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Nature Conservation Saves for Tomorrow

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Springvale Mine Extension MOD 1 - D459/1 Referral to the PAC for Final Determination BMCS's supplementary submission

Summary statement

BMCS (the Society) contends that the DPE's Assessment Report (DAR) is dominated by blinkered minimisation and inadequately evaluates the consequences of increasing the mine's ROM coal production from 4.5 Mtpa to 5.5 Mtpa. The Society contends that the PAC should look beyond the DAR's highly constrained treatment of Mod 1. It should evaluate Mod 1 within its broader context, and either reject it, or place it on hold pending resolution of the related highly pertinent proposals and a rational response to the findings of the DPE-appointed Independent Monitoring Panel.

1. The situation to date

The DPE's Assessment Report (DAR) notes (p13) "...that many of the issues raised in submissions actually relate to the ongoing operations of the mine, rather than the modification proposal **per se**. However, the Department **must consider the proposed modification before it** and has therefore focussed on any **additional environmental impacts** from the modification." [Emphasis in bold is BMCS's].

The implication of this statement is that the DPE was legislatively limited to dealing with the specific addon impacts; its hands were seemingly tied by the process. This is most unsatisfactory, since it means that the DPE, in recommending that the application is approvable (DAR p14), is failing to consider the ramifications of its blinkered approach.

Springvale has three other proposals¹ before the DPE, and the Society has been assured that, because they are inter-related, the DPE "...intends to deliver its recommendations on all three of these proposals to the Planning Assessment Commission as a single package"². The Society believes that the three other proposals, the findings of the Independent Monitoring Panel (IMP) relating to the LW419 extraction plan³, the concerns raised by BMCS and others about the toxic discharges from LDP006 (now to be investigated by the EPA⁴), and the present Mod 1 are sufficiently inter-related for the PAC to include them in its deliberations.

The DAR Section 3 draws attention to the other three proposals and emphasises their positive potential; and in Section 6.1.6 p11 the DAR says "...the Springvale Water Treatment Project would significantly reduce discharges and achieve the long-term salinity reductions in the catchment, as envisaged by the PAC in its

¹ Springvale Water Treatment Project, the Springvale Mine Modification 2 and the Western Coal Services Modification 1.

² Marcus Ray, Deputy Secretary Planning Services, Letter to Brian Marshall, BMCS, reference 1703325, 13 March 2017.

³ IMP Report, June 9 2016, *Springvale Mine Extension Project – Extraction Plan for Longwall 419*, signed by Emeritus Professor lim Galvin.

⁴ Information provided in footnote 2.

approval of the Springvale Mine Extension Project." Yet, despite the obvious inter-relationships (as emphasised in the preceding paragraph), the DAR states (Section 3 p5): "Given the current modification application is not directly related to the Springvale Water Treatment Project and was submitted well in advance, the Department is satisfied that it can and should be dealt with separately on its own merits."

In essence, the DAR is supporting the increased production-rate despite:

- (a) Springvale incompletely complying with original Consent in schedule 4 conditions 12 and 13;
- (b) Springvale seeking to vary the conditions in (a), without guaranteeing that further delays **will not** ensue;
- (c) the foreshadowed modification regarding the use of Thomsons Ck Reservoir as part of the SWTP has yet to be made available to NGOs;
- (d) negligible recognition that the design, gaining approval, construction and commissioning of the SWTP and Western Coal Services Mod 1 will at least take till June 2019, and potentially even longer such that further modification(s) become necessary;
- (e) ongoing separation from any consideration by the PAC of the polluted discharges from LDP006;
- (f) ongoing discharges of polluted mine-water from LDP009 (up to 19 ML/day) until the pieces of infrastructure for items (c) and (d) have been commissioned and are fully operational; and,
- (g) ongoing destruction of the few uncompromised THPSS⁵ in the eastern part of Newnes Plateau.

It should be abundantly clear from the above, that the present Mod 1 (increasing the production-rate) would expedite mining (acknowledged in DAR Section 2, p2), whereas neither Springvale nor Energy Australia⁶ has reason to expedite the other matters in (a) to (f). Springvale's mining operations would not be impeded because it can continue discharging polluted mine-water into the Upper Coxs River Catchment; Energy Australia's operations at MPPS would be unaffected because it can continue with its existing water supplies.

