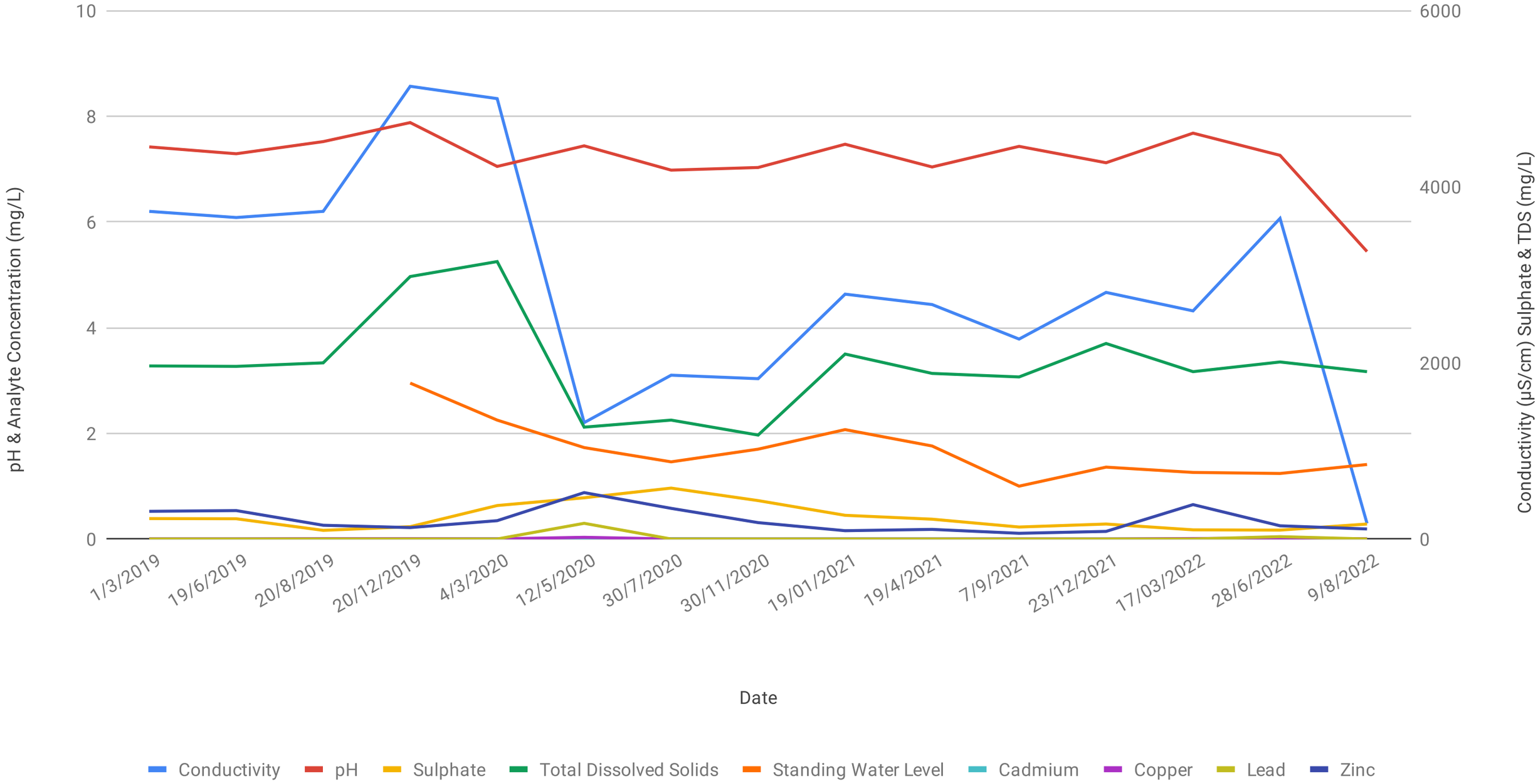
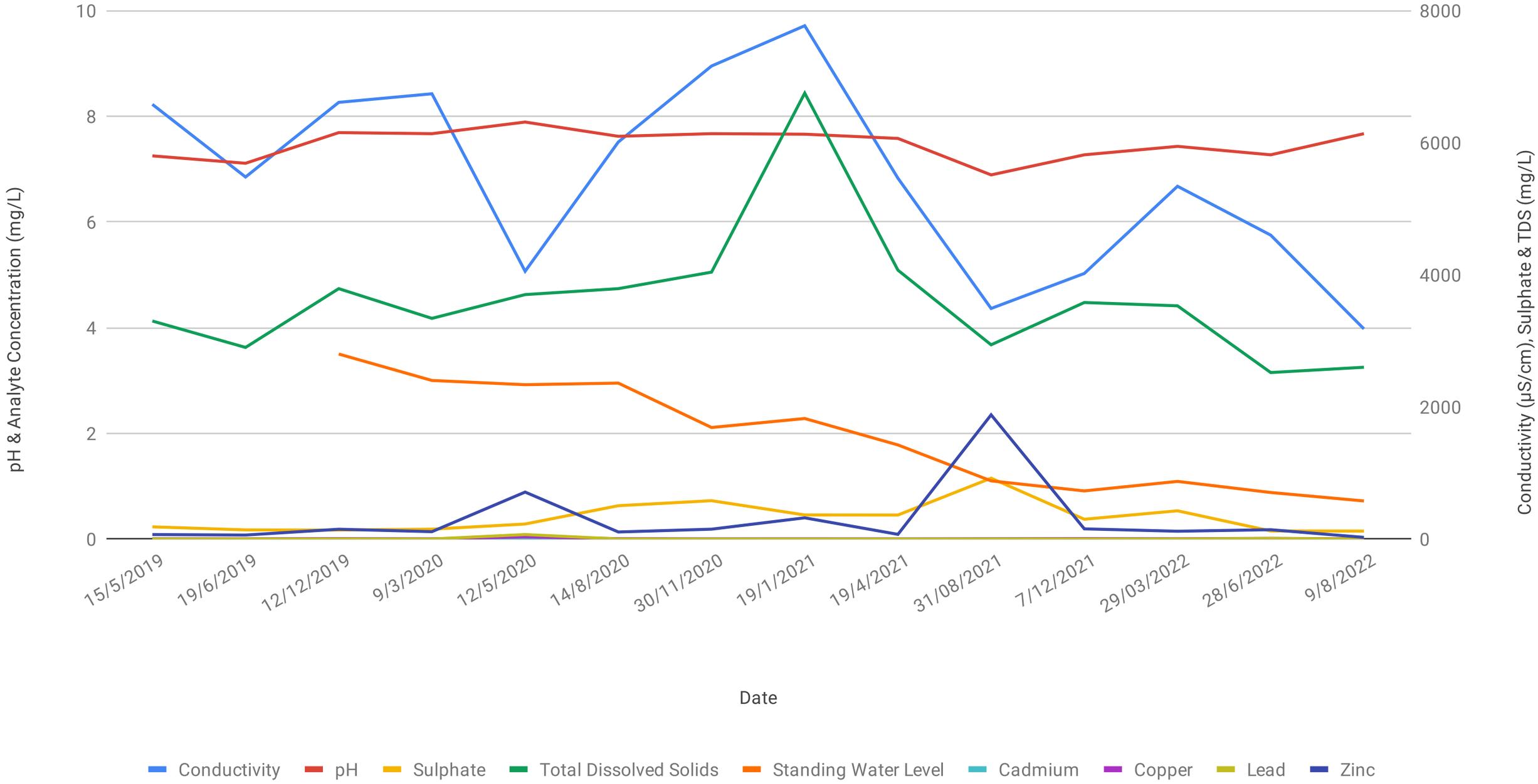


