

I live in Sydney metropolitan area and visit the Gardens of Stone conservation area often. I feel a deep affinity with the natural beauty of the place. I wish that this beauty be appreciated by generations to come. I have witnessed first-hand the damage caused by previous mining operations, from swamps drying out to enormous cracks in rock formations. Each time I see these beautiful pagodas, streams, waterfalls, and swamps damaged I feel as though I have been personally injured. I appreciate it when my children wonder at how the rock formations look like a particular bird, boat or boot and feel that it is very short-sighted to damage this wonderful reserve for short-term profit.

Here are my main concern with the project:

1. Exhibition started over the long weekend

The short window for public comment on these proposals opened at the beginning of the October long weekend. This timing means the public has effectively been denied the 14 day minimum time permitted under planning law for review and comment on modification proposals. In your submission, let NSW planning know whether you think opening public exhibition for comment a day before a long weekend is unfair?

2. These modifications should be part of the Angus Place West proposal

Modification 8 for Angus Place and modification 5 for Western Coal Services appear to be part of Centennial's plans to expand mining under Angus Place West – which has to go through a state significant development application.

The executive summary of the report for these modifications makes their connection to Centennial's expansion plans clear when it concludes that, "The proposed modification will ... safeguard the feasible recovery of the coal resource remaining at the mine."

If approved, these modifications could also obscure the extent of impacts from the future Angus Place West Proposal on national heritage in the new Gardens of Stone reserve. Modifications are supposed to allow for minor changes to approved major projects. These modifications could damage nationally endangered swamps and plants and drain water from streams in the new Gardens of Stone State Conservation Area, These proposals seek to bypass the \$120 million reverse osmosis mine water treatment plant and permit the discharge of mine water into the Coxs River catchment. These changes are not minor matters.

By carving out these changes as modification requests, it seems that Centennial Coal is trying to get around the purposes of the Environmental Planning and Assessment Act, 1979.

The impacts of these modifications should be assessed in totality with the proposed Angus Place West mine expansion proposal, rather than piecemeal through these modifications. The modifications should be withdrawn and the changes they seek should be included in Centennial's state significant development application for the Angus Place West mining area so that they can be appropriately assessed.

3. Damage to unique wetlands

In 2018, Angus Place Mine Modification 5 was approved allowing pumping at a rate of 10 ML/day from mine workings (areas 800 and 900). Following this approval, the groundwater table dropped between 21 and 30 metres (Centennial Coal, Cocks River Swamp Review, July 2018, pg44). This drop in groundwater was observed to quickly dry out Kangaroo and Lambs Creeks and associated swamps, as well as the Cocks River and swamps (Lithgow Environment Group, pers. comm. 4 Oct, 2023).

Since 2018, far-field loss of surface waters in Newnes Plateau streams and swamps has been observed over a kilometre away following depressurisation of groundwater in a coal seam due to coal mining at Springvale. Such far-field impacts may explain the observations made by Lithgow Environment Centre in 2018 and why future surface water losses from dewatering areas 800 and 900 may be expected.

The proposed modification 8 which would allow pumping at 10ML/day from areas 800 and 900 will again lower the groundwater table.

Due to the proximity of the Lithgow Coal seam to the surface at Angus Place West project area, the proposed pumping may also cause regional drawdown or localised far-field drawdown of near-surface groundwater, damaging Kangaroo and Lambs Creeks and swamps, as well as the upper Cocks River and its swamps. Nationally endangered plants may also be harmed, including *Xerochrysum palustre* (Swamp everlasting), *Pultenaea glabra*, *Kunzea cumbidgei*, *Veronica blakleyi*, *Grevillea acanthifolia*, *Gentianella cunninghamii*, *Prasophyllum australe* and Latham's Snipe (a rare migratory bird species).

#### 4. Contamination of Sydney's drinking water supplies

The mine effluent will have elevated levels of heavy metals if salinity is treated to the proposed 350µS/cm standard. This level of treatment may not adequately protect aquatic ecosystems, especially macroinvertebrates, given the flow of mine water at the LDP001 entry point into Wangcol Creek. Wangcol Creek flows to the Cocks River and is part of Sydney's Drinking Water Catchment. The modifications will see more contaminated mine water going into the Wangcol Creek from the Western Coal Services site. This water is likely to be contaminated with toxic chemicals such as arsenic and selenium that have been recorded as present in the mine water of the Springvale-Angus Place mine water system.

The proposed discharges should not meet the "neutral or beneficial" test for water pollution because it adds to the overall pollution load in the creek. The transfer of 10ML/day of mine water from Angus Place to the Western Coal Services site for discharge should not be allowed. Adding mine water to a highly polluted element of the Wangcol Creek catchment is also likely to flush out more heavy metals from that contaminated site. These contaminated discharges would then enter the Cocks River, a key part of Sydney's water catchment that flows through the Greater Blue Mountains World Heritage Area.

