



THE COLONG FOUNDATION FOR WILDERNESS LTD.

Monday 22nd August, 2016

Mining and Industry Projects
NSW Department of Planning & Infrastructure
GPO Box 39
Sydney NSW 2001

Dear Sir/Madam,

Springvale Mine Extension Project (SSD 5594) – Modification 1 proposal

To further protect the environment the Colong Foundation for Wilderness Ltd requests that the Department of Planning and Environment (the Department) should recommend to the Planning Assessment Commission (the Commission) that it modify the development consent issued on 21 September 2015 to account for new information to corrects errors and improve this consent. The Department should of course consider and make recommendations on the applicant's proposals in SSD 5594 Modification 1 but the Department's considerations should not be restricted to these matters.

Development control should not be solely the domain of the proponent to have the project's development consent modified as they see fit, especially when errors occurred in environment assessment for an approved mining activity results in unexpected adverse environmental impacts. Development control modification that operates solely for the proponent benefit is unfair to all the other parties involved in development control and would tend to advantage the applicant over the public's interests. Through the Department and Commission's development assessment processes, other groups in the community should have a say in the direction of modification of an activity to improve public interest outcomes regarding the performance of the approved activity. The Colong Foundation believes there are grounds for public interest modifications of the September 2015 development consent for the Springvale mine extension.

The Colong Foundation considers there are two grounds that support modification of the SSD 5594 consent in the public interest so as to take into account new data, make improvements and correct errors:

1. Section 96 of the Environmental Planning and Assessment Act, 1979 applies to Part 4 development consent modifications involving *minor error, misdescription or miscalculation* and modifications involving minimal environmental impacts and other modifications.

Under Item 1, upland swamp impacts have been subject to new information revealing a significant miscalculation of environmental impacts. It is no longer appropriate to assume there will be negligible impacts to the swamps arising from longwall mining under SSD5594.

The 2014 Environmental Impact Statement (EIS) incorrectly advised that the Springvale mine extension would produce negligible impacts on swamps. The determining authority concluded the swamps did not require protection that would constrain longwall mining operations in the project area. This matter must be revised by the Department and the Commission in the light of independent expert advice and swamps protected from being undermined by longwall coal extraction machines.

Further, the 2014 **EIS omits** advice or consideration of the mine's impacts as a consequence of longwall mining on the waterfall below Carne West Swamp and a 25 metre tall waterfall below Gang Gang Swamps that lie in the project area. As the Department is aware, the Carne West waterfall no longer flows due to longwall impacts on groundwater and that undermining the Gang Gang Swamps will terminate flows over a waterfall downstream. The September 2015 approval does not address these waterfalls omitted from the EIS. If nothing is done to prevent the loss of flows to a large waterfall downstream of the Gang Gang Swamps, the Department would be condoning such serious omissions.

The consent should also vary its reference in the consent conditions in relation to the water transfer pipeline proposed jointly by EnergyAustralia and Centennial Springvale. As the Department is aware, a previous arrangement for mine water directed this discharge to the now decommissioned Wallerawang Power Plant. A re-consideration of neutrality or beneficial purpose of mine water under the drinking water catchment SEPP for this modification should lead to consent conditions that require construction of an appropriate mine water transfer scheme.

2. The statement of environmental effects for Modification 1 considers the following relevant matters:
 - a) the impacts on nationally endangered upland swamps; and
 - b) the impacts of mine water discharges on the Cocks River.

The modification considers swamps, ground and surface water impacts in detail, but incorrectly restates negligible impacts arguments on affected swamps that are no longer relevant and also omits consideration of or reference to the 2016 water treatment project (SSD 16_7592).

In relation to mine water transfer - Appendix I on ground water and J on surface water, including a water and salt balance, bring the consideration of the neutrality and beneficial effect matters into the frame of this modification proposal. The water volumes and salt balance are relevant to the protection of the Cocks River. The SEPP (Sydney Drinking Water Catchment) 2011 is considered in the main volume of the statement of environmental effects on page 50.

The Modification proposal also seeks an inappropriate amendment of the September 2015 consent to allow duplication of the Springvale Delta Water Transfer Scheme (condition 9), which is opposed in relation to its location on Newnes Plateau.

The groundwater modelling presented in Appendix I is relevant to the protection of upland swamps, bringing in these considerations for review by the Department and the determining authority.