Figure 1.5.5.18 MW FRC-1



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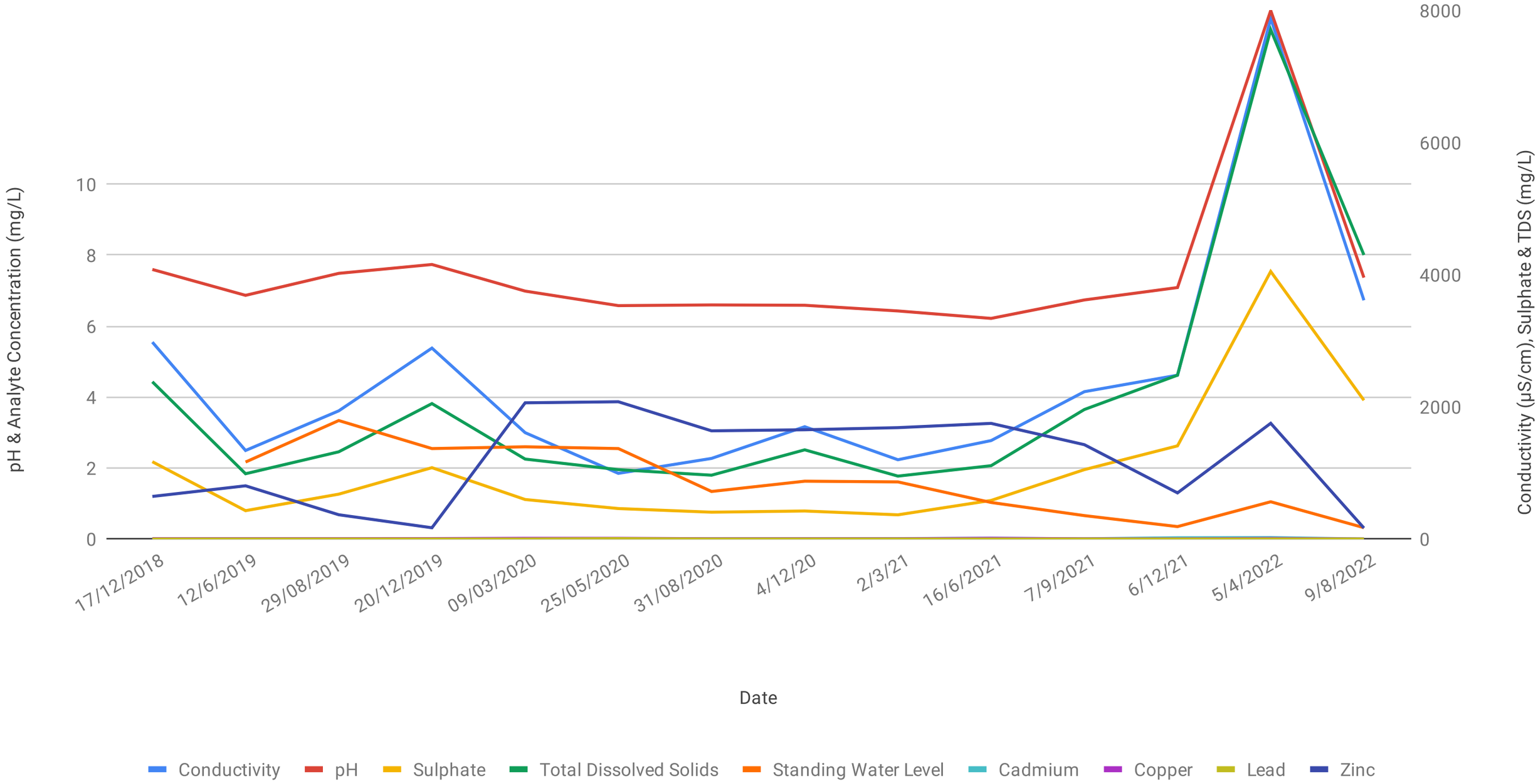