These modification proposals to allow large discharges of mine water also defeat the purpose of the Springvale Water Treatment Project (SSD-7592, approved in June 2017) that

was built to eliminate mine water discharges into the Coxs River catchment from Springvale Mine and Angus Place Colliery.

#### 5. Modifications should be a controlled actions under the EPBC Act

We are concerned the modifications have not been referred for Commonwealth assessment under the EPBC Act. We think that this project is likely to have significant impacts on water and that the modifications should be referred to Environment Minister Plibersek to determine if the water trigger applies. Commonwealth assessment and the application of the water trigger is important to ensure that there is rigorous assessment of the surface and groundwater impacts of the modifications.

Centennial Coal has failed to demonstrate that Modification 8 Angus Place and Modification 5 Western Coal Services do not impact matters of national environmental significance. The modifications should be controlled actions under the Federal Environmental Protection and Biodiversity Act (EPBC Act) for the following reasons:

As “large coal mining” developments that will have, or are likely to have, “a significant impact on a water resource” the proposed modifications should be controlled actions under s 24D of the EPBC Act (known as the “water trigger”).

These modifications will cause 10ML/day of mine water to be discharged into the Coxs River that flows downstream into the Greater Blue Mountains World Heritage Area. Any downstream impacts of mine water arising from the proposed modifications on World Heritage values of the World Heritage property must be considered.

Due to groundwater drawdown associated with the Angus Place modification 8 mine water pumping proposal, depressurisation between surface and the near-surface groundwater aquifers is possible, and could alter the existing groundwater and surface water regime. These modifications may also have a direct or indirect changes in the water resources of the Sydney Water catchment that must be considered. Far-field impacts on streams and swamps in the Angus Place West project area are possible and should be assessed.

Due to a probable lowering of the near-surface groundwater aquifers, the mine water pumping proposed by the Angus Place modification 8 may impact on nationally endangered species such as Swamp Everlasting, *Grevillea acanthifolia*, *Gentianella cunninghamii*, *Prasophyllum australe*, Latham's Snipe and nationally endangered Temperate Highland Peat Swamps on Sandstone in the Angus Place West Project Area. These impacts must be assessed.

The modifications are likely to impact on water resources of a drinking water catchment, a World Heritage Area and nationally endangered plants and communities. Modification 8 Angus Place and Modification 5 Western Coal Services should be controlled actions under the EPBC Act.

#### 6. Centennial's track record of environmental damage

Centennial has failed to demonstrate that it can operate responsibly in the Gardens of Stone region without causing irreversible damage to the environment. Records of environmental incidents and harm, consent and licence non-compliances, and inaccurate predictions of environmental impacts from its operations suggest that current impact predictions in the environmental assessment for these modifications should not be relied upon.

An audit of Centennial's mining licences for the past five years has found at least 134 licence non-compliances across its sites in the Gardens of Stone region. Centennial's non-compliance events in the region include:

In 2022, Centennial breached its development consent for Airly mine causing major irreversible fractures to million-year-old sandstone pagoda formations in the Mugii Murum-ban State Conservation Area. The Department of Planning and Environment imposed a \$150,000 enforceable undertaking on Centennial. The company has since mined outside its approved area at Airly Mine, which is a class 1 reportable offence under NSW Environmental Planning and Assessment Act.

\* In 2017, the EPA prosecuted Centennial after its coal waste storage at Clarence mine spilt 2330 tonnes of coal fines into the Wollangambe River and caused damage within the Blue Mountains World Heritage Area, and Centennial was fined over \$1 million and clean-up operations took 12 months.

\* In 2015, Centennial was fined \$15,000 when toxic coal sludge was illegally discharged from Springvale mine sediment storage ponds into downstream wetlands.

\* In 2011, Centennial acknowledged that the Federal Environment Minister considered its mining activities had had a significant impact on Temperate Highland Peat Swamps on Sandstone, namely Narrow Swamp, East Wolgan Swamp and Junction Swamp and entered a \$1.45 million enforceable undertaking with the Commonwealth under s 486DA of the EPBC Act. These swamps have not recovered and are expected to be permanently lost.

## 7. Additional Water Treatment required

If the capacity of the 40ML/day Springvale Water Treatment Plant has been exceeded and cannot treat an additional 10ML/day of mine water from Angus Place Mine, then an additional water treatment plant is required. This is a large amount of additional mine water and the entire Angus Place and Springvale mine water matter requires thorough scrutiny by expert panels, such as the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development and the Independent Expert Advisory Panel on Underground Mining.

Centennial Coal should withdraw proposed modification 8 Angus Place and proposed modification 5 Western Coal Services. Centennial Coal should at least seek to install a reverse osmosis treatment plant, as it did under Angus Place modification 5, and then pump the brine effluent to Springvale Water Treatment Plant site for processing and appropriate disposal.

Any proposal for additional water treatment capacity at Angus Place Mine should be made as part of the major project for Angus Place West. Discharges from a reverse osmosis treatment plant at Angus Place should have a salinity of 30?S/cm to have a neutral effect on the salinity of the Cocks River headwaters that would receive this discharge.