

Reporting date: 26 June 2026
Submitted via email to epbcmonitoring@dcceew.gov.au

Environmental Event Report

Narrabri Underground Mine Stage 3 Extension Project

Application number: EPBC 2019/8427
Licensee/Proponent: Narrabri Coal Operations Pty Ltd
Locked Bag 1002
Narrabri NSW 2390

Licensed Premises/Land: Narrabri Coal Operations (NCO)
10 Kurrajong Creek Road
Baan Baa NSW 2390

a) Summary of the event:

Narrabri Coal Operations (NCO) weather station recorded 57.6mm rainfall over the period 25th to 29th May 2026. The rain event resulted in flows in local watercourses. In accordance with the Surface Water Management Plan (SWMP) (Table 3-10) monitoring of surface water quality in creeks is required quarterly, in the event of flow during the quarter. Monitoring was completed on Friday 29 May 2026, and monitoring results for several downstream locations (Table 1) exceeded the surface water impact assessment criteria listed in the SWMP.

Table 1: Summary of surface water monitoring SSGV exceedances

Sample Date and Time	Monitoring ID	Coordinates (MGA55)	Trigger Type	Trigger Value	Monitoring Result
29/5/2026 1:10pm	PC1	776973; 6621935	Water Quality – EC (field)	Stage 2- 511.9 $\mu\text{S}/\text{cm}$	674 $\mu\text{S}/\text{cm}^1$
29/5/2026 12:45pm	KC1DS	779479; 6620404	Water Quality - TOC	Stage 2- 21.2 mg/L	22 mg/L ²
29/5/2026 1:10pm	PC1	776973; 6621935	Water Quality - TOC	Stage 2- 20.3 mg/L	25 mg/L ²

1. Initial notification of the exceedance was provided to the Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW) on 2 June 2026.

2. Initial notification of the exceedance was provided to the DCCEEW on 12 June 2026 following receipt of laboratory analysis on 10 June 2026.

The SWMP Trigger Action Response Plan (TARP) (Table 4-1) lists the following response when monitoring indicates exceedance of the Stage 2 surface water impact assessment criteria:

- Hydrologist (or similar specialist) to review sampling and climate data and compare to upstream value to confirm likely mining impact or otherwise. If mine related, undertake physical inspection of affected surface and creeks to identify potential source of water quality degradation.
- Implement appropriate management or contingency response (i.e. repair of subsidence cracking, remediation of ponding, erosion control works and rehabilitation).

b) Outcomes of an investigation, including identification of the cause of the incident

NCO engaged Ashleigh Hackett of HydroBalance (as a suitably qualified hydrologist) to review sampling and climate data and compare to upstream value to confirm likely mining impact or otherwise. The Hydrobalance investigation report is provided as Attachment A. The Report concluded that the TOC and EC results at PC1 and KC1DS were directly attributable to naturally occurring background levels upstream. The exceedance was unlikely to be caused by influences from mining activities. The basis for this conclusion is as follows:

- **Absence of upstream disturbance:** There was no release from sediment dams upstream of PC1 or any significant disturbance activities upstream of PC1 or KC1DS that would have elevated EC and/or TOC levels prior to 29 May 2026 at the time of the exceedance.
- **EC:** “First flush” conditions: The May 2026 rainfall was the first significant rainfall event since December 2025. This allowed contaminants to naturally accumulate within the creek catchments during the dry period. The flows after the prolonged dry period (referred to as the “first flush”) typically collect the accumulated contaminants and may cause a brief spike in downstream concentrations. It is likely that first flush conditions during the May 2026 flow event contributed to the elevated readings at PC1 and KC1DS.
- **TOC:** Consistent with historical trends: The TOC levels at PC1 and KC1DS recorded on 29 May 2026 are generally consistent with the historically recorded levels in Pine Creek and Kurrajong Creek, respectively.

c) Details of the corrective actions that have been, or will be, implemented to address the incident and prevent recurrence

No corrective actions are recommended. The exceedances have been determined to be the result of a naturally occurring events. Surface water monitoring will continue to be undertaken in accordance with the SWMP.

d) Details of compliance with requirements of the relevant management plan pertinent to the incident