Figure 1.5.5.20 MB34

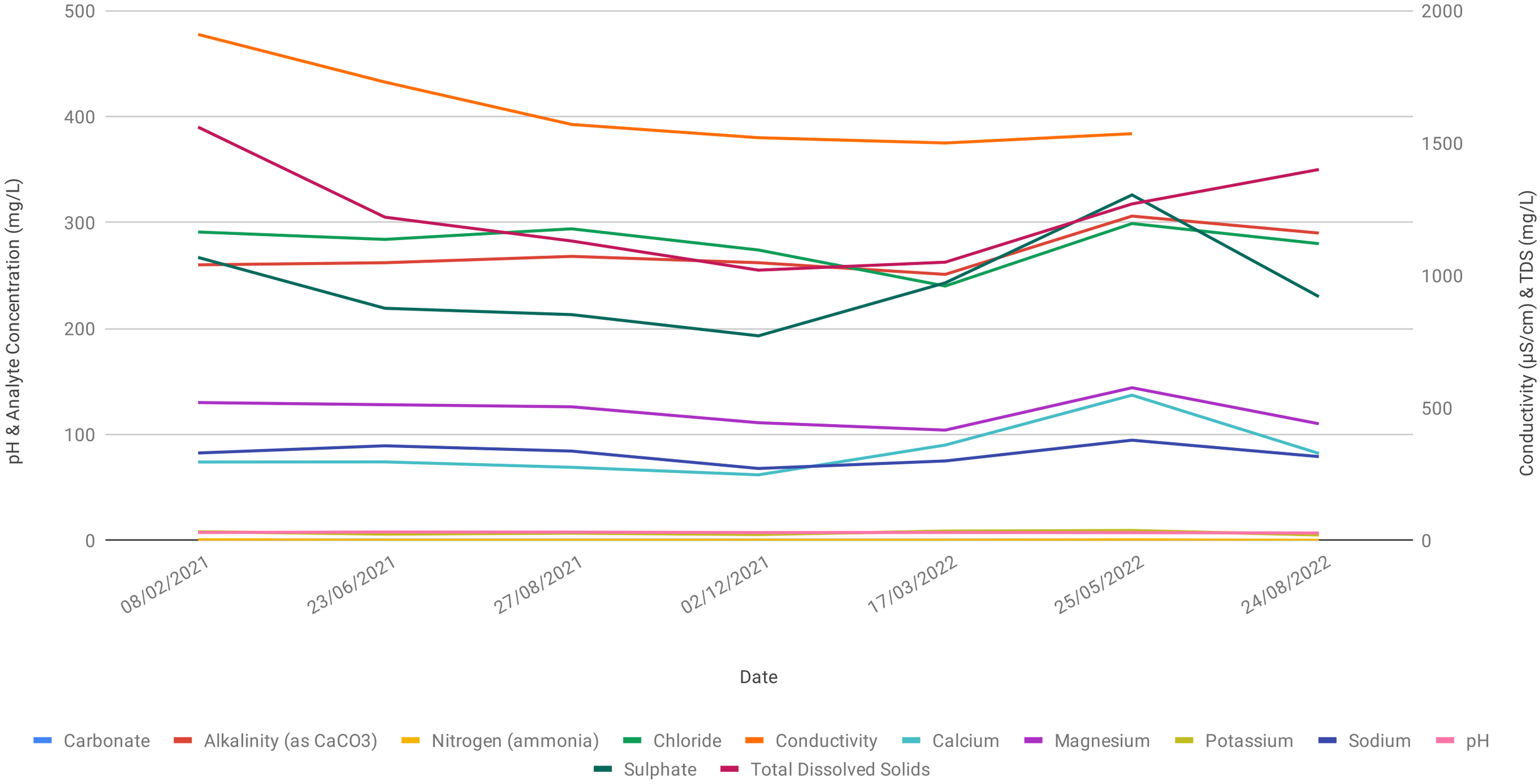

Figure 1.5.5.21 MB35

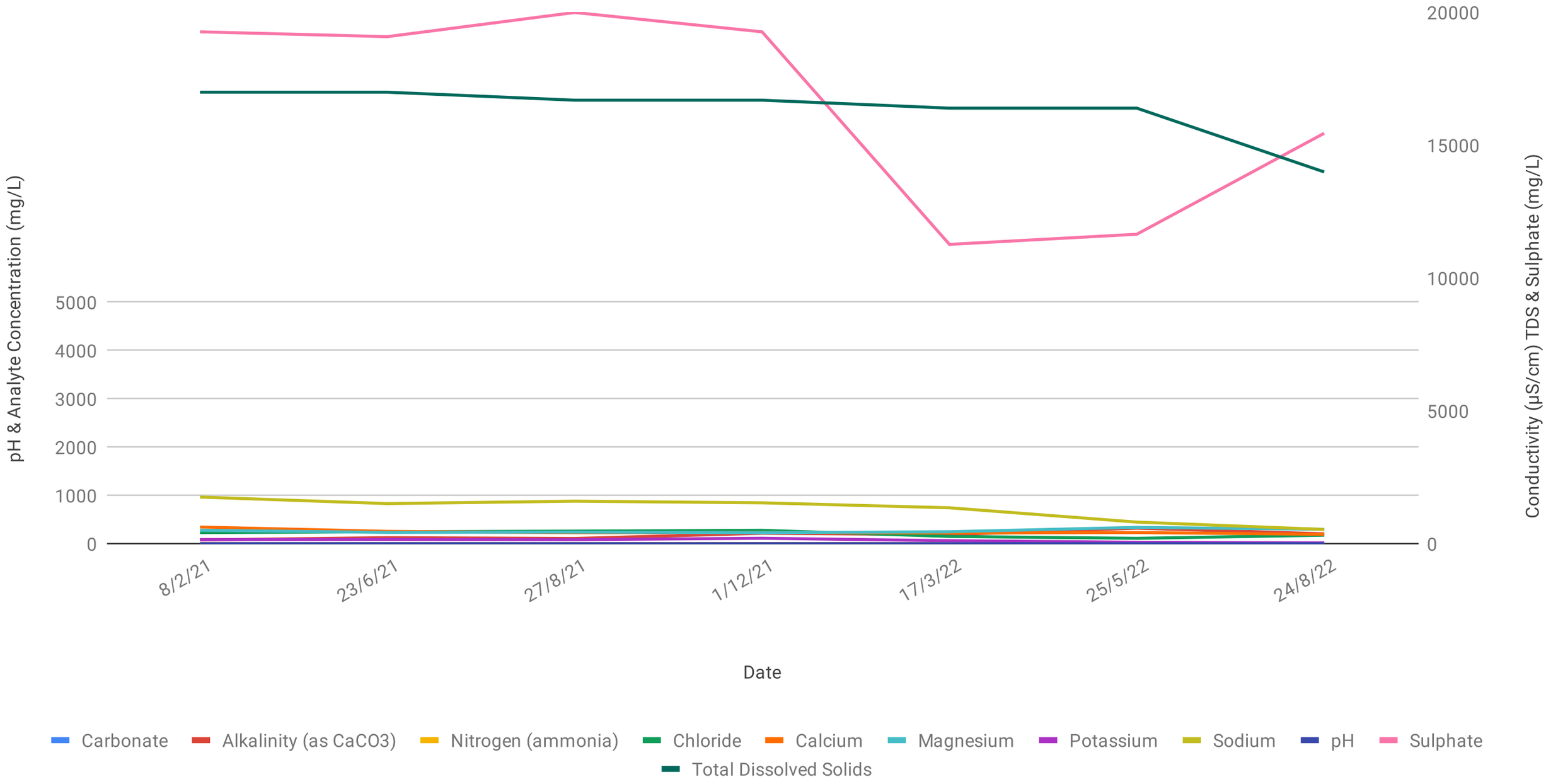

Figure 1.5.4.1 Leachate Dam