Little imagination is required to suppose that deferring matters in (a) to (f) (above) is in Springvale's best interests; the coal-price has climbed to a lucrative level, so complying with the required changes could be a troublesome and expensive 'inconvenience'. Conversely, a more efficient mining process (DAR Section 2, p2) would hasten extraction before the intensity of destruction referred to in item (g) could result in massive forfeiture of bonds, ludicrous offsetting, and/or sterilization of coal resources through comprehensive avoidance of swamps.

No wonder Springvale and (seemingly) the DPE are intent on having the present Mod 1 processed in isolation; that is, in advance and independent of the range of inter-related aspects cited in Section 1 paragraph 3 above.

2. Deficient justification, dubious minimisation and NorBe

2.1 Deficient justification

The DAR p2 justifies the proposal on the basis of an increased workforce and supplying additional coal to MPPS so that it can "...operate at full capacity for extended periods".

Employment is important for those new employees, but as is typical of those stressing the jobs issue, the downside argument is not mentioned. Increasing the annual tonnage means that the approved resource is exhausted over a shorter period (roughly about 22% less). This would probably result in the 'new'

⁵ Temperate Highland Peat Swamps on Sandstone, as listed federally, and termed Newnes Plateau Shrub Swamps and Newnes Plateau Hanging Swamps under the NSW listing; the Newnes Swamps fall into the more general THPSS categorization, but **they have unique species which include the endangered Blue Mountains Water Skink**.

⁶ Energy Australia owns Mount Piper Power Station (MPPS).

employees and many of the others becoming redundant. Some would say grab a job while it's on offer, but it is rarely that simple!

MPPS rarely runs at 100% capacity; 50% or 75% is more typical because of decreased demand for power, together with the relative inflexibility of coal-fired power-generation. The notion that Springvale's need for increased production is driven by the MMPS seemingly lacks credibility. This is the case regardless of the hoo-hah in the press about power shut-downs, power pricing, the role of renewables, and the possible mishandling of power-distribution by AEMO (The Australian Energy Markets Operator).

The other factor in DAR (p12) involves the NSW government receiving higher royalties and taxes from the increased production-rate, and the payments being worth more due to the time-value of money. The Society hopes that this is not the driving factor behind the perceived limitations of the justification and overall assessment.

2.2 Dubious minimisation

Once having decided that the 'increased production' is justified and approvable, the DPE has seemingly resorted to dubious minimisation. Thus, DAR p5 suggests that there "...would be a minor increase in the intensity of coal extraction...", the increased production "...would not significantly change the maximum mine inflow rates...", "...there is not likely to be any increase in discharges beyond what was originally considered and approved", and the modification "...would not significantly increase the environmental impacts". [Emphasis in bold by BMCS].

The Society contends that the use of such minimisation is misleading:

- 'Minor increase in extraction-intensity' an increase from 4.5 to 5.5 Mtpa is just over 22% this is hardly 'minor'; the number of years required to mine the reserve would be shortened by about 20-25%. This could have significance in relation to the Company deferring compliance with certain consent conditions⁷, and the risk of underground-mined thermal coal becoming a stranded asset.
- 'Not significantly' changing the mine inflow rates is a dubious claim; concurrent extraction from one panel and preparation/development of the adjacent panel involves 'eliminating downtime' (DAR Section 2 p2), thereby removing the recovery time between successive panels this could influence the interaction of adjacent panels and lineament-defined fault/fracture zones, and significantly enhance the inflow rate. Additional comment is provided in the next dot-point
- "Not likely" to increase the volume of discharges means that an increase is possible. The Society has long argued that hydraulic connectivity exists between the surface water regime, various levels of aquifer, fracture zones above the goaf, and inflows; lineament-defined fault/fracture zones focus and enhance vertical and horizontal components of hydraulic connectivity. This view is strongly supported by Pells Consulting⁸, the IMP⁹, and somewhat hesitantly by Springvale (as reported in footnote 9). There is good reason to believe that the volume of discharges will increase over time; potentially more than anticipated.