Water Management Plan- Surface Water Monitoring Program		
Section / Requirement	Comments	Compliant
SWMP - Table 3-10 Surface water monitoring program Monitoring locations sampled quarterly, in the event of flow during the quarter.	Sample was collected from locations PC1 and KC1DS on 29/05/2026 during a flow event (Q2 2026- 01 April- 30 June).	Yes
SWMP - Table 4-1 Trigger Action Response Plan Water quality creeks Level 2- Monitoring results exceed the Stage 2 trigger value.	NCO have initiated the required response for a Level 2 TARP trigger.	Yes
Section / Requirement	Comments	Compliant
WMP - 6. Incidents and non-compliance As soon as practicable after becoming aware of an exceedance of performance criteria notify DPHI and provide a detailed report within 7 days.	As per table 4-1 TARP - Hydrologist (or similar specialist) to review sampling and climate data and compare to upstream value to confirm likely mining impact or otherwise. If mine related, undertake physical inspection of affected surface and creeks to identify potential source of water quality degradation. - Implement appropriate management or contingency response (i.e. repair of subsidence cracking, remediation of ponding, erosion control works and rehabilitation) NCO became aware of the exceedance of performance criteria on 1 June (field EC) and 10 June 2026 (lab TOC) (refer notes for Table 1) and provided incident notification on 2 June and 12 June 2026 respectively. A hydrologist was engaged to undertake an assessment and concluded the results are unlikely to be a result of mining impacts. There are no remediation measures recommended by the hydrologist.	Yes

e) Details of any communication with other stakeholders regarding the incident.

The outcomes of the investigation and attached report have been provided to NSW Department of Planning, Housing and Infrastructure (DPHI) in accordance with conditions of SSD-10269.

Reported by:

Brent Baker
Environmental Manager

ATTACHMENT A

*Narrabri Coal Mine - Surface Water Trigger Investigation Report- May 2026,
Hydrobalance*

Narrabri Coal Mine

Surface Water Trigger Investigation Report – May 2026

Narrabri Coal Operations Pty Ltd

Doc. Ref.: WHC-059-B1

Date: 25 June 2026

Rev. No.	Doc Ref.	Report Date	Report Author	Reviewer
0	WHC-059-B	22/06/2026	AH	MGB
1	WHC-059-B1	25/06/2026	AH	MGB

For and on behalf of **HydroBalance**
Environmental and Mine Water Management Solutions



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1 Introduction

1.1 Background

Ambient flow monitoring was undertaken at Narrabri Coal Operations (NCO) on 29 May 2026, following a rainfall event. The ambient flow monitoring identified the following exceedances of Stage 2 downstream surface water impact assessment criteria specified in Stage 3 Surface Water Management Plan (the WMP):

- Electrical Conductivity (EC) exceedance at the Pine Creek (PC1);
- Total organic carbon (TOC) exceedance at Pine Creek (PC1);
- TOC exceedance at Kurrajong Creek (KC1DS).

The locations of the site monitoring points are shown in Figure 1.1.

In accordance with Table 4-1 of the WMP Trigger Action Response Plan (TARP), NCO have engaged Ashleigh Hackett of HydroBalance (as a suitably qualified hydrologist) to prepare an investigation report into the exceedance.

1.2 Scope of report

This report will support NCO's submission to the administering authority, and covers the following:

- Review of the rainfall that occurred at site prior to and during the exceedances.
- Review and characterisation of the surface water quality monitoring data during the exceedance, as well as historical water quality monitoring data.
- Consideration of other influencing factors, such as naturally elevated background levels.
- Determine whether the exceedance event was caused directly or indirectly by the upstream subsidence ponds.