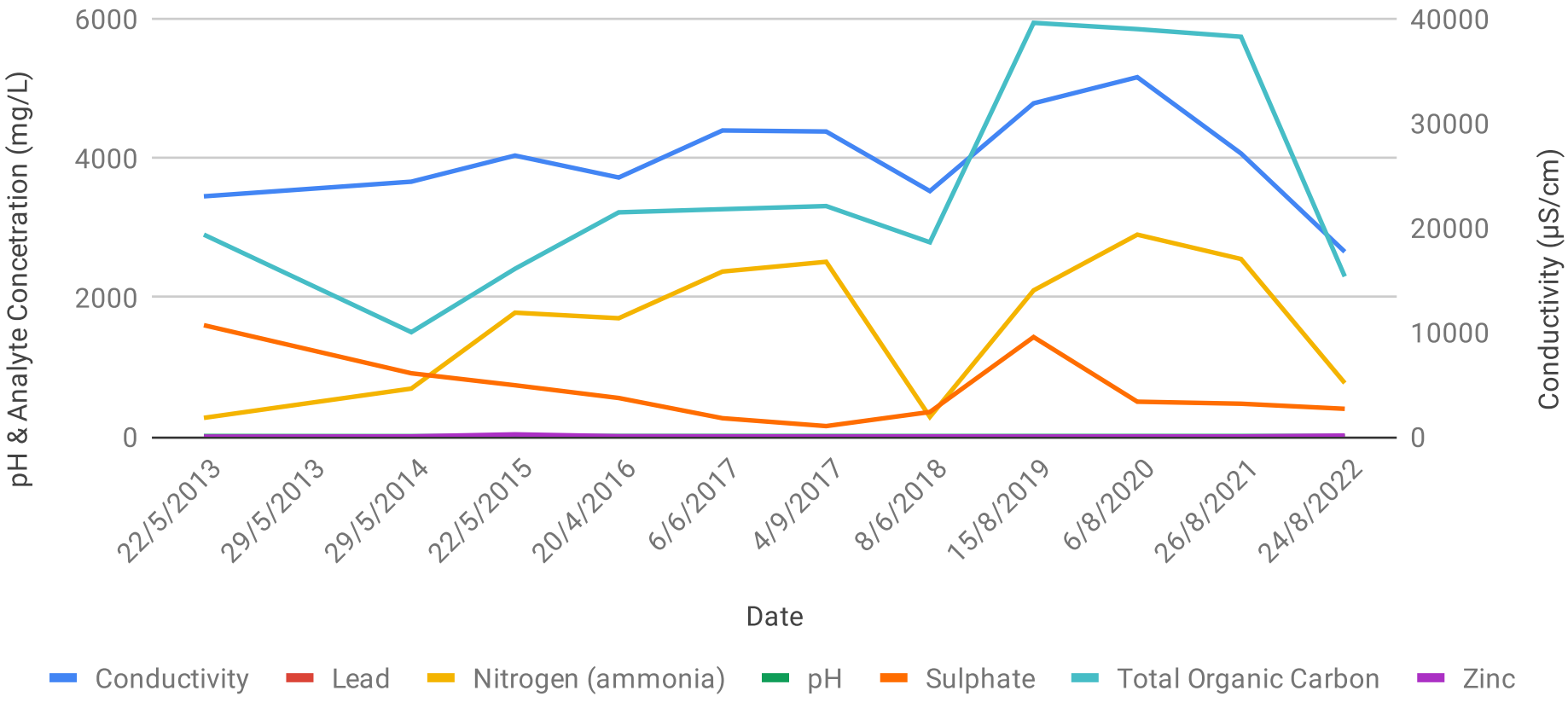

Figure 1.5.4.2 Leachate Recirculation

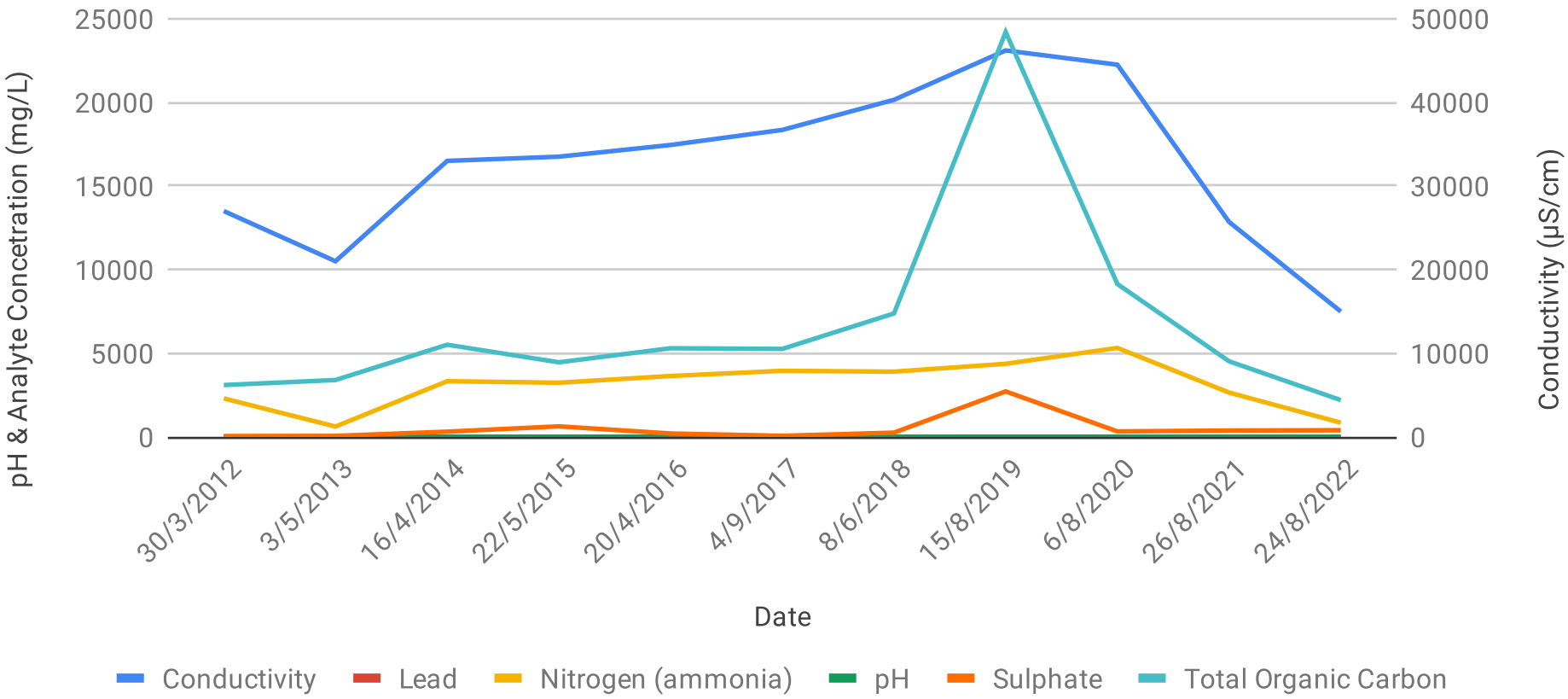

Figure 2.4.1.1 Site 110 - Upstream