In relation to swamps - Section 9 of Volume 1 of the statement of environmental effects considers the swamps, that are described as ground water dependent ecosystems. Table 34 of the statement wrongly concludes negligible impacts on Newnes Plateau swamps and also on streams.

Regardless of the conclusions made in the statement of environmental effects, these matters become relevant for Department and the Commission to consider and address with varied consent conditions because the proponent has introduced them as a relevant part of the considerations for this modification.

Reading items 1 and 2 together, the Colong Foundation for Wilderness considers it reasonable for the Department of Planning and Environment and the Planning Assessment Commission to correct errors in the September 2015 development consent and generally act improve environmental outcomes regarding the Springvale mine extension, as well as the proposed modifications.

Further Protection for Nationally Endangered Swamps

The basis for issuing the September 2015 development consent for longwall mining under nationally endangered upland swamps on sandstone was that there would be negligible impacts to these swamps, and if there were unusual circumstances causing more than negligible swamp impacts, then these impacts would be offset by the protection of swamps elsewhere. This premise was proven to be incorrect.

There was wrong information in the 2014 Environmental Impact Statement that may have mislead the Department and the Commission regarding swamps. Centennial Coal states in the 2014 environmental impact statement for mine extension that there will be negligible impact on swamps from longwall mining and there had been no past impacts on swamps attributed to longwall mining. The negligible impact on swamps claim in the 2014 EIS is wrong and dramatically so.

Connell Wagner, Centennial consultant observed that Junction Swamp was damaged by longwall mining in 2005. The swamp has lost groundwater and surface flows, but nine years later, other Centennial consultants claimed in the 2014 EIS that no damage had occurred to the same swamp. The swamp, Junction Swamp, is now effectively non-existent.

The V-notch weir that used to measure flows from Junction Swamp was removed when flows ceased. Yet the Centennial Coal 2014 EIS states, “no water level changes that can be attributed to longwall mining have been observed” (2014 EIS, Appendix E, on page 75). Centennial describes all previously undermined swamps at Springvale by a euphemism - ‘rainfall-dependent swamps’, alias ‘Type A’ swamps, and these swamps are claimed to not have experienced groundwater impacts (see Pells, 2015, page 27, Figure 22). The Colong Foundation believes this is incorrect.

The Colong Foundation considers that near-surface groundwater below swamps falls five to ten metres when longwall mining passes under Newnes Plateau swamps, the groundwater available to the swamps is then irreversibly reduced. The swamps cease being groundwater dependent swamps and become ‘rainfall dependent’. The nationally endangered ecological community is destroyed. The groundwater dependent vegetation slowly dies, and is ultimately replaced by dry land vegetation. The ‘rainfall dependent’ swamps are then prone to destruction by bushfires that will

consume the peat soil. The Department and the Commission should also appreciate that the drop in groundwater levels occurs throughout an area subject to longwall mining, but the contingent environmental impacts are most marked on swamps and streams.

The Planning Assessment Commission reported on confusion and uncertainty regarding swamp impacts. A Commission report further states 'However, the Commission believes that **there also needs to be a focus on the avoidance or mitigation of damage to swamps**, as well as adaptive management measures, in order to deal with the various uncertainties around subsidence-related impacts on swamps' (page 6, 2015). The Commission's belief should be now translated into amended consent conditions that protect swamps from being undermined. This would correct the misleading statements in and wilful omissions of waterfalls from the 2014 EIS, as well as new information by experts that point to other errors in the 2014 EIS in relation to swamp impacts.

Two expert reports now question the negligible impact claims made by Centennial Coal in the 2014 EIS (repeated in the Statement of Environmental Effects) that have led to the Commission's uncertainties referred to above. The Independent Monitoring Panel established to advise on swamp health in relation to SSD 5594 operations reported in June 2016 on 'the very significant drop in the water level of Carne West Swamp and the cessation of flow in the stream through this swamp, with the consequential drying out of the swamp and loss of the waterfall at the downstream end of the swamp. These changes begun to be detected when the mining was up to 700 metres away, well outside the impact zone predicted in the environmental impact statement (EIS) for mining in this region of the Springvale mine' (page 2 of the report, June 9, 2016).

