



Our reference: DOC15/210861

22 JUN 2015

Mr David Kitto
Executive Director Resource Assessments
and Business Systems
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Kitto

I refer to the Springvale Mine Extension Project (SSD 5594).

I understand that the Department of Planning and Environment (DPE) has been provided with copies of correspondence between the Environment Protection Authority (EPA) dated 28 May 2015 and Centennial Coal (Centennial) dated 29 May 2015 regarding the reduction of salinity in the discharge of mine water from Springvale (and Angus Place) Colliery. The following is a summary of the key limits determined in the recent agreement between the EPA and Centennial.

The purpose of this letter is to provide the EPA's position that support for the Springvale Mine Extension Project (SSD 5594) and agreement to licence this project (subject to planning approval) is dependent on these key limits being included as statutory variations to environment protection licenses for any discharge from the Centennial Springvale Colliery.

700/900 EC Limits – 30 June 2017

Agreement that by 30 June 2017 Centennial will meet a 50th percentile of 700, a 90th percentile of 900 and a 100th percentile limit of 1,000 micro-Siemens per centimetre Electrical Conductivity ($\mu\text{S}/\text{cm}$ EC) limits for salinity.

500 EC Limit – 30 June 2019

That by 30 June 2019 Centennial will meet a 90th percentile of 500 EC for salinity.

The EPA notes that the 500 EC limit for 30 June 2019 will relate to any discharges from the Angus Place Colliery from this date.

Lastly, as stated in the respective letters the EPA and Centennial agrees to develop a monitoring regime, which will be prescribed as a condition of the Licence(s) for Springvale Colliery. It should be noted that the future monitoring regime will be subject to the EPA's approval that the program has been properly designed, and includes all the relevant variables and data to be monitored.

Should you have any questions please contact Richard Whyte, Manager Central West Region at the EPAs Bathurst Office on 6332 7600.

Yours sincerely

A handwritten signature in black ink, reading "Mark Gifford". The signature is written in a cursive style with a large initial 'M'.

MARK GIFFORD
Chief Environmental Regulator
Environment Protection Authority

cc Mr David Moul, Managing Director & CEO, Centennial Coal



29 May 2015

Mr Mark Gifford
Chief Environmental Regulator
NSW EPA
P O Box A290
SYDNEY SOUTH NSW 1232

Dear Mark

SPRINGVALE MINE EXTENSION PROJECT (SSD 5594)

I refer to your letter dated 28 May 2015, regarding the EPA's response to Centennial's proposed commitments for the Springvale Mine Extension Project.

Centennial acknowledges and agrees to the EPA's proposal for 700/900 EC limits as discussed in your letter.

Centennial agrees in principle to a target of 500 EC at the 90th percentile level from its western operations (Springvale and Angus Place), by 30 June 2019. This agreement is subject to the completion of Centennial's feasibility of such further reductions and the subsequent commercial evaluation required to assess the impact to those operations. To be clear any commitments made to further reductions need to ensure continuity of supply to the local power stations and provide long term security of employment to the Lithgow community.

Centennial will continue to work with the EPA and other relevant stakeholders with a view to meeting improvements in water management in the Upper Coxs River catchment.

Centennial acknowledges and agrees to the proposed monitoring regime, as highlighted in Centennial's correspondence of 10 April 2015.

Separate correspondence in relation to the matters raised by the EPA on the toxicity of the discharge at LDP009 of EPL 3607 and the proposal for Clarence Colliery will be forwarded shortly.

Please do not hesitate to contact me should you wish to discuss this further.

Yours sincerely



David Moulton
Managing Director & CEO



Our reference:
DOC15/175886
Contact:
Richard Whyte

Mr David Moulton
Managing Director and Chief Executive Officer
Centennial Coal Pty Ltd
Level 18, BT Tower
1 Market Street
SYDNEY NSW 2000

28 May 2015

Dear Mr Moulton,

I refer to Centennial Coal's letter dated 14 May 2015, and received by the Environment Protection Authority (EPA) on 25 May 2015, regarding the Springvale Mine Extension Project (SSD5564) and the commitments proposed by Centennial Coal.

The following is the EPA's response to these commitments and other raised in Centennial's letter.

Proposal for 700/900 EC Limits

The EPA agrees to Centennial's timeframe of two (2) years to 30 June 2017 to meet a 50th percentile of 700 and a 90th percentile of 900 for salinity, measured as micro-Siemens per centimetre Electrical Conductivity ($\mu\text{S}/\text{cm}$ EC). Additionally, the EPA will require a 100th percentile limit of 1,000 $\mu\text{S}/\text{cm}$ EC, with these limits to be set by a variation to the Springvale Colliery Environment Protection Licence (EPL 3607).

Proposal for 350 EC Limit

The EPA notes that Centennial does not agree that a longer term goal of 350 $\mu\text{S}/\text{cm}$ EC within four (4) years of the date of the consent is necessary, and questions the need to further reduce salinity in the Springvale discharge on the grounds that the discharge is not acutely toxic and the salinity is not having a toxic effect on the environment. This matter has two components which need to be addressed separately.