In the preceding two dot-points, the DAR (Sections 6.1.3 and 6.1.4) refers to the PAC's concern that modelling (p9) "cannot provide accurate, site-specific predictions". Nevertheless, the DAR (Section 4, p10) ultimately considers that inflow rates and mine-water discharges will not exceed the previously approved 19 ML/day; the DAR (Fig. 4 p9) suggests that peak inflows, under the proposed production rate, would exceed the current production rate of 18.6 ML/day by 0.4 ML/day.

⁷https://majorprojects.affinitylive.com/public/67c3569693d73b5ccece72b2854df7ff/Springvale%20MEP_Development%20Conse nt.pdf; Schedule 4 Conditions 12 and 13.

⁸ Pells, S.E. & Pells, P.J.N. 2015 Impacts from coal mining at Springvale Colliery on the Temperate Highland Peat Swamps of the Newnes Plateau. Consultant's report by Pells Consulting for Colong Foundation. Ref S007.R1 Jan 2016.

⁹ IMP Report, June 9 2016, *Springvale Mine Extension Project – Extraction Plan for Longwall 419*, signed by Emeritus Professor Jim Galvin.

BMCS appreciates that a simple linear relationship may not apply, but it is surprising that increasing production by about 22% per annum only increases inflows by 2%.

2.3 The NorBe test

The DAR (Section 6.1.2, p8) indicates that the DPE sought legal advice about the applicability of the NorBe test to this modification application.

The bottom line is that, despite contrary advice, the DPE opted to use the test. Unsurprisingly, the test is passed because the DPE contends that (Section 6.1.4, p10) "...the potential impacts on Sydney's drinking water catchment would remain substantially the same as those that were approved under the original project" and (Section 6.1.5, p10) "...the potential catchment impacts from short-term variability in mine inflows are substantially the same as approved under the original consent" ¹⁰.

The Society believes that rigid use of the NorBe test would require a clear statement that the outcomes are either neutral or beneficial. 'Substantially the same' is substantially inadequate because, if the water quality is lowered, even to a small degree in some parameters, the outcome is neither neutral nor beneficial. Furthermore, the Society strongly asserts that, where the waters being discharged are of lesser quality than the immediate receiving waters, this should be deemed unacceptable.

In the present Mod, the DPE is comfortable with the outcome because the additional discharge has the same toxic quality as that approved under the original consent. This is risible. The original consent was given subject to specific improvements in water quality¹¹; they haven't happened, so until the Water Treatment Project referred to in the DAR (Section 6.1.6) is firmly locked in, the present Mod should be put on hold.

3. Three other proposals need resolution

DAR Section 4, p5 summarizes the DPE's position as follows: "...the Department is satisfied that the application can be characterised as a modification to the existing consent under section 96(2) of the EP&A Act as it would result in substantially the same development as the development for which consent was originally granted."

The statement is broadly correct, but the original consent included conditions which required the minewater discharges from LDP009 and various other discharge points to comply with certain specifications and investigate alternative ways of achieving them. This has resulted in three other proposals which, according to DPE, will be sent to the PAC for collective evaluation (refer to Section 1, para 3 above). BMCS sincerely hopes that the PAC has been apprised of this approach, because it is the Society's strong contention that the present Mod should not be dealt with before these other proposals have been assessed by the PAC.

Although there is some duplication of Section 1 (above), the ensuing summary provides a useful timeline.

Before the consent to mine was finalised, environmental groups advocated transferring the toxic discharges of mine-water from LDP009 to the MPPS for treatment and 're-use'. Springvale initially resisted this, but examining the transfer to MPPS became part of the consent conditions. After some delay, Springvale presented a transfer-proposal in which treated water, excess to MPPS's needs, would be sent to an Upper Coxs River tributary to dilute high-salinity discharges from a different discharge point (LDP006). This **misuse**

¹⁰ The Society believes that the use of NorBe, as applied in the original consent, was wrong. The Society also notes that the decision in the case brought by *4Nature* relating to the interpretation of the NorBe test is subject to appeal.

¹¹ It still hasn't happened and Springvale is asking for the conditions to be modified - see the next section 3.

¹²https://majorprojects.affinitylive.com/public/67c3569693d73b5ccece72b2854df7ff/Springvale%20MEP_Development%20Cons ent.pdf; Schedule 4 Conditions 12 and 13.

