

Nagindar Singh
Via Planning Portal

Dear Nagindar,

Request for Advice - South 32 Illawarra Metallurgical Coal (IMC)'s Extraction Plan for Longwall's 709-711 & 905 - EMIN21-00019

I refer to your invitation through the planning portal for Subsidence Advisory NSW (SA NSW) to provide comment on Illawarra Metallurgical Coal's (IMC) extraction plan for Longwalls 709 to 711 and 905.

Damage Prediction to Homes

The extraction plan includes a subsidence damage assessment (carried out by MSEC) to homes. It predicts that;

- up to 40 homes could require a very minor to minor repair and
- up to 19 homes could require a substantial to extensive repair and
- up to 5 homes could require a demolition and rebuild.

Whilst MSEC's report states that the damage assessment to homes provides a reasonable indication of the likelihood of damage inclusive of non-conventional subsidence effects, however it is unclear from the report as to whether it incorporates the elevated non-conventional subsidence risks identified for homes located at the top of razorback range and homes located within 25m of steep slopes.

Advice received from IMC regarding proposed development within the extraction area have indicated that a high likelihood of tension cracking, ongoing non-conventional movements due to steep slopes and a high risk of non-conventional subsidence is present.

The assessment of slope instability is a first pass appraisal

The attached documentation indicates that the assessment of mass slope instability is based on a preliminary appraisal including a desktop assessment and a street level drive-by assessment across the study area as a first-pass appraisal of landslide hazards.

The report indicates that the expectation is that the residential sites that require appraisals can be conducted on a longwall-by-longwall basis.

The land management plan indicates that the probability of mining induced large-scale slippages is extremely low, however it is unclear as to whether the assessment is representative of the study

area. MSEC have previously indicated that there is limited experience of longwall mining beneath “Wianamatta Shale slopes” with grades as steep as those found on the Razorback Range.

The Built Features Management Plan (BFMP) and Monitoring Plan do not specifically detail how the risk to homes will be monitored and managed.

The BFMP indicates that impacts to houses will be managed through individual Property Subsidence Management Plans (PSMPs). It also states that individual PSMPs will be developed as required in negotiation with the property owner.

IMC have also stated that existing PSMPs that have been prepared are commercially sensitive and have not been attached to the BFMP for our review.

All PSMP’s should be supplied to SA NSW for review and should be completed in accordance with the *Coal Mine Subsidence Compensation Act 2017* and SA NSW’s approved procedures.

A specific monitoring plan detailing survey types, locations and reading frequencies is also not provided. It is noted that SA NSW is not included in the list of agencies consulted in the determination of monitoring locations. The plan also doesn’t outline when monitoring data is to be provided to SA NSW.

Proposed mining sequence and claim timeframes

The owners of homes and improvements damaged by subsidence may claim compensation under the *Coal Mine Subsidence Compensation Act 2017*.

The approximate proposed mining sequence and timeframes for LWs 709 - 711 and 905 are set out at Table 1:

Table 1

Year commencing	Year ending	Longwalls
December 2022	June 2023	Longwall 709
June 2023	February 2024	Longwall 710A
March 2024	December 2024	Longwall 710B
December 2024	May 2026	Longwall 711
July 2022	December 2022	Longwall 905

SA NSW notes there are properties that will be impacted by Longwalls 709, 710A and 711. This will result in active subsidence periods of approximately three and half years. Therefore, it is likely several homeowners will be living in damaged properties for a number of years. Others may require relocation where their properties require extensive repairs or rebuilding.

Due to the significant period of time between the extraction of these longwalls, SA NSW would anticipate progressing claims for subsidence damage resulting from Longwall 710A at the completion of this longwall. The owners of properties impacted by subsidence from subsequent longwalls would then be eligible to lodge further claims under the *Coal Mine Subsidence Compensation Act 2017*.

Recommendations

SA NSW considers that the attached documentation does not adequately quantify or adequately address the potential subsidence risks to residential houses.

It is recommended that DPIE request the following documentation and actions from IMC prior to the approval of the extraction plan.

- Clarification on whether the estimated number of homes that will be damaged is inclusive of non-conventional subsidence risks from mining under steep “Wianamatta Shale” slopes and previous slope failures.
- That a full appraisal of the risk of landslides and slope stability impacting homes and other infrastructure be provided by a suitable industry leading expert.
- The provision of copies of existing PSMP’s for all homes located within the extraction plan study area and confirmation that the PSMP’s comply with both the *Coal Mine Subsidence Compensation Act 2017* and SA NSW’s approved procedures.
- Details of the proposed survey type and frequency used to monitor subsidence contained in each PSMP. It is recommended that SA NSW be consulted when these survey plans are developed, and this survey data is provided to SA NSW as it is obtained in order to support the claims process.
- The provision of a list and a plan identifying homes within the extraction plan study where a PSMP does not exist and the provision of documentation outlining timeframes for PSMP development that includes a summary of the type and frequency of monitoring proposed for each home.

Recommended additional protections for homeowners

Subsidence damage may cause considerable stress and anxiety for homeowners who may be required to live in damaged houses for a number of years before their claims can be resolved. In situations where a house has sustained significant damage, these effects on homeowners are exacerbated. SA NSW recommends that IMC include within their extraction plan, the following requirements.

- Offer property acquisition when the house reaches damage category R4 or R5 and/or
- Offer property acquisition when the house reaches damage category R3 or more and has/will be impacted by more than two longwalls as outlined in both the extraction plan for LWs 709 to 711 and 905. This should be inclusive of previously approved and planned longwall panels as outlined in IMC’s project approval.

If you would like more information, please contact SA NSW on 4908 4300 or subsidedevelopment@customerservice.nsw.gov.au

Yours sincerely



John Johnston
Manager, Subsidence Risk Evaluation and Regulation

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