Further Reductions in Salinity

The EPA maintains that further reductions in salinity are necessary to progressively improve the water quality of the upper Cocks River, and that salinity levels much greater than the background concentrations do impact on the diversity and abundance of the aquatic biota (essentially influencing which species can and cannot live in the downstream waters where the salinity is higher because of mine water discharge).

The EPA remains of the view that the salinity of the mine water discharge needs to be reduced below 700/900 EC in the future. However, as an interim step the EPA will require a 90th percentile of 500 EC for the Springvale mine water discharge by 30 June 2019.

Additionally, the EPA will require Centennial to undertake a year round monitoring program with a status report by 30 June 2017 on the impact of the Springvale discharge on the aquatic environment, including downstream salinity and pollutant levels in Lake Wallace and Lake Lyell. The monitoring will be ongoing and Centennial will be required to provide a second report by 30 September 2020 that will be used as a basis to test the relationship between the 90th percentile of 500 EC and a salinity limit of 350 $\mu\text{S}/\text{cm}$ EC, which remains the EPA's end goal for the discharge, as expressed in our previous correspondence.

This approach is based on the management program outlined in Centennial's letter of 10 April 2015 - 4. *Pollution Reduction Programs:*

- a) *Water quality, macroinvertebrate and ecotoxicology monitoring across the Coxs River Catchment to measure the performance against the long term water quality objective and the impacts of change on the aquatic ecology and ecosystem health of the Coxs River.*
- b) *The water quality parameters to be monitored at all proposed Licensed Discharge Points, the frequency of monitoring and concentration limits focussed on those that have been identified as having potential to cause harm to the environment.*
- c) *A Trigger Action Response Plan should concentration limits be exceeded that focusses on the extent to which an exceedance of quality limits might affect aquatic ecology of the Coxs River catchment.*

The EPA will prescribe a condition on the Springvale EPL to capture this program. However this will be subject to the EPA's satisfaction that the monitoring program has been properly designed, and includes all the relevant variables to be monitored (e.g. including some of the flow data not included in the Jacobs Report). Centennial also needs to consider the likelihood of more cost effective treatment processes becoming available in the future (e.g. trialling de-alkalisation), which could become the subject of further Pollution Reduction Programs (PRP).

Toxicity of Licensed Discharge Point 9 (LDP9) of EPL 3607

The EPA does not agree with Centennial's statement that the mine water discharge does not show characteristics of acute toxicity. Centennial's own document prepared by GHD (Coxs River Ecotoxicology Assessment September 2014) reported acute toxicity of the discharge, especially to Cladoceran species. As you are aware on 4 May 2015 the Office of Environment and Heritage (OEH) on behalf of the EPA tested the LDP9 discharge and the preliminary results show acute toxicity to Cladoceran species. These results indicate that Centennial's changes to the flocculation process have not eliminated the toxicity.

The EPA expects to have the final test report from OEH shortly. We will then be in touch to organise a meeting with the respective ecotoxicologists to discuss the results delivered by GHD for Centennial and those from OEH. As previously stated, and most recently repeated in the EPA's comments to the Department of Planning and Environment on the Jacob's Report, the EPA has concerns about the ionic composition and high bicarbonate alkalinity being related to the toxicity of the mine water.

Proposal for Angus Place

The EPA agrees that a further reduction in salinity for the Angus Place Mine Extension Project needs to be undertaken, and will continue negotiations with Centennial to deliver the most beneficial environmental outcome for this mine.

Proposal for Clarence Colliery

In regards to the proposal to eliminate the mine water discharge from Clarence Colliery into the Wollangambe River and instead pipe the treated water in the Lithgow Water Supply Dam, Centennial needs to take into account the following:

- A discharge from the treatment plant directly into the Lithgow Water Supply Dam, bypassing the dam on the Wollangambe River, would require an additional LDP on EPL 726.
- The quality of the receiving waters of the Dam and Farmers Creek needs to be characterised.
- ANZECC 2000 would be used for guidance for a Slightly to Moderately Disturbed Waters, in addition to the Australian Drinking Water Guidelines.
- The need to eliminate any toxicity characteristics in the Clarence mine water discharge, both to deal with interim impacts on the Wollangambe River and to deliver a suitable water quality which meets both environmental standards and is of a quality suitable for domestic use in the Lithgow Water Supply Dam.

Other Matters

Should planning approval be granted for the Springvale and Angus Place Mine Extension Projects any resulting variations to EPLs will include the following conditions as outlined in the EPA's letter of 7 May 2015:

- Variations to the Environment Protection Licences (EPLs) for Springvale and Angus Place Collieries through a review of all the LDPs for the mines and where necessary applying new limits for pollutants to meet the relevant timeframes.
- Whereas salinity has been earmarked as an important pollutant, the variations to the EPLs will include other pollutants, such as aluminium, arsenic and manganese for Springvale, taking into account the existing capability of the treatment systems, the capacity for timely upgrading, and the relevant timeframe.

By 1 June 2015 the EPA seeks confirmation from Centennial Coal of its agreement to the EC Limits as described above.

Should you have any questions please contact Richard Whyte at the EPA's Central West Regional Office on 63 327 601.

Yours sincerely

 28/5/15

MARK GIFFORD
Chief Environmental Regulator
Environment Protection Authority