Whitehaven

Reporting date: 07 October 2026
Submitted via email to epbcmonitoring@nationalepa.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 29.2mm rainfall over the period 21st to 26th August 2026. 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 Wednesday 26 August 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
26/8/2026 12:10pm	KC1DS	779479; 6620404	Water Quality - TOC	Stage 2- 21.2 mg/L	25 mg/L
26/8/2026 2:00pm	PC1	776973; 6621935	Water Quality - TOC	Stage 2- 20.3 mg/L	25 mg/L

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 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 TOC levels prior to 26 August 2026 at the time of the exceedance. Additionally, there are no subsidence ponds upstream of KC1DS.
- **Consistent with historical trends**: The TOC levels at PC1 and KC1DS recorded on 26 August 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 26/08/2026 during a flow event (Q3 2026- 01 July - 30 September).	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 3 September (lab TOC) (refer notes for Table 1) and provided incident notification on 7 September. A hydrologist was engaged	Yes

	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.	

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

Whitehaven

ATTACHMENT A

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

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Narrabri Coal Mine

Surface Water Trigger Investigation Report – August 2026

Narrabri Coal Operations Pty Ltd

Doc. Ref.: WHC-074-B1

Date: 6 October 2026

Rev. No.	Doc Ref.	Report Date	Report Author	Reviewer
0	WHC-074-B	25/09/2026	AH	MGB
1	WHC-074-B1	6/10/2026	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 26 August 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):

- Total organic carbon (TOC) exceedance at Pine Creek (PC1); and
- TOC exceedance at Kurrajong Creek (KC1DS).

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

In accordance with Table A-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.

