

19 April 2017

**NSW Planning Assessment Commission Determination Report
Springvale Mine Extension Project – Production Rate Increase Modification (SSD 5594 MOD 1)**

1. INTRODUCTION

On 17 March 2017, the Planning Assessment Commission (the Commission) received from the Department of Planning and Environment (the Department) a modification request from Springvale Coal Pty Limited (the Applicant) to increase the production rate at the Springvale Mine.

The Department has referred the modification request to the Commission for determination in accordance with the Minister for Planning's delegation dated 14 September 2011 because the Department received more than 25 submissions from the public in the nature of objections.

The Commission to determine the modification request consisted of Ms Abigail Goldberg (Chair), Ms Lynelle Briggs AO, and Mr Ross Carter.

1.1 Summary of Modification Application

The Springvale Mine Extension Project modification (the Project) seeks to make the following amendments to the existing development:

- increase the mine's run-of-mine (ROM) coal production from 4.5 million tonnes per annum (Mtpa) to 5.5 Mtpa;
- increase the capacity of the ROM coal stockpile from 85,000 tonnes to 200,000 tonnes;
- extend the stockpile footprint 0.3 hectares to the north-east; and
- increase the workforce from 310 full time equivalent personnel, including contractors, to 450 full time equivalent personnel.

1.2 Need for modification

The Department's assessment report states that Springvale Mine is the only local mine that supplies the Mount (Mt) Piper Power Station, which provides approximately 15% of NSW electricity. Mt Piper does not continuously operate at full capacity; however, the power station requires a reliable source of coal to ensure it can operate at full capacity during periods of increased demand.

The proposed increase in production rate and capacity of the stockpile would allow the mine to supply additional coal to the power station and ensure that it can operate at full capacity for extended periods. It would also provide the mine with the flexibility to meet market fluctuations, increasing its commercial viability.

In this regard the Department's assessment report notes that the proposed increase in production would ensure the long-term viability of the mine and the continued employment of 310 personnel, plus an additional 140 full time equivalent personnel.

In addition, the Applicant's Statement of Environmental Effects (SEE) identifies that due to the mine not operating for a period of eight weeks while the original application for the Springvale Mine Extension Project was being assessed, the increase in production output will assist to make up for previous shortfalls in production and revenue. The modification does not change the current approved

life of mining operations at the site. The SEE identifies that the proposed increase in production will be achieved through:

- an increase in the workforce by an additional 140 personnel;
- installation and operation of additional underground mining equipment; and
- improved equipment utilisation and availability.

1.3 Background

Mining operations originally commenced within the site in 1995 under a development consent granted in 1992. In September 2015, a new development consent for the Springvale Mine Extension Project was approved by the Commission. The current consent permits:

- mining operations until 31 December 2028;
- extraction of up to 4.5 Mtpa of ROM coal;
- transportation of coal:
 - by overland conveyor to the Western Coal Services Site for further processing;
 - by overland conveyor to the Mt Piper Power Station; or
 - by road to local domestic customers; and
- operation of support infrastructure, including ventilation shafts, coal stockpile, mine services bores and offices.

Processing of the extracted coal occurs at the Western Coal Services Site which operates under a separate consent (SSD 5579).

The Commission undertook two separate reviews of the Springvale Mine Extension Project, in April 2015 and September 2015. Approval for the Project was then granted on 21 September 2015, subject to conditions of consent.

Current consent

The Commission made four recommendations when reviewing the Springvale Mine Extension Project which related to the role of a proposed Independent Monitoring Panel (IMP), consideration of transferring minewater to Mt Piper power station, strengthening the Extraction Plan and the Water and Biodiversity Management Plans, and investigations into low frequency noise. These recommendations were substantially adopted by the Department and were included as conditions of consent in the determination. The consent also required the Applicant to secure future swamp offset liabilities should swamps in the project area experience any impacts that are more than negligible.

The role of the IMP is to improve monitoring and mitigation of the potential impacts of mining on swamps in particular, with a focus on avoidance or minimisation of impacts and adaptive management. Since its inception, the IMP has worked with the Applicant and the Department, providing advice on the mining related impacts on swamps. The Department's assessment report acknowledges that the IMP has noted a significant drop in the water levels of two of the swamps above the current mining areas. As a result of these observations and the recommendations of the IMP, Springvale Coal has to date installed additional monitoring equipment and lodged \$4 million in bonds with the Department to secure future swamp offset liabilities.

