## **TAHMOOR COLLIERY: Longwall 26**

Subsidence Management Status Report No. 02 Submitted every four months as required by Condition 17 of the Subsidence Management Plan Approval for Longwall 26



Reporting Period	3 August 2011 to 30 November 2011	
Length of extraction	1658 m	as at 30 November
Length of extraction remaining	1826 m	
Distance travelled by LW since previous report	869 m	
Maximum total subsidence since start of LW22 within zone of active subsidence	853 mm	on Moorland Road at 28 November
Maximum incremental subsidence due to LW26 within zone of active subsidence	829 mm	on Moorland Road 28 November
Maximum increase in subsidence since previous report	586 mm	on Remembrance Drive since 28 July

## Summary of Observations, Management Actions and Consultation since start of LW26

#### Summary of subsidence development

The longwall has completed extraction beneath the township of Tahmoor and is progressing towards Thirlmere. The rate of subsidence development within the township of Tahmoor has significantly slowed in recent weeks, with very little change measured each week.

Increased subsidence had developed above commencing end of LW26 along Tahmoor Road, but the magnitude of subsidence is reduced compared to previous experiences during the mining of LWs 24A and 25. As the longwall has progressed, it has been observed that areas such as Moorland Road and Struan Street have subsided slightly less than Tahmoor Road, suggesting that subsidence is reducing up the panel as mining continues. Remembrance Drive, York Street and the Main Southern Railway have continued this trend.

Increased compressive ground strains have been observed at a number of locations within the Tahmoor township. These have resulted in localised impacts on road pavements, services and houses. The rate of development of these strains has substantially reduced in recent weeks, though a trend of very small increases is currently being measured at some locations.

#### **Natural Features**

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

No impacts observed or reported with respect to natural features.

Summary of Management Actions

Monitoring and inspections are being undertaken as per the Natural Features Management Plan. The longwall has completed extraction beneath Myrtle Creek and is moving away. While valley closure movements have been observed along monitoring lines that cross the creek, no impacts have been observed.

Summary of Consultation with Stakeholders

Observations during mining of Longwall 26 reported to TCCC. No issues raised.

## Main Southern Railway

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

The longwall has completed extraction beneath the Main Southern Railway and is moving away. There have been no impacts on the safety or serviceability of the Railway. The railway infrastructure has experienced some impacts as a result of mine subsidence, and these have been successfully managed by ARTC and Tahmoor Colliery. Based on monitoring results to date, triggers are not forecast to be exceeded in the next week due to the continued extraction of Longwall 26.

Summary of Management Actions

Monitoring, inspections and management responses are being undertaken as per the Railway Management Plan.

Summary of Consultation with Stakeholders

Ongoing consultation with ARTC, including weekly teleconference. Detailed subsidence monitoring reports weekly and management summary reports and meetings are held monthly. Please refer to Railway Status Report for further information.

## Local Roads, Bridges and Culverts

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

Impacts to road pavement and kerbs have been observed within zone of active subsidence. Bumps formed on Tahmoor Road, Moorland Road, the corner of Struan Sreet and Tahmoor Road, Remembrance Drive and York Street where non-systematic subsidence movements were observed. Impacts were also observed to kerbs and pavement on Oxley Grove.

Impacts were experienced at the Castlereagh Street Bridge and these were successfully managed by Wollondilly Council and Tahmoor Colliery. There were no impacts on the safe operation of the Bridge. The engineering response measures required the temporary closure of one lane on the Bridge. Traffic management measures were in place during this time.

Summary of Management Actions

Monitoring, inspections and management responses are being undertaken as per the Wollondilly Council Management Plan.

Summary of Consultation with Stakeholders

Detailed subsidence monitoring report is issued to Wollondilly Council each week. Teleconferences were held between Council and

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Tahmoor Colliery with respect to the Castlereagh Street Bridge. Council was also notified of increased ground strains and irregular subsidence profiles and impacts to the road pavement. Residents were also notified of the temporary road closure on Castlereagh Street Bridge.

#### Potable Water Infrastructure

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

A water main leaked on Moorland Road on 17 August, where increased ground strains and a bump in the subsidence profile and pavement is observed. The pipe was repaired the same day.

A water leak was observed on York Street in September and again in early November near Pegs Y30 and Y31, where increased strain and a bump have been observed. The leak was repaired each time.

Visual inspections of Myrtle Creek pipe crossing have not detected any impacts.

Summary of Management Actions

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

Summary of Consultation with Stakeholders

Detailed subsidence monitoring report is issued to Sydney Water each week. Sydney Water was also notified of increased ground strains and irregular subsidence profiles and observations of water leaks.