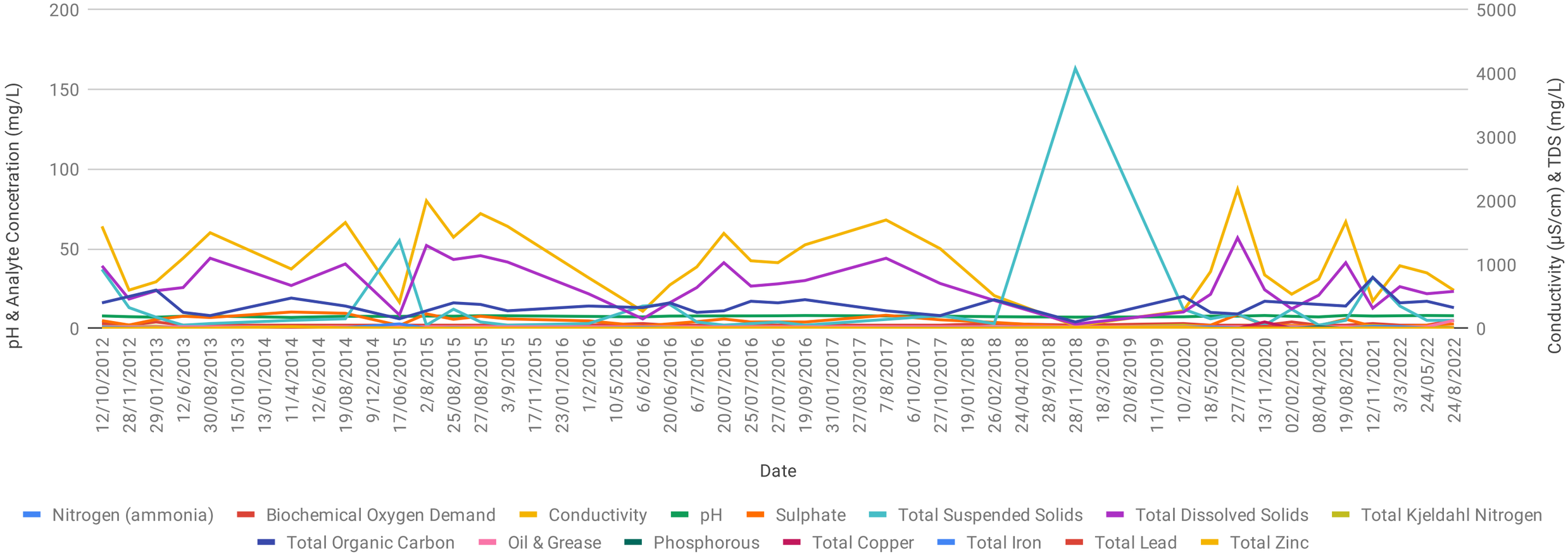

Figure 2.4.1.2 Site 150 - Mulwaree River

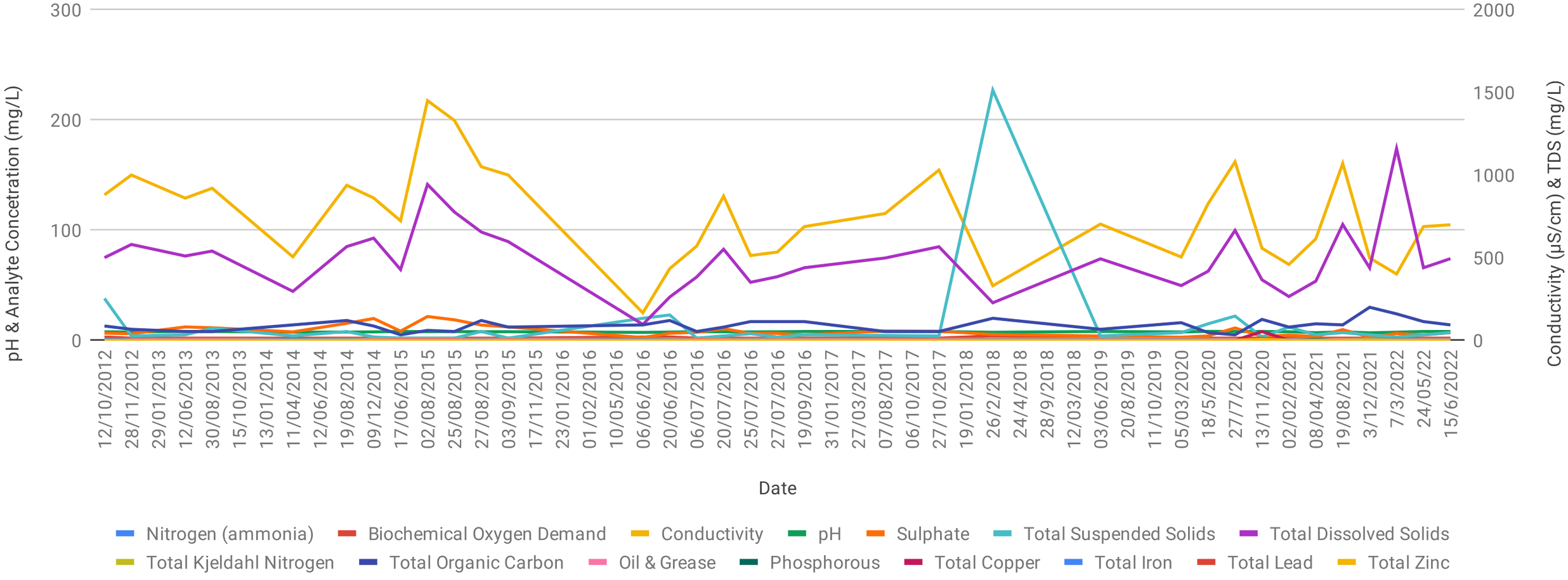

Figure 2.4.1.First Flush - Stormwater Outlet