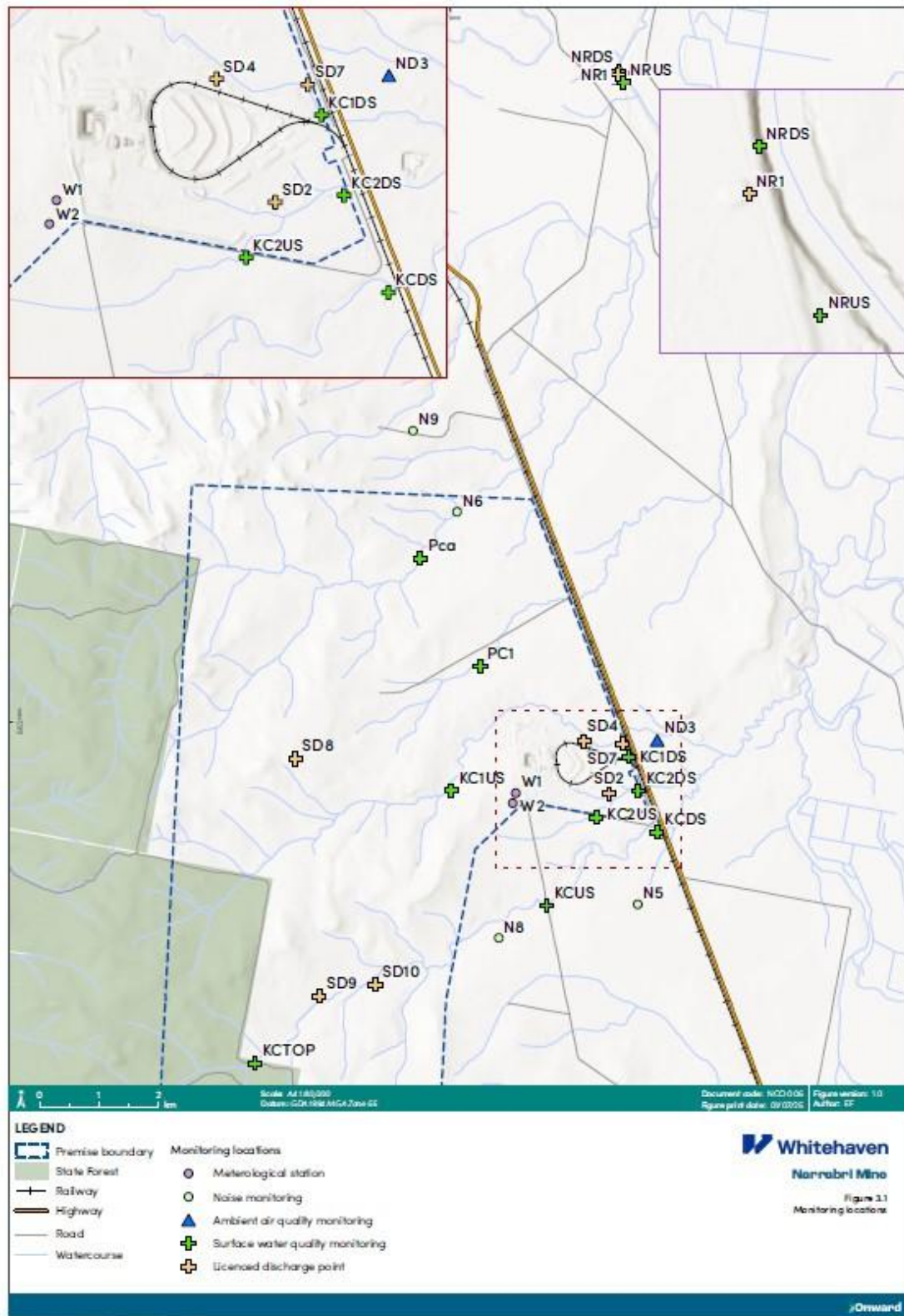


Figure 1.1 – Locality plan

2 Exceedance event details and review of available data

2.1 Exceedance event details

The sample in which the EC exceedance occurred was taken on 29 May 2026. This ambient flow monitoring sample was undertaken following a rainfall event trigger notification, which occurs when greater than 38.4 mm of rainfall occurs over any consecutive 5-day period.

The laboratory analysis for the 29 May 2026 water quality sampling showed the following key results, in relation to the identified exceedances:

- **Pine Creek PC1**
 - EC level of 662 $\mu\text{S}/\text{cm}$, which exceeded the Stage 2 trigger value of 511.9 $\mu\text{S}/\text{cm}$.
 - TOC level of 25 mg/L, which exceeded the Stage 2 trigger value of 20.3 mg/L.
- **Kurrajong Creek KC1DS**
 - TOC level of 22 mg/L, which exceeded the Stage 2 trigger value of 21.2 mg/L.

NCO notified Department of Planning, Housing and Infrastructure (DPHI) and Department of Climate Change, Energy, the Environment and Water (DCCEEW) of the PC1 EC exceedance on 2 June 2026, following collection of the field samples. The TOC exceedance at PC1 and KC1DS were reported on 12 June 2026, following receipt of the laboratory analysis data.