Furthermore, according to the Independent Expert Panel, 'it is now concluded by Centennial Coal that mine subsidence interactions with lineament fault zones at Springvale mine do appear to impact standing water levels well outside the designed buffer zone (defined by a 26.5 degree angle of draw or a 20mm vertical subsidence contour, whichever produces the widest buffer) and, furthermore, these water levels do not fully recover. In some cases, the impacts extended for more than three times the width of the designed buffer zone' (page 2).

The problem arises now that the mine is having and has had impacts outside the mine project area since it began operations and that these impacts have not been subjected to environmental assessment. Review consent conditions to protect these significant environmental values is justified by the fact that swamp impacts haven't been and will never be 'negligible', further unassessed impacts are occurring and have occurred outside the project area, and the waterfalls mentioned above were not considered in the 2014 EIS despite being in the project area. The expert identified far field impacts outside the project area are not permitted by the development consent. Technically the consent has been and will remain invalid, and required immediate correction to protect the environment.

The abovementioned views of the Independent Monitoring Panel are confirmed by Pells Consulting (2015) in its report to the Colong Foundation and the Blue Mountains Conservation Society regarding the *Impacts from coal mining at the Springvale Colliery on the temperate highland peat swamps of Newnes Plateau* report.

The Pells report confirms that dramatic swamp impacts from future mining are irreparable. Pells Consulting believes mining will slowly change swamps, drying them out and this will be reflected in changes to swamp ecology. Mine dewatering will also ultimately affect swamps, but it is not known

by when, and by how much. These findings are consistent with longwall mining being a key threatening process to these nationally endangered swamps, but directly contradict Centennial Coal's negligible impacts claim. The Pells report states that the theory used by Centennial to justify the claim of minor swamp impacts is based on an assumption that is not supported by measurement.

Swamp monitoring and offsets are all very well, but they do not fix errors in the consent that will cause unexpected damage national heritage listed swamps or ensure flows over waterfalls. Centennial's proposed offsets for Newnes swamps are on private land in the Blue Mountains across many parcels of land and are not like-for-like offsets. Such offsets are already protected in Environmental Protection zones 2 and 3. Protection of protected swamps can in no way compensate for the damage to the public interest from loss of swamps on public forests within the Gardens of Stone Sage 2 reserve proposal.

These deficiencies were foreseen by the Planning Assessment Commission who stated that in its determination report that 'the role of the Independent Monitoring Panel should be more clearly defined, *as well as broadened to enable greater focus on avoidance and minimisation of swamp impacts, and adaptive management measures*' (my emphasis). These broader powers for the Independent Panel were not included into the consent, but while that may be the case, there remains a need to adapt the consent to protect Newnes Plateau swamps from longwall mining.

It is immaterial to a swamp or waterfall whether the responsibility falls to the Planning Assessment Commission, Department of Planning and Environment or the Independent Monitoring Panel to adapt the consent. Given the modification for determination, it would be appropriate for the Planning Assessment Commission to amend the development consent to protect swamps and the waterfall by placing protection zones over and around them.

It is unacceptable for September 2015 SSD 5594 development consent to remain defective as it is based on wrong information in relation to swamps or no information in the case of a key value (waterfalls) that were not considered in the 2014 EIS.

Further provisions to effectively clean-up the Coxs River

The September 2015 consent conditions must be amended to require a water transfer scheme from Springvale Mine to Mt Piper Power Plant to be built. Construction of this scheme is by no means certain, despite a preliminary environmental analysis prepared for Centennial Coal and EnvironmentAustralia by GHD.

A Land and Environment Court ruling against 4Nature and for Centennial Springvale regarding its water discharges to the Coxs River would probably result in cancellation of this proposal. The transfer pipeline is the only proposal on the table that would remove mine water from the Coxs River and it would achieve a neutral impact of drinking water supplies provided there is no discharge to the environment from the power plant.

The Colong Foundation prefers transfer and reuse of mine water to its alternative of treatment and discharge to the Coxs River. On face value the reuse of mine waste water by the power industry is superior to that industry using water from the Coxs River that would be better consumed by Sydney

residents and by also providing environmental flows to the Coxs River that flows through the World Heritage Area.

On Monday, May 9th, 2016 the Land and Environment Court considered whether discharges of mine water from the Springvale Mine have a neutral or beneficial effect on water quality of the Coxs River.