Related applications

Springvale Coal has recently lodged several other development applications with the Department for approval. A summary of the other applications which are currently under assessment by the Department include:

- Springvale Water Treatment Project (SSD 7592):
 - An 8 km pipeline, to transfer all minewater from Springvale and Angus Place mines to Mt Piper Power Station;

- Treatment of minewater at a new water treatment plant at Mt Piper Power Station;
- Using the treated water in the cooling towers at the power station; and
- Storage of excess treated water not required by the power station in Thompsons Creek Reservoir.
- Springvale Extension Project MOD 2 (SSD 5594 MOD 2):
 - Removal of the 2017 interim salinity reduction target; and
 - Deferral of the 2017 toxicity of aquatic species target until 2019.
- Western Coal Services Project MOD 1 (SSD 5579 MOD 1);
 - Acceptance and emplacement of the residual waste by product from the Springvale Water Treatment Project; and
 - Changing the rehabilitation strategy to account for the residual transfer pipeline between Mt Piper and Western Coal Services.

The Department has advised and the Commission is satisfied that this modification application can and should be dealt with separately on its own merits, and prior to the assessment of the other current applications being completed.

2. DEPARTMENT'S ASSESSMENT REPORT

The Department's assessment report identified potential impacts on surface water in the catchment and swamps, and socio-economic impacts, as the key issues associated with the Modification application. The Department's assessment report concluded that the potential impacts on Sydney's drinking water would remain substantially the same as those that were assessed by the Commission under the original Project and concluded that there would be negligible additional impacts on swamps.

From a strategic perspective, the Department concluded that Springvale Mine is the only local mine currently supplying coal to the Mt Piper Power Station and the increase in the production rate would allow the mine to supply additional coal to the power station, which would ensure it can operate at full capacity when there is increased demand.

The Department also concluded that the modification would provide a positive socio-economic contribution to the Lithgow region and the NSW economy by providing 140 additional employment opportunities with subsequent flow-on effects.

3. COMMISSION'S MEETINGS AND SITE VISIT

As part of its assessment of the proposal, the Commission met with the Department, the Applicant, Lithgow City Council and visited the site. Notes from these meetings and the site inspection are provided in **Appendix 1**. The Commission also conducted a public meeting. Notes from the public meeting are provided in **Appendices 2 and 3**.

3.1 Briefing from the Department

On 31 March 2017, the Department briefed the Commission on the Project and its assessment report. Specifically, the Department outlined the history of the Project, existing consent requirements, impacts of underground mining on the swamps and the bonds and offsets requirements currently in place.

3.2 Briefing from the Applicant and site visit

On 6 April 2017, the Commission met with the Applicant to discuss the Project and visited the site. The Applicant briefed the Commission on the subsidence and water impacts of underground mining on swamps, adaptive management mine design changes under consideration and the water inflow/discharge implications of this modification. During the site visit, the Commission visited the Carne West and Barrier swamps, including a hanging swamp.

3.3 Meeting with Lithgow City Council

On 7 April 2017, the Commission met with Lithgow City Council (Council) to discuss the Project. Council advised the Commission that it was unanimously in support of the Project Modification and the jobs it would provide.

3.4 Public Meeting

The Commission held a public meeting at the Lithgow and District Workies Club, Tank Street, Lithgow on 7 April 2017 to hear the public's views on the proposal. A list of the 18 speakers that presented to the Commission is provided in **Appendix 2**. A summary of the issues raised by the speakers and provided in written submissions is provided in **Appendix 3**. In summary, the main issues of concern included the economic and employment benefits, swamp impacts, water impacts, noise impacts and matters regarding the Project approval.

4. ADDITIONAL INFORMATION

The Commission sought additional information from the Applicant clarifying amendments to the proposed mine plan. The Commission also sought additional information from the Department regarding proposed offsets in relation to Newnes Shrub swamps, outcomes of the low frequency noise investigation undertaken by the Applicant, and a summary of other applications and modifications related to Springvale Mine currently being assessed.

5. COMMISSION'S CONSIDERATION

In this determination, the Commission has considered carefully:

- all information provided by the Applicant;
- the Department's assessment report;
- advice and recommendations from government agencies;
- additional information provided to the Commission and described above in Section 4; and
- relevant matters for consideration specified in section 79C of the *Environmental Planning and Assessment Act 1979* (EP&A Act), including:
 - relevant environmental planning instruments;
 - the *Environmental Planning and Assessment Regulation 2000*;
 - the likely impacts of the development on both the natural and built environments;
 - social and economic impacts in the locality;
 - the suitability of the site for the development;
 - all written and verbal submissions from the public; and
 - the public interest, including the objectives of the EP&A Act.

