

TAHMOOR COLLIERY: Longwall 28

Subsidence Management Status Report No. 06
Submitted every four months as required by Condition 17 of the
Subsidence Management Plan Approval for Longwall 27 to 30

Reporting Period	1 July 2014 to 31 October 2014	
Length of extraction	1394 m	as at 30 October
Length of extraction remaining	1236 m	
Distance travelled by LW since previous report	972 m	30 June to 30 October
Maximum total subsidence since start of LW22 within zone of active subsidence	982 mm	Remembrance Drive line as at 19 August
Maximum incremental subsidence due to LW28 within zone of active subsidence	755 mm	Main Southern Railway line as at 27 October
Maximum increase in subsidence since previous report	668 mm	Railway Embankment Toe (23 June to 18 October)

Summary of Observations, Management Actions and Consultation since start of LW28

Summary of subsidence development
<p>Subsidence is developing above LW28 within expectations. The magnitude of subsidence at the commencing end is reduced compared to previous experiences during the mining of LWs 24A, 25, 26 and 27.</p> <p>The zone of active subsidence is currently in rural land between Tickle Drive and Redbank Creek.</p> <p>Non-systematic subsidence movements in the form of increased ground strains have been observed at one new site during the mining of Longwall 28, which is on the Tahmoor Carrier line (Pegs TC15 & TC16), with no impacts to infrastructure observed.</p>
Natural Features
<p><i>Summary of any observed/reported impacts or incidents, exceedence of triggers</i></p> <p>Valley closure and upsidence has been measured in Myrtle Creek along a number of monitoring lines that are located directly above Longwall 28. Minor additional closure has been observed across Myrtle Creek where it crosses previously extracted Longwalls 25 and 26. Valley closure has developed along the MXA, MXB and MXC lines above Longwalls 27 and 28. Little change in ground movement is currently observed as the longwall has progressed well away from the Creek.</p> <p>Weekly visual inspections along Myrtle Creek found some new impacts above Longwall 28. Some pools were observed to be dry and water levels in one pool had reduced, though some pools were partially refilled during heavy rainfall events. A groundwater seep was observed in one location above Longwall 28, and one new crack has been observed. No impacts have been reported on water quality.</p> <p><i>Summary of Management Actions</i></p> <p>Monitoring and inspections are being undertaken as per the Environmental Management Plan. Ground surveys will commence along Redbank Creek after 1500 metres of extraction, as per the Management Plan.</p> <p><i>Summary of Consultation with Stakeholders</i></p> <p>Observations during mining of Longwall 28 reported to TCCC and DTIRIS, and other stakeholders, in accordance with the approval.</p>
Main Southern Railway
<p><i>Summary of any observed/reported impacts or incidents, exceedence of triggers</i></p> <p>The longwall face has completed extraction beneath the Main Southern Railway in the Tahmoor area, and is now re-approaching the main southern railway near Redbank Creek. There have been no impacts on the safety or serviceability of the Railway. The railway infrastructure has experienced some minor impacts as a result of mine subsidence, and these have been successfully managed by Tahmoor Colliery in consultation with ARTC.</p> <p><i>Summary of Management Actions</i></p> <p>Monitoring and inspections are being undertaken as per the Railway Management Plan. Major resurfacing of the area of the main southern railway subsided by longwall 28 was undertaken during the programmed rail possession on 18-19 October.</p> <p><i>Summary of Consultation with Stakeholders</i></p> <p>Ongoing consultation with ARTC, including weekly teleconference. Detailed subsidence monitoring reports issued weekly. Please refer to Railway Status Report for further information.</p>
Local Roads, Bridges and Culverts
<p><i>Summary of any observed/reported impacts or incidents, exceedence of triggers</i></p> <p>A small bump in the pavement at the intersection of York Street and Remembrance Drive, observed during LW27, has changed slightly. Small hairline cracks previously observed in Tahmoor House Court have opened slightly.</p> <p>A small bump near Peg RE58 on Remembrance Drive was repaired in August. A new minor dip was observed near the eastern edge of Longwall 28 on Remembrance Drive between Pegs RE67 and RE68.</p> <p>Very little differential movement was observed at the Remembrance Drive Road and Pedestrian Bridges over Myrtle Creek, as expected. Visual inspections have not observed any impacts, though it is noted that the joints between the Road Bridge deck and the approach pavements have opened slightly, with a noticeable dip observed in the road surface on the west bound approach.</p> <p>No additional impacts or valley closure movement have been observed at Castlereagh Street Bridge during the mining of Longwall 28.</p>

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Summary of Management Actions

Monitoring and inspections have been undertaken as per the Wollondilly Shire Council Management Plan. Weekly surveys at the Remembrance Drive Road and Foot Bridge over Myrtle Creek at the commencement of Longwall 28 have measured only minor changes. A small amount of closure has developed between the footbridge abutments, with a trend of very small uplift over time.