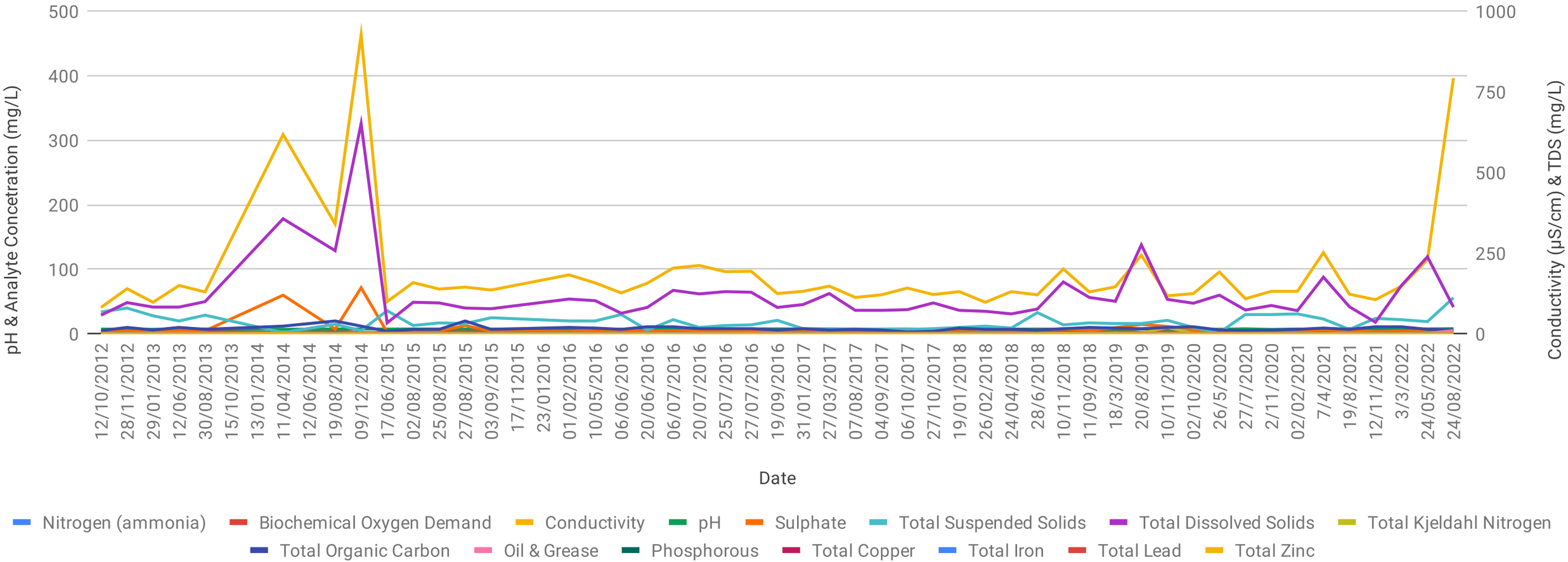

Table 1.1 GMBH1				
Date	**20/12/2021**	**03/02/2022**	**28/04/2022**	**25/08/2022**
Methane	0	0	0	0