In the 2014 determination process it appears that the application of the neutral or beneficial test for 19ML/day of mine water discharge into the Coxs River may have been not undertaken in an appropriate manner, although the SEPP guidelines apparently were applied. The Colong Foundation believes that the appropriate test should have been whether the mine water discharge was equal to a previous virtual 0ML/day discharge of mine water into the Coxs River from Licence Discharge Point 9 due to its transfer to Wallerawang Power Plant.

To be more accurate, the 2014 EIS for the Springvale extension estimated that the mine water transferred from LDP 9 to the Wallerawang power plant represented 86% of all water leaving the mine in 2013 and this was predicted to increase to 89% with the now approved mine expansion.

Surely the application of the SEPP to a mine extension must require an environmental outcome for the Coxs River that was previously achieved by the mine at the time the 2014 EIS was written and as described in it, rather than a worse outcome as is currently the case under the consent? Surely this is an error?

The Wallerawang power plant closed down before the Springvale mine extension was approved but the EPA, WaterNSW and Department of Planning and Environment did not then require Centennial Coal to relocate its mine water transfer arrangement to the Mt Piper power plant, as should have been done as part of the approval deliberations and consent conditioning. Instead, the SEPP Guidelines were apparently misapplied in a manner that considered guidelines and contaminant concentrations, but did not appropriately consider past volumes and practical outcomes.

The absurdly simple mathematic question is whether the mine water discharge of 19ML/day that now goes to the Coxs River should go to the Mt Piper Power Plant so that it can equal a discharge of 0 ML/day as before when the discharge went to the Wallerawang power plant. Is this not correct?

These government agencies and Planning Assessment Commission appear have made an error in unreasonably considering that this very large new mine water discharge to the Coxs River had a neutral or beneficial effect on water quality, with partial water treatment that was required by the consent to increase through time.

It does matter that 19ML/day is not less than or equal to 0ML/day, and the government agencies should correct this error and require the transfer of mine water to the power plant as an amendment to the September 2015 consent.

The merit of the water transfer proposal, as well as maths, should be part of any reasonable assessment of the Department and the Commission in reaching a “state of satisfaction” after “active intellectual engagement” on whether a discharge complies with the drinking water SEPP. Both must conclude that 19ML/day of mine water is not less than or equal to 0ML/day of mine water discharge when it is diverted, as before, to a power plant.

The duplication of the mine water transfer pipeline on Newnes Plateau proposed in the modification documentation must be required keep to the existing pipeline alignment. The proposal for an additional road and pipeline easement descending off Newnes Plateau will cause totally unacceptable scarring to a scenic part of the Gardens of Stone region.

The proposed new alignment does not follow the existing corridor through the sensitive western edge of Newnes Plateau. The road and 10 metre wide easement proposal descends into Sawyers Swamp Creek.

The existing pipeline alignment further to the south must be followed. This will avoid the destruction of a Sheltered Peppermint – Brown Barrel Shrubby Forest between two significant and well featured Pagoda spurs above the creek. It would avoid unnecessary bisection and damage to a Tableland Gully Snow Gum – Ribbon Gum Montane Grassy Forest, an endangered ecological community. This diversion of the pipeline alignment was originally rejected by the Department and the Commission and this unnecessary impact must be avoided.

Further, a consent condition for a water transfer pipeline must require all Springvale discharges to be incorporated into the transfer system, including the LPT006 discharge that is part of the existing consent. Springvale Coal Services April 2016 Environmental Monitoring Data reveals salinity values for discharges from LDP006 of 4,550 uS/cm.

In addition, the transfer pipeline should be required to have sufficient capacity to serve all licenced discharges from coal mines in the Cocks River catchment as well as those from the Clarence Colliery that discharges 15ML/day of mine water to the Wollangambe River catchment. The consent should require a much more specific **Upper Cocks River Action Plan**. A revised Action Plan must consider and provide for future capacity to collect, transfer and treat polluted water from licenced discharge points of mining operations, including those of Angus Place, Clarence Colliery and Lidsdale Siding and Western Coal Services (amend Schedule 4, condition 13 of the September 2015 consent to require an integrated water treatment plan).

Proposed Amendments to the September 2015 development consent

Springvale-EnergyAustralia Water Transfer Scheme

Omit condition 9 and instead insert

9. A further pipeline for the Springvale-EnergyAustralia water transfer scheme on Newnes Plateau shall follow the existing pipe, be located underground and located not more than 5 metres offset from the existing pipe.