No samples were taken at the upstream monitoring locations (PCa, KC1TOP and KC1US) as they were dry. Field observations at PC1 noted “slight flow” at this location. Similarly, field observations at KC1DS noted a “slight trickle”.

2.2 Recorded rainfall

Sub-daily rainfall is recorded at the NCO AWS. The daily rainfall totals that fell in the period around the exceedance is presented in Figure 2.1, which shows that the total recorded rainfall that fell over the period between 25 and 29 May 2026 was 57.6 mm. This confirms that the 5-day rainfall event trigger (38.4 mm) was exceeded prior to the exceedance on 29 May 2026.

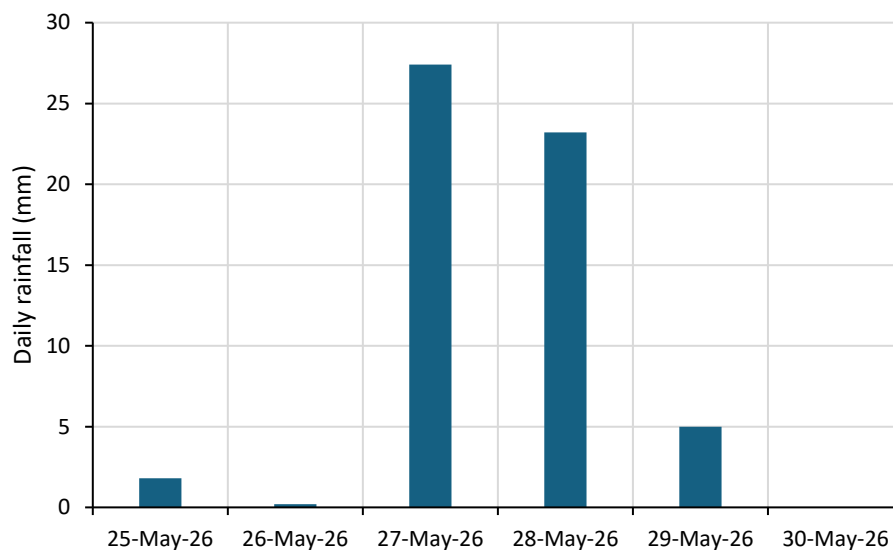


Figure 2.1 – Daily rainfall totals – site rainfall station

2.3 Recorded streamflow

There are no streamflow gauges located on Pine Creek or Kurrajong Creek.

Field notes taken during sampling state that Pine Creek at PC1 and Kurrajong Creek at KC1DS had a “*Slight flow*.” And “*Slight trickle*”, respectively. This indicates that the creeks were still flowing somewhat on 29 May 2026, on the day of the exceedance.

2.4 Subsidence pond locations and water quality

Ponding may occur in the LW101 subsidence area, upstream of PC1. No subsidence has or will occur over the LW201 panel upstream of KC1DS, due to the cut and fill methods used in this location. Hence, no ponding due to mining operations is expected to occur upstream of KC1DS. Refer to Figure 1.1 for locations.

The LW101 subsidence pond was observed by NCO personnel inspected following the May 2026 rainfall event. The inspection found that no overflows from LW101 occurred. The recorded water quality in the LW101 subsidence pond showed an EC level of 171 $\mu\text{S}/\text{cm}$.

2.5 Historical water quality in Pine Creek

Figure 2.2 shows the long-term EC levels recorded at PC1 and PCa (located on Pine Creek upstream of the mine, but on a different streamline than PC1) across the last 2 years. Figure 2.3 shows the long-term TOC levels at PC1 and PCa. The LW101 panel has been subsided during the full 2-year period of record. The following is of note:

- **Electrical conductivity:**
 - The EC levels in Pine Creek are generally low in the 2 years prior to the May 2026 flow event, consistently below 230 $\mu\text{S}/\text{cm}$ across PC1 and PCa.
 - The PC1 May 2026 reading appears to be elevated compared to the historical trend, appearing to be somewhat anomalous.
 - The recorded PC1 and PCa EC levels are generally similar across the 2 year period of record in instances where both PC1 and PCa samples were collected.
 - No reading was collected at PCa in May 2026.
- **Total organic carbon:**
 - The TOC levels in Pine Creek range between 9 mg/L and 25 mg/L in the 2 years prior to the May 2026 flow event. The highest reading (25 mg/L) in the past 2 years was recorded at PCa in December 2024.
 - The PC1 May 2026 reading appears to be within the range of typical values observed in Pine Creek.
 - The recorded PC1 and PCa TOC levels are generally similar across the 2 year period of record in instances where both PC1 and PCa samples were collected.
 - No reading was collected at PCa in May 2026.