Summary of Consultation with Stakeholders

Detailed subsidence monitoring report is issued to Wollondilly Council, who agreed to cease surveys of the Remembrance Drive and the Bridges until the completion of Longwall 28.

Potable Water Infrastructure

Summary of any observed/reported impacts or incidents, exceedence of triggers

No impacts observed or reported with respect to potable water infrastructure.

Summary of Management Actions

Monitoring and inspections are being undertaken as per the Potable Water Management Plan.

Summary of Consultation with Stakeholders

Detailed subsidence monitoring report is issued to Sydney Water.

Sewer Infrastructure

Summary of any observed/reported impacts or incidents, exceedence of triggers

Monitoring of the Tahmoor Carrier Pipe from York Street to Tahmoor House Court for changes in sewer grade have shown that pipe grades have remained well above trigger levels for low grades.

Summary of Management Actions

Monitoring and inspections are being undertaken as per the Sewer Management Plan. A CCTV inspection was undertaken in early July at the site of increased compressive ground strain between TC15 and TC16, with no issues raised. A follow up inspection in late July did not identify any issues. The affected section of pipe is encased in concrete, and is located directly beneath a house. Visual inspections around the house and driveway have not detected any impacts.

Summary of Consultation with Stakeholders

Detailed subsidence monitoring report is issued to Sydney Water, who have agreed to cease surveys until the completion of Longwall 28.

Gas Infrastructure

Summary of any observed/reported impacts or incidents, exceedence of triggers

No impacts observed or reported with respect to gas pipes, including where compressive strains have been measured on the Remembrance Drive survey line between Pegs RE56 and RE60. Level 1 the trigger levels for ground strain and curvature may have been exceeded but it is difficult to be certain given the disturbances to the survey marks due to pavement construction. As a precaution, Tahmoor Colliery arranged for a gas detection survey to be undertaken on 21 July and no leaks were detected.

A local 3D survey of 9 locations along the gas pipe on Remembrance Drive Road Bridge over Myrtle Creek indicates that very little change in the shape of the pipe has occurred during the mining of Longwall 28.

Summary of Management Actions

Monitoring and inspections are being undertaken as per the Jemena Management Plan.

Summary of Consultation with Stakeholders

Detailed subsidence monitoring report is issued to Jemena.

Electrical Infrastructure

Summary of any observed/reported impacts or incidents, exceedence of triggers

No impacts observed or reported with respect to electrical cables or poles.

Summary of Management Actions

Monitoring and inspections are being undertaken as per the Endeavour Management Plan. This includes monthly surveys of critical power poles.

Summary of Consultation with Stakeholders

Detailed subsidence monitoring report is issued to Endeavour Energy.

Telecommunications Infrastructure

Summary of any observed/reported impacts or incidents, exceedence of triggers

No impacts observed or reported with respect to telecommunications cables or poles.

Summary of Management Actions

Monitoring and inspections are being undertaken as per the Telstra Management Plan. This includes weekly visual inspections within the zone of active subsidence and monitoring of changes in tilts on the Telstra Tower above the former Redbank Railway Tunnel by tiltmeters. Movements are within expectations.

Summary of Consultation with Stakeholders

Detailed subsidence monitoring report is issued to Telstra.

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TAHMOOR
UNDERGROUND
GLENCORE

Items of Heritage Significance

Tahmoor House

Summary of any observed/reported impacts or incidents, exceedence of triggers

Only minor impacts have been observed during the mining of Longwalls 27 and 28. No triggers have been exceeded.

Summary of Management Actions

Tahmoor House has experienced subsidence movements and very small differential movements during the extraction of LW28. No management actions have been undertaken during the reporting period as the longwall face has mined past the property by approximately 1100 metres.

Summary of Consultation with Stakeholders

None during this reporting period as the longwall face has mined past the property by approximately 1100 metres.

Building Structures

Summary of any observed/reported impacts or incidents, exceedence of triggers

Impacts observed to a number of houses during the mining of LW28.

Summary of Management Actions

Ongoing inspections of properties within the active subsidence area.

Summary of Consultation with Stakeholders

Ongoing, extensive consultation has been undertaken with residents in the subsided areas. This includes consultation with residents who have experienced impacts and neighbouring residents who have not reported impacts.

Any additional and/or outstanding management actions

None. The existing management processes are considered to be adequate and effective.

Certified by Tahmoor Colliery:

Signature: _____



Date: 31 October 2014