Protection

Schedule 3, insert new condition 3

Shorten the northern and southern ends of LW420 to prevent swamp undermining to ensure no more than negligible impact to Gang Gang Swamp South West, and prevent flow impacts to downstream waterfall structure and avoid more than negligible impact to Gang Gang East Swamp.

Omit LW421 to prevent to prevent swamp undermining and ensure no more than negligible impact to Gang Gang Swamp South West and Gang Gang East Swamp, and prevent flow impacts to downstream waterfall structure.

Shorten the northern end of LW422 to prevent to prevent swamp undermining and ensure no more than negligible impacts to Gang Gang Swamp South West and Gang Gang East Swamp, prevent flow impacts to downstream waterfall structure.

Split LW424 to prevent swamp undermining and ensure no more than negligible impacts to Pine Swamp and shorten the southern part of the split LW to prevent more than negligible impacts to Paddys Swamp.

Split LW425 to prevent swamp undermining and ensure no more than negligible impacts to Pine Swamp.

Split LW426 to prevent swamp undermining and ensure no more than negligible impacts to Upper Pine Swamp and Pine Swamp Hanging.

Split LW428 to prevent swamp undermining and ensure no more than negligible impacts to Marrangaroo Creek Swamp.

Shorten the southern end of LW429 to prevent swamp undermining and ensure no more than negligible impacts to Marangaroo Creek Swamp and Marangaroo Creek Upper Swamp.

Shorten LWs 430-432 to ensure Marangaroo Creek Swamp is not undermined and does not experience greater than negligible impacts.

First Workings

Omit Schedule 3, condition 9 and instead insert

9. To ensure continuous improvement the and subject to condition 10 below, the Applicant must not carry out first workings in the underground mining area, other than in accordance with an approved extraction plan unless otherwise directed by the Secretary so as to protect upland swamps, surface and groundwater resources.

The purpose of this amended consent condition is to ensure mining can be altered to prevent unauthorised far-field impacts on upland swamps.

Water management and performance measures

Omit existing Schedule 4 Condition 13 (c) and insert

13 (c) construct by December 2017 a mine water transfer scheme to Mt Piper Power Plant of sufficient capacity to accept all discharges from the Springvale Mine, Angus Place Mine, Lidsdale Siding, Western Coal Services, Pine Dale Mine, Clarence Colliery and proposed extension and the proposed Neubecks Mine.

Insert new condition

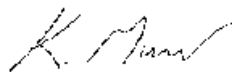
13 (d) The Springvale-EnergyAustralia mine water transfer scheme by June 2018 and must ensure all water transferred is reused by the Mt Piper Power Plant and the reuse facilities must have a modular design to accommodate any further increase in water transfers.

Insert new condition Schedule 4 Condition 13 (e) and renumber subsequent subparagraphs 13 (e) a mine water transfer scheme to Mt Piper Power Plant must include all flows and runoff from Springvale Coal Services Area, including those from LPT006, by December 2017.

Insert a volumetric prescription in Mine Water Discharges, Schedule 4, Table 6
The Springvale-EnergyAustralia Water Transfer scheme must by June 2018 reduce to zero all discharges to the environment.

Thank you for this opportunity to comment.

Yours sincerely,



Keith Muir
Director
The Colong Foundation for Wilderness Ltd

References:

Connell Wagner PPI Energy Solutions, May 2005, Appendix I, in Springvale Colliery Longwalls 411-418 Subsidence Management Plan Application, Springvale Coal, Lidsdale.

Springvale Coal, Nov. 2006, Subsidence Management Status Report, Four Monthly Update, page 13 rapid groundwater levels rapid decline above 411; Attachment 5, table 4, decline in moss and fern species.

Centennial Coal, April 2014, *Environmental Impact Statement – Springvale Mine Extension Project* (SSD 5594).

Springvale Coal Services, April 2016, Environmental Monitoring Data Report, page 5 regarding water discharges.

Galvin, J., June 9, 2016, Advice for the Independent Monitoring Panel.

Pells Consulting, 24 December 2015, Impacts from Coal Mining at Springvale Colliery on the Temperate Highland Peat Swamps of the Newnes Plateau.

https://www.colongwilderness.org.au/files/news/pells_consulting_springvale_swamp_report_feb_2016_0.pdf

GHD, April 2014, Water Treatment Project, Preliminary Environmental Analysis, Final, prepared for Centennial Coal and EnergyAustralia.