¹³ Springvale Water Treatment Project, the Springvale Mine Modification 2 and the Western Coal Services Modification 1.

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7592; Springvale Water Transfer and Treatment Project SSD 16_7592

of treated water was rejected by environmental groups. They suggested that it be stored in a nearby reservoir to be used by MPPS when running at 75-100% capacity. BMCS understands from the DPE¹⁵ that such a modification will now be made.

Despite investigation of a transfer-proposal being in the consent conditions, Springvale believes that the above changes have caused undue delays, and that the changes, when implemented, obviate the need to retain two parts of condition 12; hence, Springvale Mine Mod 2¹⁶. BMCS opposed Mod 2 because: Springvale stated (May 2015) that it accepted and was able to comply with the condition which it now wishes to change; Springvale could meet the condition by installing a temporary reverse osmosis plant at the principal discharge point; and, polluting the river system from the principal discharge point for another two years is unacceptable.

The Springvale Western Coal Services modification¹⁷ is needed to accommodate the transfer-proposal. Although supported in principle, BMCS qualified its support because the toxic discharges from LDP006 were unresolved. BMCS believes that the discharges should become part of the transfer-proposal, as they were targeted in the Upper Coxs River Action & Monitoring Plan¹⁸, but it seems that this issue will be handled by the EPA (source: footnote 15).

Once again, until all these matters are fully assessed and considered by the PAC, the Society believes it would be most inappropriate to allow the Company to increase its rate of coal-extraction and continue polluting the Upper Coxs River Catchment for at least two more years.

The above concerns have been raised by BMCS with the previous and current Ministers for Planning. The letters [items (a) and (b)] are attached as separate items for your information.

4. Destruction of Newnes Plateau Swamps (NPS)

The Society is aware that Mr Muir's letter¹⁹ has comprehensively examined this matter. BMCS strongly endorses Mr Muir's assessment.

The ensuing quotations from the DAR are from three separate sections of the report. They are either incorrect, or carefully phrased to avoid reality. BMCS has elected to insert comments after each section.

DAR Section 6.2.1 p11 states:

"There is no change proposed to the mine layout or the mining method and therefore there would be no additional environmental consequences to swamps from conventional subsidence effects (i.e. vertical subsidence, strains or tilts). Furthermore, while the increased production rate would slightly accelerate the occurrence of subsidence effects, there would be no increase in the predicted overall subsidence effects."

"...Changes to groundwater levels or baseflows to swamps from the modification would therefore be negligible."

"...the Department is satisfied that impacts to swamps would be generally consistent with the approved impacts."

The mining method still involves LW-extraction so it hasn't changed! But the panel dimensions and chain pillars have been modified as a result of previous impacts on NPS. On each occasion the Company has emphasised its better understanding of the pertinent factors and has predicted that impacts from future LWs will be 'negligible'. The reality is that the NPS have carried the risk while the Company continues mining

¹⁵Marcus Ray, Deputy Secretary Planning Services, Letter to Brian Marshall, BMCS, reference 1703325, 13 March 2017.

¹⁶ Springvale Mine SSD_5594 Mod 2 – http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8178

¹⁷ Western Coal Services SSD 5579 Mod 1 – http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8098

¹⁸https://majorprojects.affinitylive.com/public/67c3569693d73b5ccece72b2854df7ff/Springvale%20MEP_Development%20Consent.pdf; Schedule 4 Condition 13(c).

¹⁹ Keith Muir, *PAC determination of Springvale Mine Extension Mod 1*, Letter dated 30 March 2017 to Ms Abigail Goldman, Chair, Planning Assessment Commission, on behalf of the Colong Foundation.

(as approved by extraction plans) until the next 'unique' set of circumstances cause damage. Oops! There goes another swamp.

The DAR cautiously limits its prediction of no environmental damage to 'conventional subsidence effects (i.e. vertical subsidence, strains or tilts)'. In doing this, it avoids any reference to 'far-field' effects²⁰ and disregards Springvale's own data²¹, particularly in relation to the damage caused to other swamps. And, even if something does happen, it will be deemed 'negligible', or 'consistent with the approved impacts', which largely means the same thing!