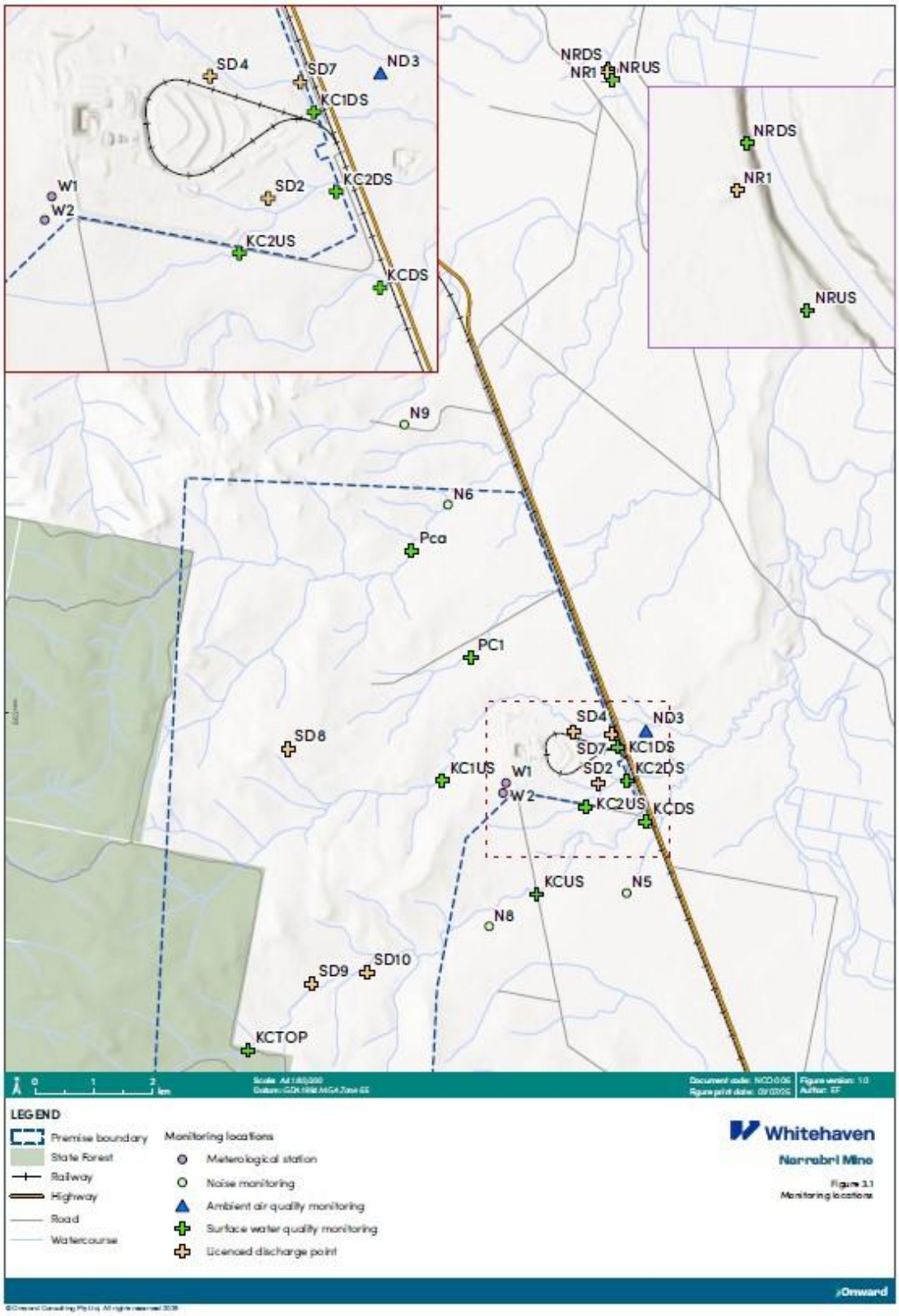

Figure 1.1 – Locality plan

2 Exceedance event details and review of available data

2.1 Exceedance event details

The sample in which the TOC exceedance occurred was taken on 26 August 2026. This ambient flow monitoring sample was undertaken following a flow event in Pine Creek and Kurrajong Creek.

The laboratory analysis for the 26 August 2026 water quality sampling showed the following key results, in relation to the identified exceedances:

- **Pine Creek (PC1)**
  - TOC level of 25 mg/L, which exceeded the Stage 2 trigger value of 20.3 mg/L.
- **Kurrajong Creek (KC1DS)**
  - TOC level of 25 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 exceedance on 3 September 2026.

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

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 21 and 26 August 2026 was 29.2 mm.

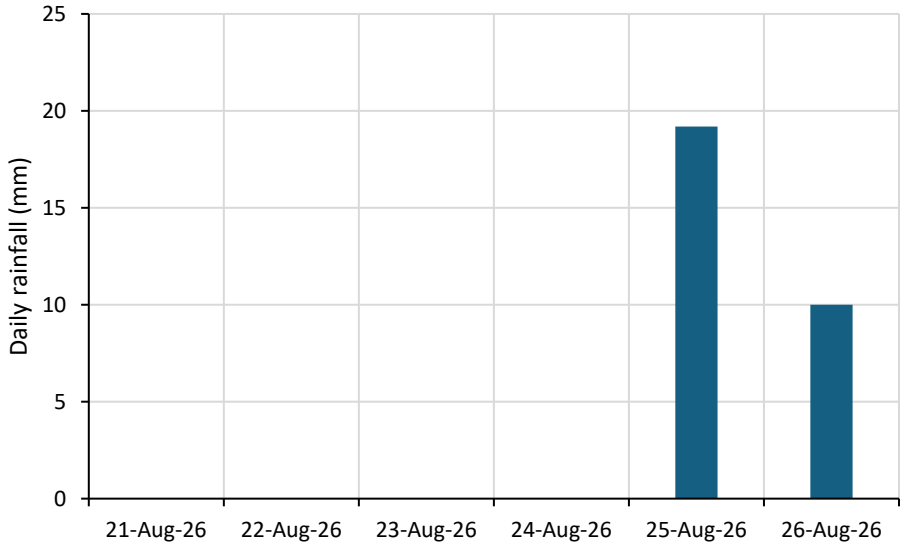

Figure 2.1 – Daily rainfall totals – site rainfall station

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 trickle*" and "*half full, steady to strong flow*", respectively. This indicates that the creeks were still flowing somewhat on 26 August 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 flit 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 August 2026 rainfall event. The inspection found that no overflows from LW101 occurred.

2.5 Historical water quality in Pine Creek

Figure 2.2 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:

- The TOC levels in Pine Creek range between 9 mg/L and 25 mg/L in the 2 years prior to the August 2026 flow event. The highest reading in the past 2 years was 25 mg/L and was recorded twice; once at PCa in December 2024 and once at PC1 in May 2026.
- The PC1 August 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, suggesting that it is unlikely that subsidence ponding contributed to the slightly elevated levels at PC1.
- No reading was collected at PCa in August 2026, due to the lack of flow in the upstream location.