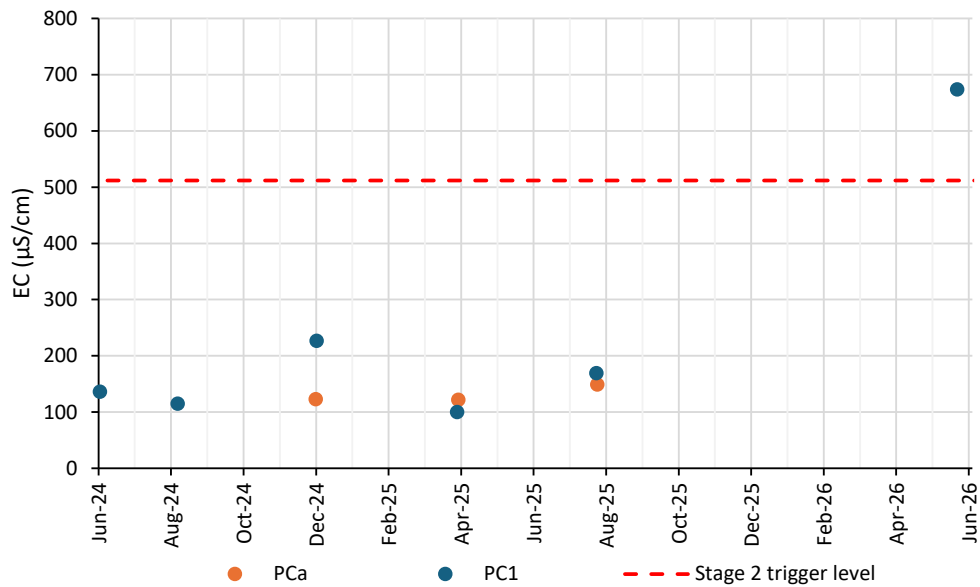


Figure 2.2 – Long-term Electrical Conductivity readings in Pine Creek

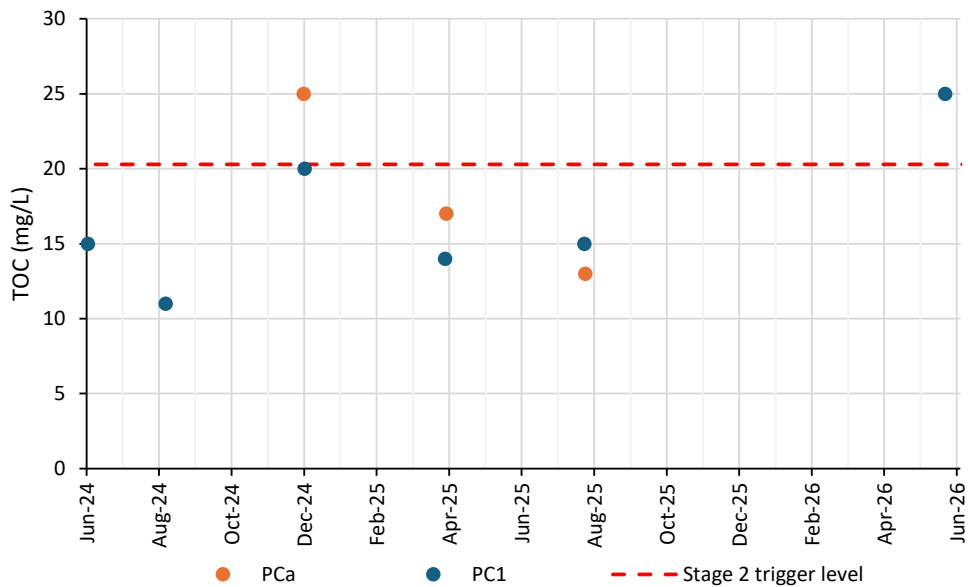


Figure 2.3 – Long-term Total Organic Carbon readings in Pine Creek

2.6 Historical water quality in Kurrajong Creek

Figure 2.2 shows the long-term TOC levels recorded at KC1DS, KC1US and KC1TOP across the last 5 years. The following is of note:

- The TOC levels in Kurrajong Creek range between 2 mg/L and 45 mg/L in the 5 years prior to the May 2026 flow event. The highest reading (45 mg/L) in the past 5 years was recorded at KC1TOP in November 2022.
- The KC1DS May 2026 reading appears to be within the range of typical values observed in Kurrajong Creek.