The Commission noted that some individuals at the public meeting questioned whether the Project can be constituted as a modification under section 96(1A) of the EP&A Act. The Commission agrees with the Department's advice that the proposed changes do indeed fall within the scope of section 96(1A).

5.1 Swamp Impacts

The Commission received a number of submissions identifying the health of the Newnes Plateau Shrub swamps and the Newnes Plateau Hanging Swamps as a key concern regarding this Project. The Commission's previous consent was stringent in its establishment of a monitoring and reporting regime to advise on mining related impacts to the swamps.

At its meeting with the Commission, the Applicant presented information that detailed the impacts of mining operations at the Springvale Mine on the nearby swamps. The presentation identified that at the commencement of operations there was insufficient research or information relating to the

Newnes Forest swamps to provide a robust benchmark position. The presentation then outlined the results of monitoring since operations started. This monitoring indicates that groundwater levels at a number of swamps have changed as a result of underground mining operations. The Applicant noted however that resultant impacts on the swamps to date, with the exception of the Carne West swamp, which was affected by mining operations prior to the 2015 approvals, are within the acceptable impact range identified within the Project's existing consent. The Applicant provided an update on reparation and rehabilitation activities at the Carne West swamp.

Monitoring and reporting undertaken by the Applicant has overall improved the understanding of how underground mining operations influence water levels in swamps. This monitoring has identified new information highlighting a notable reduction in swamp groundwater levels when longwall mining occurs in relation to lineaments (a lineament being a geological fault line), which are found in the geology underlying the Newnes Forest. The Applicant has identified that if the current mine plan proceeds as approved, the potential exists for impacts on swamps outside the project area due to the lineament formations. Recognising these potential impacts, the Applicant has proposed to review and adapt future works. Several adaptive management controls are under consideration to minimise impacts:

- Longwall 421 to be shortened by 288m to avoid mining through a significant linking fault that intersects the lineament which underlies Carne Central Swamp;
- Longwall 422 to be deferred until the impacts of Longwalls 420 and 421 can be determined;
- Longwall 423 to not proceed due to proximity to Carne Central and Barrier swamps;
- After completion of Longwall 420, mining of Longwall 424 to commence; and,
- Narrowing mining voids (from 315m to 260.9m) and widening chain pillars (45m to 58m) for all Longwalls in SSD5594 approved area.

The Commission recognises that swamps within the Project area have been impacted since the 2015 approval but that these impacts are within the levels permitted under the existing consent. The Commission considers that the Applicant's monitoring, reporting, review and adaptation of future mine works will moreover help further protect swamps located within the approved Project area and prevent impacts to swamps outside the project area. Furthermore, the increase in the mine's annual ROM coal production is not anticipated to increase impacts on the swamps beyond that which has been approved to date.

5.2 Water Impacts

The Commission noted that several submissions raised concerns over the potential increase in water inflows and the impact on discharged water from Springvale Mine as a result of the modification proposal. The SEE prepared by the Applicant provided updated modelling prepared by the CSIRO to address the potential impacts of increasing the ROM coal production rate from 4.5Mtpa to 5.5Mtpa. The updated modelling identified an increase to the peak mine inflow of 0.4ML/day, which would increase the peak inflow rate from 18.6ML/day in 2022 to 19.0ML/day. The Department's assessment report identifies that the increased peak inflow rate of up to 19.0ML/day is consistent with the maximum permissible rate that was approved under the original consent. The Commission accordingly finds that the increased inflow rate is within the approved limits.

Further concerns raised at the public meeting relate to the discharge of minewater into Lake Burragorang and Lake Wallace (the two primary local catchments) and the flow-on impacts in the broader downstream catchment. The Department's assessment report indicates that based on updated modelling, the modification is not predicted to change the water quality at Lake Burragorang and Lake Wallace. Furthermore, the Environmental Protection Authority (EPA) and WaterNSW were satisfied with the Applicant's proposal. The Commission accordingly finds that there is unlikely to be any additional impact on water catchments beyond that which is already approved.