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 Suphide	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
Molcular Weight Of Stack Gases	g/gmol	29
Nitrogen Oxides	mg/m^3	290
Oxygen	%	8.3
Sulfuric Acid Mist & Sulfur Trioxides S03	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 Temparature	°C	1293
Hydrogen Sulphide	mg/m^3	<0.6

Table 4.3 Landfill Gas Flare #2		
Designed Residence time	seconds	>0.3
Designed Temparature	°C	1288
Hydrogen Sulphide	mg/m^3	<0.8

Table 4.4 Landfill Gas Flare #3		
Designed Residence time	seconds	>0.3
Designed Temparature	°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 Coffer 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			
Pollutant	**Unit***	**Frequency**	**24/08/2022**
Alkalinity (as CaCO3)	mg/L	Annual	9400
Aluminium	mg/L	Annual	11
Arsenic	mg/L	Annual	0.29
Barium	mg/L	Annual	0.25
Benzene	mg/L	Annual	<10
Cadmium	mg/L	Annual	0.015
Calcium	mg/L	Annual	0.11
Chloride	mg/L	Annual	2000
Chromium (Hexavalent)	mg/L	Annual	<0.005
Chromium (Total)	mg/L	Annual	0.47
Cobalt	mg/L	Annual	0.11
Conductivity	µS/cm	Annual	17696
Copper	mg/L	Annual	0.034
Ethyl Benzene	mg/L	Annual	<10
Fluoride	mg/L	Annual	1.1
Lead	mg/L	Annual	0.057
Magnesium	mg/L	Annual	120
Manganese	mg/L	Annual	2.5
Mercury	mg/L	Annual	<0.0005
Nitrate	mg/L	Annual	<0.05
Nitrite	mg/L	Annual	<0.05
Nitrogen (ammonia)	mg/L	Annual	770
Organo-chlorine pesticides	mg/L	Annual	<0.0004
Organo-phosphate pesticides	mg/L	Annual	<0.0004
pH	pH	Annual	8.41
Phosphorous (Total)	mg/L	Annual	44
Polycyclic Aromatic	mg/L	Annual	<0.001
Potassium	mg/L	Annual	780
Sodium	mg/L	Annual	1700
Sulphate	mg/L	Annual	400
Toluene	mg/L	Annual	<10
Total Dissolved Solids	mg/L	Annual	10000
Total Organic Carbon	mg/L	Annual	2300
Total Petroleum Hydrocarbons	mg/L	Annual	15.9
Total Phenols	mg/L	Annual	1600
Total Suspended Solids	mg/L	Annual	1500
Xylene	mg/L	Annual	<0.002
Zinc	mg/L	Annual	16

Table 7.2 Leachate Recirculation System			
Pollutant	**Unit***	**Frequency**	**24/08/2022**
Alkalinity (as CaCO3)	mg/L	Annual	9000
Aluminium	mg/L	Annual	3.1
Arsenic	mg/L	Annual	0.32
Barium	mg/L	Annual	0.11
Benzene	mg/L	Annual	<10
Cadmium	mg/L	Annual	0.0043
Calcium	mg/L	Annual	0.064
Chloride	mg/L	Annual	2100
Chromium (Hexavalent)	mg/L	Annual	<0.005
Chromium (Total)	mg/L	Annual	0.51
Cobalt	mg/L	Annual	0.087
Conductivity	µS/cm	Annual	14991
Copper	mg/L	Annual	0.023
Ethyl Benzene	mg/L	Annual	<10
Fluoride	mg/L	Annual	0.8
Lead	mg/L	Annual	0.016
Magnesium	mg/L	Annual	130
Manganese	mg/L	Annual	0.48
Mercury	mg/L	Annual	<0.0005
Nitrate	mg/L	Annual	<0.05
Nitrite	mg/L	Annual	<0.05
Nitrogen (ammonia)	mg/L	Annual	850
Organo-chlorine pesticides	mg/L	Annual	<0.0002
Organo-phosphate	mg/L	Annual	<0.0002
pH	pH	Annual	8.42
Phosphorous (Total)	mg/L	Annual	25
Polycyclic Aromatic	mg/L	Annual	<0.001
Potassium	mg/L	Annual	830
Sodium	mg/L	Annual	1700
Sulphate	mg/L	Annual	400
Toluene	mg/L	Annual	<10
Total Dissolved Solids	mg/L	Annual	12000
Total Organic Carbon	mg/L	Annual	2200
Total Petroleum	mg/L	Annual	14.1
Total Phenols	mg/L	Annual	0.06
Total Suspended Solids	mg/L	Annual	1400
Xylene	mg/L	Annual	<0.002
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 9.2 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 9.3 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 9.4 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 9.5 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 9.6 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	NT	NT	NT	NT
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				
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 WM5

Pollutant	Unit	7/12/2021	05/04/2022	29/06/2022	10/8/2022
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 MW8S

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	5.57	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 MW9S

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 MW10S

Pollutant	Unit	07/12/2021	05/04/2022	28/06/2022	10/08/2022
Alkalinity (as calcium carbonate)	mg/L	NT	NT	NT	NT
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				
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 MB10S