#### Sewer Infrastructure

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

Impacts previously reported on sewer pipes on Tahmoor Road and along sections of pipes between Abelia Street and Oxley Grove have been repaired. Inspections and CCTV investigations were undertaken for a section of pipes along Moorland Road where non-systematic subsidence movements have developed and no issues were found.

Monitoring of critical pipes for changes in sewer grade between Struan Street, Tahmoor Road and Moorland Road demonstrated that pipe grades have remained well above trigger levels for low grades.

The temporary, standby bypass line and pump system for the horizontal bore behind Amblecote Place was installed prior to the longwall approaching the site. A minor sewage overflow occurred on 9 November at a manhole at Elphin Street. The area has been cleaned up. The bypass pump is operating on an intermittent basis in response to rising water levels in the upstream manhole, as per the Sewer Management Plan. The incident is being managed by Sydney Water and its contractors. The cause of the overflow is currently not known and investigations are continuing. A CCTV inspection in the vicinity of Leiha Place has found some pipe deformations that will require repair, though the sewage is flowing. Further CCTV investigations will be undertaken.

Fortnightly CCTV inspections and weekly ground surveys have been undertaken along the 375mm diameter Tahmoor Carrier pipe in light of the observed closure of the ground surface across a small drainage line on York Street. The ground was observed to gradually compress along the pipe section, though the rate of ground closure has slowed in recent weeks. CCTV inspections have found no impacts on the pipe.

Surveys of Myrtle Creek pipe crossings have commenced and surveys have recorded an initial shortening in distance across the Huen Place crossing, with very little change for the last month. A CCTV investigation of the pipe has found no impacts on the pipe sections.

Summary of Management Actions

Monitoring, inspections and responses are being undertaken as per the Sewer Management Plan.

Summary of Consultation with Stakeholders

Ongoing consultation is being held between Sydney Water and Tahmoor Colliery. Detailed subsidence monitoring report is issued to Sydney Water each week.

### Gas Infrastructure

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

No impacts observed or reported with respect to gas pipes. Increased compressive ground strain has exceeded the early warning Level 1 trigger level at one location on Remembrance Drive. Weekly inspections by Jemena have detected no leaks.

Summary of Management Actions

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

Summary of Consultation with Stakeholders

Jemena was consulted prior to and after exceedence of the Level 1 trigger level and discussions between Jemena and Tahmoor Colliery resulted in a decision to undertake inspections by Jemena on a weekly basis as a precautionary measure. Detailed subsidence monitoring report is issued to Jemena each week.

### **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. Changes in the catenaries of some cables but are not of concern.

Summary of Management Actions

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

Summary of Consultation with Stakeholders

Detailed subsidence monitoring report is issued to Integral each week. Integral were notified by Tahmoor Colliery of the leaning of

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some power poles in the network as part the Colliery's inspections. The poles were inspected and the causes of lean were not considered to be due to mine subsidence.

#### 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. Changes in the catenaries of some aerial cables have been observed but are not of concern yet, though some were tight in Tahmoor Road and Krista Place.

Summary of Management Actions

Monitoring and inspections are being undertaken as per the Telstra Management Plan. This includes visual inspections within the zone of active subsidence.

Summary of Consultation with Stakeholders

Detailed subsidence monitoring report and a detailed visual inspection report is issued to Telstra each week.

### **Tahmoor Town Centre**

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

No signficant impacts observed or reported at the Tahmoor Town Centre. The rate of subsidence development at Tahmoor Town Centre has substantially slowed with very little change measured each week.

Summary of Management Actions

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

Summary of Consultation with Stakeholders

Detailed subsidence monitoring report is issued to TTC each week.

#### Inghams

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

No new impacts observed or reported at Inghams Processing Plant. No triggers have been exceeded and are considered unlikely to be exceeded as mining progresses.

Summary of Management Actions

Monitoring and inspections are being undertaken as per the Inghams Management Plan, as amended prior to the commencement of LW26.

Summary of Consultation with Stakeholders

Detailed subsidence monitoring reports have been issued to Inghams.

## Items of Heritage Significance

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

No impacts observed. No triggers have been exceeded.

Summary of Management Actions

The heritage listed property on Remembrance Drive was inspected from the kerb each week.

Summary of Consultation with Stakeholders

The resident has requested not to be consulted and no access is permitted on the property.

### **Building Structures**

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

Impacts observed to a number of houses during the mining of LW26, including severe (Category 4) impacts to 3 houses near the locations of non-systematic movements on Tahmoor Road and Moorland Road. Most houses on Oxley Grove have also reported impacts, as have some houses near the corner of Struan Street and Tahmoor Road.

Summary of Management Actions

Extensive monitoring, inspections and emergency works have been undertaken on houses and associated structures by Tahmoor Colliery and the Mine Subsidence Board.

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: