

Friday 22<sup>nd</sup> July, 2022

EPBC Referrals
Department of Climate Change, Energy, the Environment and Water
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Canberra ACT 2601

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Dear Sir/Madam,

## Angus Place West (EPBC Ref# 2022/09270) should be a Controlled Action

The Centennial Coal Angus Place mine has a poor environmental record, spanning decades. The applicant denied it damaged upland swamps for over a decade and now denies that the swamps in this coal mining proposal are matters of national environmental significance. These factors should trigger a critical examination of this EPBC referral by the Referrals Unit.

## Angus Place mine's record on the environment

**June 1985 – October 1988:** The NSW Department of Mineral Resources recorded 55 cliff collapses at the Angus Place Colliery (Dr Lax Holla, 1991). Planning condition 20(a) of the original 1982 consent required escarpments to be protected. While the original mining company was not Centennial, disregarding environmental controls and denying environmental damage are part of the mining culture of this community.

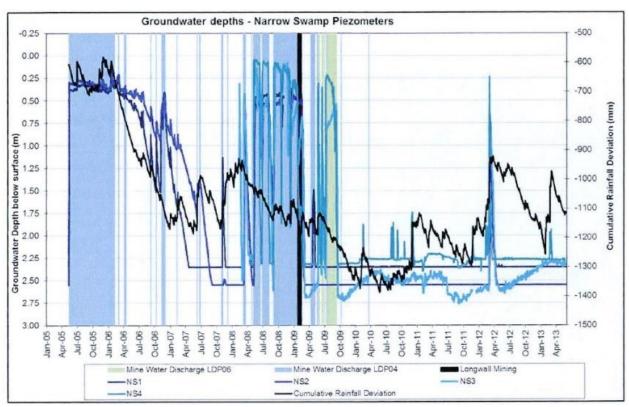
**May 1996:** The flow of Kangaroo Creek became much reduced when longwall operations commenced under a swamp in its headwaters. Very low flows from the headwaters of Kangaroo Creek have continued ever since. A small dam located on Kangaroo Creek downstream of the mined area has never been full since 1997.

**July 2007:** Longwall mining at Angus Place caused cracking associated with Narrow Swamp, which is situated on the headwaters of the Wolgan River, and once the discharge of toxic mine water discharges to the river ceased in 2009, the near-surface groundwater fell rapidly below the base of monitoring bores.

**August 2007:** Longwall mining at the Angus Place mine impacts flows in the middle section of Kangaroo Creek on Newnes Plateau.

**June 2009:** West Wolgan Swamp which above the Angus Place Colliery, has shown an increase in abundance of Eucalypt species (Centennial Angus Place, June 2009, page 42) indicating that this swamp has dried out.

**June 2005 – April 2013:** The hydrographs of the four piezometers in Narrow Swamp in Figure 8.5 for the Angus Place [east] extension proposal (EIS Vol. 1, page 228 – reproduced below) reveal that the 'bottom of the hole' groundwater level trends continue for these bores at least till April 2013. Yet in this mine extension EIS Centennial Coal denied its mining had any impact on this swamp.



Piezometers indicating no water in swamp in an EIS, claimed not to be an indicator of swamp damage in Centennial Angus Place proposal to extend the mine further east under Newnes Plateau.

**October 2011 - Enforceable undertaking:** Centennial Coal signed an enforceable undertaking under s 486DA of the EPBC Act in which it acknowledged that the Minister considers that its mining activities have had a significant impact on THPSS, namely Narrow Swamp, East Wolgan Swamp and Junction Swamp. In response, Centennial denied it had damaged swamps in media statements.

**2012:** Poor economic assessments led to proposals to weaken economic assessment guidelines. The economic assessments for Airly, Springvale and Angus Place mine extensions 'have been undertaken in a manner that is inconsistent with well-established principles and the NSW Government's November 2012 Guideline for the use of Cost Benefit Analysis in mining and coal seam gas proposals' (The Centre for International Economics, pg. 2, 2014, report that was prepared for the Department of Planning and Environment).

The former Minister for Planning, Pru Goward, announced a process of separate economic analysis for mining proposals (SMH Mining assessments to be beefed up after scathing review, 16 June, 2014). Centennial Coal was heavily involved in the development of draft guidelines on economic assessment of coal projects, engaging consultants to draft large parts of the Department's new approach to 'Local Effects Analysis'. To assist marginal coal mining proposals, the draft guidelines proposed to remove consideration of financial viability, including a mine's revenues and costs (Campbell, R. TAI, email Oct 22, 2015). These efforts didn't help Angus Place, the mine went into care and maintenance shortly thereafter.

**2018:** Angus Place Mod 5 approval permitted discharges of mine water from LDP001 to the Coxs River at 11 times background salinity from Angus Place Colliery Water Treatment Project S75W. This discharge was not a "neutral or beneficial" outcome on the Coxs River as required by the Protection of the Environment Operations Act, 1997. The 350 $\mu$ S/cm discharge standard did not adequately protect aquatic ecosystems given that mine water is the predominant component of flow in the Coxs River at that point.

**2017:** Mine water discharges from both Springvale and Angus Place have since been diverted to the Mt Piper Power Plant using the Springvale water transfer pipeline and treatment plant. This outcome was only achieved after a judgement from the NSW Court of Appeal was handed down in 2017, demonstrating the lengths required to enforce environmental laws in the Lithgow region.

## **Issues of concern regarding Referral # 2022/09270**

Wilderness Australia supports the submission made by Lithgow Environment Group that identifies the following MNES in the referral area:

- 10 EPBC Listed Threatened Species and Ecological Communities, including the Giant Burrowing Frog;
- 2 EPBC Listed Migratory Species;
- The Sydney drinking water catchment area; and
- Adversely impact the Greater Blue Mountains World Heritage Area though loss of headwater flows.

Centennial Coal's referral understates the size of the nationally endangered wetlands in its application. They are not "small patches of freshwater wetland habitat (i.e. permanently or seasonally saturated land) associated with Coxs River, Kangaroo Creek and Lambs Creek." The potentially impacted nationally endangered wetlands are large and extend over kilometres. These nationally listed swamps are shown below using mapping data obtained from the Temperate Highland Peat Swamps on Sandstone Research Program.



KML shape file of EPBC swamps draped over a Google Earth image of Coxs River, and Kangaroo and Lambs Creeks.

The swamps shown in the above figure are officially mapped in the upper reaches of the Coxs River, and at Kangaroo and Lambs Creeks. This mapping research was paid for by the \$1.45 million enforceable undertaking by Centennial Coal due to swamp damage at Angus Place and Springvale mines. This mapping should be applied to this controlled action. Centennial Coal must not be allowed to sweep from its environmental assessments these large nationally significant Temperate Highland Peat Swamps on Sandstone (THPSS).

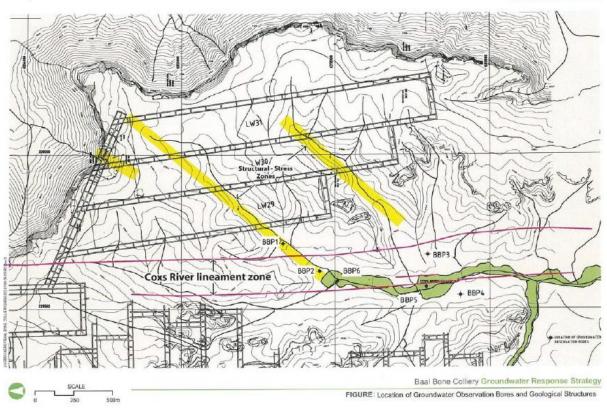
Groundwater drawdown has been observed in Long Swamp. In 2009-11 Baal Bone colliery was observed to lower groundwater levels in the northern tip of Long Swamp when mining was 400 metres distant from the swamp. Groundwater levels along the structural zone containing the two piezometers suddenly collapsed by up to 8m due to the passage of a longwall. This drawdown was due to the Coxs River being associated with a large north-south running fault complex.

# BAAL BONE COLLIERY

OPERATED BY THE WALLERAWANG COLLIERIES LIMITED

Figure 17 - Location of Groundwater Observation Bores and Geological Structures





Coxs River lineament zone is indicated here by Baal Bone mine as approximately 200 metres wide, so setbacks proposed by Centennial Coal are inadequate and the mine will drain Long Swamp.

When Centennial's first workings approach the river and intersect the fractured strata associated with this fault, far field drawdown of near surface groundwater can be expected to drain nationally endangered Long Swamp. Mining under Kangaroo Creek can be expected to have similar consequences to its swamp due to other lineaments. From the above figure, the setbacks proposed by Centennial shall be insufficient to prevent water losses.

At Long Swamp, the headwaters of the Coxs River were observed by Streamwatch to have a permanent flow, even during the 2006 drought. Streamwatch monitoring recorded regular flows over three years from October 2006 to February 2010. Water flows through the upper reaches of the swamp stopped in November 2009 (C. Jonkers, pers. comm., Feb. 2010), following the sudden drop in near-surface groundwater levels reported in observation bores after mining of longwall 29 commenced in July 2009 (Baal Bone, 2010, pg. 8). Only after heavy rainfall of 100mm over a week, did the stream through Long Swamp recommence flow (C. Jonkers, pers. comm., Feb. 2010). A reduced stream flow pattern has apparently

persisted with continued rain since the damage event. The extent to which flow has declined will not be known for several months, after further stream monitoring.

The drop in groundwater levels was observed approximately 400 metres distant from longwall 29. The angle of dewatering influence, the furthest extent of groundwater drawdown (Booth, 2009), is for longwall 29 and Long Swamp well beyond the area affected by mine subsidence. This was the first time far field impacts on near surface groundwater was officially reported for an underground mine.



Dead patch on Long Swamp, the headwaters of the Coxs River, believed to be associated with the mining of longwall 10, Baal Bone Colliery (Photo: C. Jonkers, 2004)

The impact of water resources should also be determined to be a controlled action. It must be remembered that additional flows into the Angus Place mine from this proposal will be transferred to the Mt Piper Power Plant and possibly at a later date out of the water supply catchment area as well.

All surface water and near surface groundwater that flow into this mine deprive resources from Sydney's drinking water supply catchment. As well as being a miner of coal, Centennial Coal is also a provider of water resources. The Centennial Angus Place proposes to provide water to the McPhillamys Gold Project (SSD-9505) that would require an inter-basin transfer of water resources. While this water transfer would be a separate proposal to this referral, the mine derived water resources from the Sydney water supply catchment are part of this proposal and should be a controlled action. It would be better to require consideration of measures to prevent loss of water resources from the Sydney water supply catchment now, than requiring studies for the restoration of water resources with a later proposal.

The EPBC Unit should not give much weight to the claim in this referral that the proposed mining at Angus Place West will be first workings by bord and pillar with minimal subsidence. This claim was made by Centennial Coal for its Airly Mine. Despite assurances of low impact and subsidence, coal yield from the Airly Mine initially was 75% using a panel and pillar method. The yield was then reduced to 46% following the NSW Department of Planning and Environment directions to achieve the subsidence performance criteria in the development consent. An enforceable undertaking for non-compliance with the Mt Airly Mine consent conditions followed. Airly Mine was described as bord and pillar but morphed to an intensive form of mining. Coal pillars have since doubled in size at Mt Airly Mine to 70 metres.

Thank you for the opportunity to comment.

Yours sincerely,

K. Minn

Keith Muir

Hon. Project Officer Wilderness Australia

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