The Society referred to such optimistic beliefs in Section 2.2 as 'dubious minimization'. It might also be termed blinkered vision, particularly in view of the next section.

And in Section 6.2.3 p12:

"...there have been impacts on swamps from mining at Springvale and is concerned that these may be long term impacts requiring offsets...impacts to these swamps were predicted and are allowed under the existing consent, subject to the strict regulatory framework..."

"...Springvale Coal has installed all additional monitoring equipment recommended by the IMP and has also lodged \$4 million in bonds with the Department to secure any future swamp offset liabilities."

"The IMP's most recent report has warned the company about this potential risk for the longwalls at the eastern end of the mine plan. The Department continues to closely monitor all the swamps, in consultation with the IMP, and will not approve any future Extraction Plan if there is likely to be any risk to swamps outside the project area."

In this section, past impacts are acknowledged, seemingly predicted, and are allowed under the consent²². BMCS has been unable to find clear statements about destroying the whole endangered ecosystem, but it is largely foreshadowed in the consent²³; there is nothing which stops mining or truly protects the remaining swamps unless those swamps are outside the project-area. The destruction is officially sanctioned via the avoid, minimise, offset, or 'pay the man some money' route. The role of the IMP is recognized (Schedule 3, Condition 11), but it is not empowered to recommend stopping the unconscionable destruction.

And in Section 7 p13:

"There would also be negligible additional impacts on swamps from the proposed modification. While the Department notes there are ongoing impacts on swamps at the mine, it is satisfied that these are consistent with the approved project and that the existing consent framework is sufficiently robust to manage or offset these impacts."

The Society believes that when the PAC approving the Consent invoked adaptive management, it did so with a view to ensuring swamp-avoidance if it became obvious that destruction of the ecosystems was inevitable. The way adaptive management is now enacted, mining will forge ahead causing sanctioned destruction as long as the financial penalties are easily covered; perhaps as a tax deduction?

The above concerns have been raised by BMCS with the Minister for Planning. The letter [item (c)] is attached as a separate item for your information.

5. Conclusions

²⁰ IMP Report, June 9 2016, *Springvale Mine Extension Project – Extraction Plan for Longwall 419*, signed by Emeritus Professor Jim Galvin

LW419 Extraction Plan – Preamble, Part 2, Evolution of understanding of the interactions of groundwater behaviour and mine subsidence at Springvale Mine, Centennial Coal, 26 pp.

²²https://majorprojects.affinitylive.com/public/67c3569693d73b5ccece72b2854df7ff/Springvale%20MEP_Development%20Cons ent.pdf; Schedule 3, Performance measures, Conditions 1 and 2.

²³https://majorprojects.affinitylive.com/public/67c3569693d73b5ccece72b2854df7ff/Springvale%20MEP_Development%20Cons ent.pdf; Schedule 3, Performance measures, Conditions 3-6.

- The PAC for MOD 1 D459/1 should place the decision on hold until the related (and arguably more fundamental) issues have been dealt with; failure to do this will ensure ongoing pollution of the Upper Coxs River catchment for at least another two years.
- Contrary to what is stated in the DAR, approval of the present MOD 1 D459/1 would have adverse environmental outcomes.
- LW-mining has been progressively destroying Newnes Plateau Swamps for over 15 years, aided by regulatory settings which have been more concerned with the extraction of coal, than preservation of a NSW-listed endangered ecosystem.
- The PAC should examine adaptive management in view of its misappropriation such that environmental desecration can be offset by payment to a fund; the only way to stop desecration is to set payment at a prohibitively high level.

Dr Brian Marshall, For the Management Committee

Attachments forwarded as separate items:

- (a) Springvale-WCS_BMCSLettrToSpeakman-Stokes_170110.pdf Concerns regarding Centennial Coal's Springvale Mine proposals and the Western Coal Services discharges.
- (b) Springvale-WCS_BMCSLettrToRoberts-Upton_170213.pdf More concerns regarding Centennial Coal's Springvale Mine proposals and the Western Coal Services discharges.
- (c) SpringvaleSwamps&LWImpact_BMCSLettrToRoberts_170224.pdf Protection of swamps from longwall mining impacts.