03 November 2022

NSW Environment Protection Authority

Comments on draft Climate Change Policy and draft Climate Change Action Plan

The Environment Protection Authority has released a draft Climate Change Policy and Action Plan 2022-2025 and is seeking community consultation. A submission follows:

01. On 28 February 2022, the Clean Energy Regulator published the annual National Greenhouse and Energy Reporting (NGER) data for the 2020-21 reporting year. Mining accounted for 29.3% of Scope 1 emissions, the second highest emitter after the electricity generation sector (47.6%).

02. Contemporary State Significant Development (SSD) consents for coal mines limit Scope 1 emissions based on a site's "emissions cap" set by the Commonwealth Government's Safeguard Mechanism.

03. The total emissions capping for coal mines under NGERs should be calculated to ensure it meets legislative greenhouse gas (GHG) emissions targets.

Carbon Source Minimisation

04. Cond B31 of the Mount Pleasant Coal Mine (SSD-10418) development consent specifically relates to operating conditions relating to GHG emissions. Cond B32 references development of an Air Quality and Greenhouse Gas Management Plan. These conditions could be strengthened by inclusion of clear performance measures, as shown in **Table 1**.

Table 1 – Carbon Source Minimisation

Feature	Performance Measure
Carbon Source - General	• Aim for no-emissions solutions • Continue to investigate purchasing opportunities of equipment from companies offering sustainable equipment *i.e reduced fuel consumption, electrified equipment from renewable power (e.g electric rope shovels) and battery powered vehicles (especially in underground mining where haul routes in and out of mines are more permanent and smaller sized machines)* • Continue to investigate alternate mobile equipment offering reduced fuel consumption and higher productivity and alternate sustainable materials *(e.g bucket wear liners that last longer)* • Continue to investigate options for waste disposal from companies offering sustainable management, recycling and productive use for waste streams • Electrified equipment will be used where practicable • Financially contribute toward technology improvement research, as reasonable apportioned to size of the operation • Continue to investigate opportunities for alternate power generating activities on surrounding buffer lands
Diesel Use	• Continue to improve fuel consumption • Use of battery powered plant, where practicable • Investigate alternative fuel supplies

Feature	Performance Measure
	• Reduce idle time • Improve operator performance
Distance Travelled	• Continue to optimise mine design to reduce haulage distances, for the life of the operation • Use of conveyor, where practicable
Grease and Oil Consumed	• Continue to improve consumption of grease and oils • Investigate methods to increase time between service • Improve operator performance • Correct maintenance • Reduce idle time
Electricity Used	• Minimise Co2-e emissions by use of electricity generated by renewable or carbon neutral sources where reasonable and feasible • Continually improve electricity consumption • Minimise lighting impact (use of LED lights and efficient use of lighting across site, sensor lights, star rated appliances in administration facilities)

The Proponent must not increase environmental impacts predicted in the Environmental Impacts Statement whilst trying to meet the objectives in Table 1.

05. GHG minimisation measures outlined in SSD-10418 Cond B34 part d) should also be calculated to ensure sector wide emissions meet reduction targets.

Carbon Sinks

06. The Mount Pleasant Coal Mine has 12,875 ha of offset land to be managed and secured (in perpetuity). If continuous forest canopies can sink up 2 tonnes per hectare of carbon each year, and soil can sink up to 70 tonnes per hectare, the Mount Pleasant Coal Mine offsets has the potential to sink 901, 252 tonnes of carbon which exceeds Mount Pleasant's annual source cap of 663,971 tonnes per year.

07. The Proponent should demonstrate the Carbon Sink potential of its offsets and how this can be improved over time. This should include performance measures for improving net ecosystem exchange for each land type e.g native ecosystems, woodland and agriculture; using ecological and ecosystem principles.

08. The Proponent should prepare a Carbon Sink Plan that includes a methodology to determine sink potential and performance of each land type (developed by a suitably qualified expert); detailed baseline data for each land type; performance measures and criteria (including trigger levels for identifying and investigating potential adverse impacts; a monitoring program to monitor and evaluate compliance with performance measures, productivity of sink offsets (to inform the Site Carbon Balance) and effectiveness of plan; reporting procedures; trigger actions response plan.

09. The Proponent should prepare a Site Carbon Balance that includes details for:
    a) Predicted carbon emissions and carbon sink potential for the development;
    b) Sources of carbon emissions and carbon sink potential for the life of the development;
    c) Carbon sink storage capacity;
    d) Carbon use and management on the site, including any carbon credit transfers;
    e) Carbon credits owned or purchased;

f) Reporting procedures, including the annual preparation of an updated site carbon balance; and
g) A program to periodically validate the carbon balance for the development.

Carbon Neutrality

10. For any new greenfield coal mine applications, Proponent's should demonstrate carbon neutrality under the Australian Government's Climate Active program. As demonstrated by ASX-listed developer QMines for the Mt Charmer Project.

11. For existing brownfield coal mines, Proponent's should demonstrate carbon neutrality under the Climate Active program by 2030.

Planning Considerations

12. If implemented, the abovementioned recommendations should be introduced in a manner consistent with the recent rehabilitation reforms undertaken by the Resources Regulator i.e relevant legislation updated, and licences updated and conditions enforced at the same time by a certain date.

13. The NSW Net Zero Emissions Dashboard shows Muswellbrook Shire Local Government Area (LGA) as the highest emitter in NSW. Any sector limits should not restrict development shire wide.

14. Reporting of GHG by mining industry should be consistent between NGER's and EPA's State of Environment Report.

15. Muswellbrook Shire LGA contains approximately 3,402km^2 of National Park. The net ecosystem exchange of these areas could be improved using ecological and ecosystem principles to offset the impact of other industry in the shire.

Thank you for the opportunity to comment.

Yours faithfully



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