- The recorded KC1US and KC1DS TOC levels are generally similar across the 5 year period of record in instances where both upstream and downstream samples were collected. The KC1TOP readings appear to be elevated in comparison to the KC1US and KC1DS readings.
- No readings were collected at KC1US or KC1TOP in May 2026.

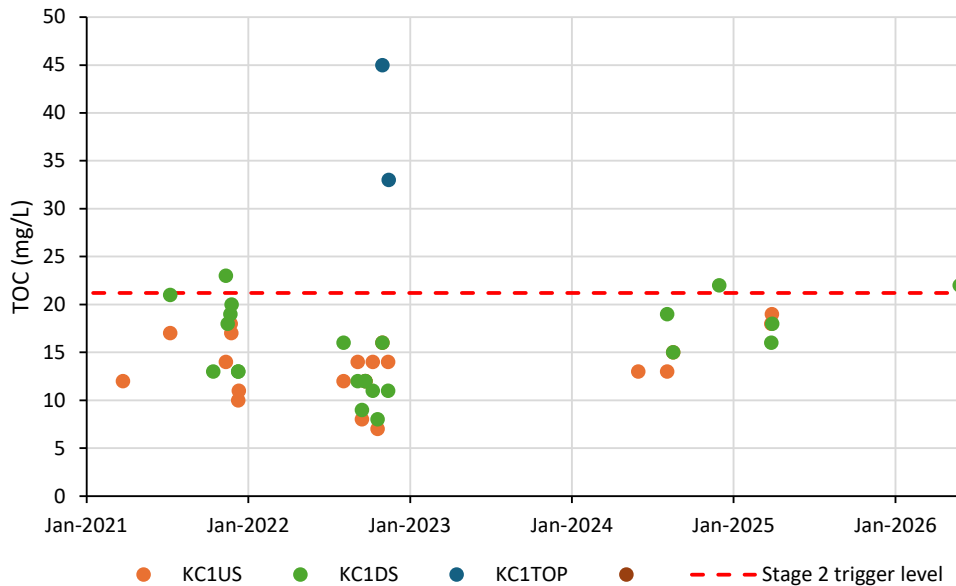


Figure 2.4 – Long-term Total Organic Carbon readings in Kurrajong Creek

2.7 Sediment dam licenced discharge

No sediment dam discharges occurred on Pine Creek upstream of PC1 or on Kurrajong Creek upstream of KC1DS in the days prior to the exceedance.

3 Investigation outcomes

Based on the information provided by NCO, it is my professional opinion that the exceedances recorded at monitoring locations PC1 and KC1DS on 29 May 2026 were directly attributable to naturally occurring background levels upstream. The exceedance was unlikely to be caused by influences from the mine, being either overflows from the upstream subsidence ponds or any sediment dam discharges. The basis for this conclusion is as follows:

- **Absence of upstream disturbance:** There was no release from sediment dams upstream of PC1 or any significant disturbance activities upstream of PC1 or KC1DS that would have elevated EC and/or TOC levels prior to 29 May 2026 at the time of the exceedance.
- **Electrical conductivity:**
 - **“First flush” conditions:** The May 2026 rainfall was the first significant rainfall event since December 2025. This allowed contaminants to naturally accumulate within the creek catchments during the dry period. The flows after the prolonged dry period (referred to as the “first flush”) typically collect the accumulated contaminants and may cause a brief spike in downstream concentrations. It is likely that first flush conditions during the May 2026 flow event contributed to the elevated readings at PC1 and KC1DS.
- **Total organic carbon:**
 - **Consistent with historical trends:** The TOC levels at PC1 and KC1DS recorded on 29 May 2026 are generally consistent with the historically recorded levels in Pine Creek and Kurrajong Creek, respectively.

On the basis of these findings, I am satisfied that the most likely cause of the exceedances observed at PC1 and KC1DS on 29 May 2026 were due to naturally elevated levels upstream and are unlikely to be a result of contributions from the upstream subsidence ponds.

This investigation outcome is provided to demonstrate compliance with the reporting requirements of the Stage 3 WMP, and to confirm that the exceedance has been appropriately investigated.