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 consulation 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 consulation 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 consulation 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 consulation 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 consulation 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 consulation 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 consulation 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 consulation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
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 consulation 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
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 consulation 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 consulation 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 consulation 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 consulation 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 consulation 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 consulation 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 consulation 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 consulation 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 consulation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
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 consulation 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	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 consulation 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 consulation 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 consulation 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 consulation 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 consulation 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 consulation 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	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 consulation 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 consulation 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
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 consulation 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 consulation 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 by 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 consulation 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 consulation 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 consulation 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 consulation 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 consulation with the NSW EPA, an in-depth and detailed analysis approach to investigating reports of odour is being undertaken.
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 consulation 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 consulation 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 consulation 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 consulation 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
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 consulation 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 consulation 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 consulation 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 consulation 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	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 consulation 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 consulation 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 consulation 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 "pooey" 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 consulation 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
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 consulation 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 consulation 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 thet 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 vehiclewhile 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.
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 likegarbage”.	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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.
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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.
20/06/2022	2:45:00 pm	EPA Environmental Line	Road Traffic	Bungendore Road, Tarago	A community member alleging a leaking shipping container observed in transit between the premises and the Woodlawn Eco Precinct along Bungendore Road at approximately 2:45pm on the afternoon of the 20 June 2022.	The container identified was immediately removed from service for inspection and investigation into the incident was carried out.
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.
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.

Woodlawn Bioreactor Complaints Register

Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.	
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".	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	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).	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	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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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).	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	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 ofLumley 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.
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 thefacility 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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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 theWoodlawn 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.
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 atLeahys 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 feelnauseous.	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 thensmelt 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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.	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	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.	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	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.
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”.	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	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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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 a3/10.	
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 a3/10.	
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 a2/10.	
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 smellcame 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.	

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.
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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.
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.
17/05/2022	10:50:00 am	EPA Environmental Line	Road Traffic	Bungendore Road, Tarago	A community member alleging a leaking shipping container observed in transit between the premises and the Woodlawn Eco Precinct along Bungendore Road at approximately 10:50am on the morning of the 17 May 2022.	The container identified was immediately removed from service for inspection and investigation into the incident was carried out.
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 residen 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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.
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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.
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.
11/04/2022	8:09:00 am	EPA Environmental Line	Road Traffic	Bungendore Road, Tarago	A community member observed an alleged leaking shipping container in transit from the Crisps Creek Intermodal Facility to the Woodlawn Landfill along Bungadore Rd at approximately 08: 09am on the morning of the 11th April 2022.	The container identified was immediately removed from service for inspection and investigation into the incident was carried out.
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.
24/03/2022	2:05:00 pm	E-mail	Road Traffic	Collector Road, Tarago	The complainant reported that they were overtaken as they exited the Bioreactor by a waste truck travelling over the temporary mandatory speed limit.	The offending truck was identified, and the customer was notified of the incident.
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.
18/03/2022	3:00:00 pm	EPA Environmental Line	Road Traffic	Bungendore Road, Tarago	A community member observed an alleged leaking shipping container aboard a truck in transit from the Crisps Creek Intermodal Facility to the Woodlawn Landfill along Bungadore Rd on the 18th March 2022.	The container identified was immediately removed from service for inspection and investigation into the incident was carried out. As the waste had been containerised and stored in Sydney for a period of time, Veolia had implemented measures to reduce any impact on the community and environment.
18/03/2022	8:23:00 am	E-mail	Road Traffic	Bungendore Road, Tarago	Veolia received an email from a resident of the Tarago area reporting that as they were following a trucked container out from the Crisps Creek intermodal, they noticed it was leaking liquid.	The container identified was immediately removed from service for inspection and investigation into the incident was carried out. As the waste had been containerised and stored in Sydney for a period of time, Veolia had already implemented measures to reduce the impact on the community and environment.
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.

Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.
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	8:00:00 am	EPA Environmental Line	Odour	Breadalbane Road, Collector	The EPA received a report of odour from a resident of Breadalbane Road, Collector. The complainant 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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
23/02/2022	9:09:00 am	E-mail	Road Traffic	Tarago-Bungendore Road	The complainant reported that their spouse was travelling on the Tarago-Bungendore Road when they encountered an oncoming truck driving on their side of the road due to very poor condition of parts of the road.	This section of road has been identified as requiring urgent repair and Veolia understands road repairs are scheduled to commence shortly. In the interest of public safety Veolia customers have been asked to limit travel between Bungendore and Tarago prior to daylight hours.
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.
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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.
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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.
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 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.
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 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.
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 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.
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 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.
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 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.
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 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.

Woodlawn Bioreactor Complaints Register

Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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 it's 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.
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 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.
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 it's 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 it's 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 it's 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 it's 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	Taylors Creek Road, Tarago	The EPA received a report to their Environment Line from a resident of Taylors 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	Taylors Creek Road, Tarago	The EPA received a report to their Environment Line from a resident of Taylors 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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.
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	Taylors Creek Road, Tarago	The EPA received a report to its Environment Line from a resident of Taylors Creek Road, Tarago 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 complainants 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.
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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.
22/10/2021	11:52:00 am	E-mail	Road Traffic	Bungendore Road, Tarago	Veolia received an email from a resident of the Tarago area reporting that that there was water on the road, tracking from the IMF to the Collector Road turnoff that could have been from a container in transit.	The section of the road was inspected and showed no indication of residue which would indicate that the liquid was most likely water from the top of the container that had since evaporated. Based on Veolia's investigations, there is no evidence that indicates that the liquid on the road leaked from within a container.
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	Taylors Creek Road, Tarago	Veolia received a call to its Community Feedback Line from a resident of Taylors Creek Road, Tarago reporting that there 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 complainants 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.
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.

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Date	Time	Method	Type	Location	Description	Response/action taken to resolve the complaint
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.