5.3 Socio-Economic Impacts

The Commission received a number of submissions in support of the modification application, in particular the additional employment predicted to be generated in the short to medium term. Lithgow City Council identified that the region was subject to higher than average unemployment and that project was unanimously supported for the additional 140 jobs it would generate. Submissions also recognise that local businesses and services would benefit from the flow on expenditure that would result from additional employment opportunities.

Countering this support were a number of concerns expressed at the public meeting relating to the coal resource potentially being exhausted prior to the proposed end of mine life on 31 December 2028. Submissions raised concerns that 450 personnel could then be made redundant sooner, leaving more residents unemployed.

The Applicant identifies in the SEE that it is feasible that the mine could be completed by the end of 2024 in the event that efficiencies are gained and markets are available to accommodate the increased ROM coal production. However, the Applicant's modification request stated that the approved *expiry date of 31 December 2028 will not be altered in this modification* and that hours of operation are not proposed to alter from the current 24 hours per day, seven days per week. Moreover, the requested increased extraction rate is not expected to be fixed, but is anticipated to vary depending on market and energy requirements as well as mining conditions.

The Commission is accordingly satisfied that the economic benefits of the project, including employment provided by the mine and other indirect socio-economic benefits generated, will provide material benefit to the local area and NSW.

5.4 Low Frequency Noise Impacts

One submission raised concerns over low frequency noise continuing to be emitted from the ventilation systems of the mine. The existing development consent required the Applicant to prepare and implement a Noise Management Plan, including *an investigation into the generation and perception of low frequency noise by the project*. The Department has advised that the Applicant's low frequency noise investigation has been completed, and received and reviewed by them. This report concluded that it was highly unlikely that noise from the ventilation fan is a contributor to low frequency noise at the residence in question given its significant distance from the fan. The Department is satisfied by this report that no further action is required.

The Applicant's SEE for this modification identified that the only notable increase in noise emissions as a result of the modification request would be from additional traffic generated by the increased workforce.

The Department's assessment report considered low frequency noise and noise impacts in general. Neither the Department, nor the EPA raised concerns regarding potential noise impacts resulting from the modification. The Commission is satisfied by these findings.

5.5 Offsets

An issue raised in several public submissions regarding the modification application related to the certainty of the framework triggering the need for the Applicant to offset environmental damages to the swamps. The Department's assessment report acknowledges that Springvale coal mine has impacted on swamps and that long term offsets are required. The Commission requested further detail from the Department regarding the need by the Applicant to offset impacted swamps, and the framework for implementing this.

The Department's response identified that it had met with agencies and the Applicant regarding potential swamp offsets. The Department is satisfied that there are a range of robust, researched options for the Applicant to satisfy its maximum predicted offset liability, which align with the conditions of consent and the *NSW Biodiversity Offsets Policy*. The Department notes however that it is likely to take several months to finalise the plan for a strategic offset area for swamps, although the process is advancing.

The Commission is satisfied with the Department's response and notes that a framework is being developed for the Applicant to adequately offset environmental damages to the swamps.

6. COMMISSION'S FINDINGS AND DETERMINATION

The Commission has considered carefully the Applicant's proposal, the Department's assessment report and the relevant matters for consideration under section 79C of the EP&A Act. The Commission has noted the advice and recommendations of Lithgow City Council, and government agencies. The Commission has considered submissions received and heard from members of the community about their concerns regarding the proposal during the public meeting in Lithgow on the 7 April 2017.

The Commission is satisfied that the Applicant has increased its monitoring and reporting activities and has also been working with the IMP and the Department to adapt future operations to reduce the impacts on swamps both within and outside the mining area. In addition, the Commission finds that by approving this application, there will be no additional impacts beyond what is currently approved to the swamps.

The Commission is also satisfied that the increased water inflow rates are within the acceptable range as assessed under the original consent. The Commission finds that the proposed predicted discharge resulting from the project would not adversely affect Lake Burragorang, Lake Wallace and other downstream catchments further to what is already approved.

The Commission notes the immediate socio-economic benefits of the modification application, in particular the proposed additional employment opportunities at the mine, and related flow-on effects within Lithgow.

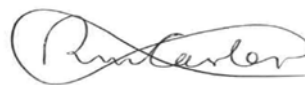
For the reasons set out above, the Commission accepts the Department's recommendation that this proposal be approved. Consequently, the Commission has determined to grant consent to the modification request subject to the conditions set out in the existing instrument of approval.



Abigail Goldberg (Chair)
Member of the Commission



Lynelle Briggs AO
Member of the Commission



Ross Carter
Member of the Commission