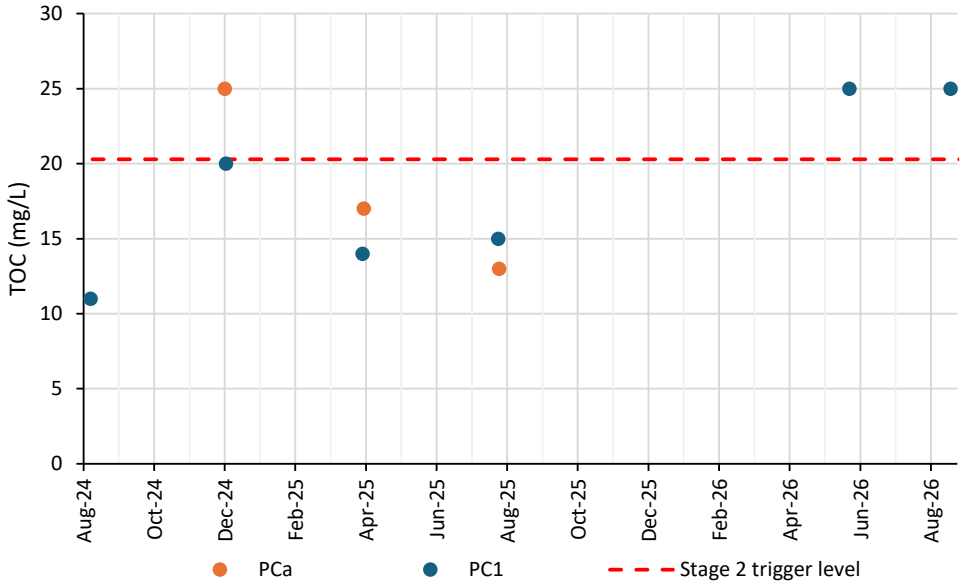

Figure 2.2 – Long-term Total Organic Carbon readings in Pine Creek

2.6 Historical water quality in Kurrajong Creek

Figure 2.3 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 August 2026 flow event. The highest reading (45 mg/L) in the past 5 years was recorded at KC1TOP in November 2022.
- The KC1DS August 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. KC1TOP is located upstream of KC1US and KC1DS.
- No readings were collected at KC1US or KC1TOP in August 2026, due to the lack of flow in the upstream location.

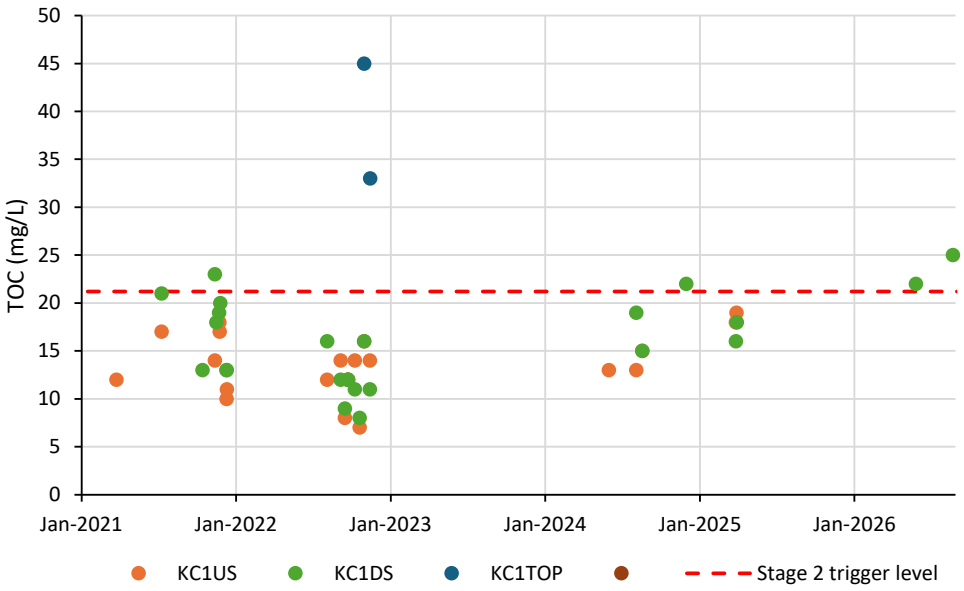

Figure 2.3 – Long-term Total Organic Carbon readings in Kurrajong Creek

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 26 August 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 TOC levels prior to 26 August 2026 at the time of the exceedance. Additionally, there are no subsidence ponds upstream of KC1DS.
- **Consistent with historical trends**: The TOC levels at PC1 and KC1DS recorded on 26 August 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 26 August 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.

It is recommended that the TOC trigger levels are reviewed and revised if necessary to reflect the historical background levels in Pine Creek and Kurrajong Creek.