

Hamish Aiken

From: system@affinitylive.com on behalf of Wendy Wales <wgwales@gmail.com>
Sent: Wednesday, 2 December 2015 4:03 PM
To: Hamish Aiken
Cc: Howard Reed
Subject: Submission Details for company DAMS HEG (org_object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Wendy Wales
Organisation: DAMS HEG (Convenor)
Govt. Agency: No
Email: wgwales@gmail.com

Address:
892 Dorset Rd

Muswellbrook, NSW
2333

Content:
I object to an additional 32 million tonnes of coal being extracted until 2038.

We need to limit CO2 emissions, cut our energy consumption and find ways to switch to renewables.

The local impacts of additional coal mining e.g. excessive water consumption and contamination, groundwater disruption, dust, noise and loss of habitat or arable land combined with the global impacts, particularly climate change are not on hold for this proposal.

Singleton and Camberwell already experience excess to NEPM standard PM10 readings. This mine is adjacent to Singleton Heights. It is in line with the prevailing winds for both Singleton and Camberwell. It has been observed that dust becomes a more significant problem on days over 28°C. Given we have had more moderate weather (more regular rainfall) locally since the breaking of the last drought (Pasha Bulka storm 2007) and mining has expanded exponentially in this time, I believe it is reasonable to expect an extreme dust impact from this mine with the next drought.

The extension of Rix's Creek Mine is a head-in-the-sand proposal, which hobbles Australia to a quarry mentality, sacrificing the planet and all that makes us unique along the way. If its too expensive to fix final voids, we can't control the diffuse leaks of saline and polluted water into the waterways and we have no fix for climate change, save change our ways then the most effective responses to these problems is don't make them worse.

This expansion should not be allowed to go ahead.

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Submission: Online Submission from company DAMS HEG (org_object)
https://majorprojects.affinitylive.com/?action=view_activity&id=133136

Submission for Job: #6300 Rix's Creek Extension Project
https://majorprojects.affinitylive.com/?action=view_job&id=6300

Site: #2884 Rix's Creek Coal Mine
https://majorprojects.affinitylive.com/?action=view_site&id=2884

Wendy Wales

E : wgwales@gmail.com

Hamish Aiken

From: system@affinitylive.com on behalf of Cathy Merchant <rhffps@gmail.com>
Sent: Thursday, 3 December 2015 3:31 PM
To: Hamish Aiken
Cc: Howard Reed
Subject: Submission Details for Cathy Merchant of Ryde Hunters Hill Flora and Fauna Preservation Society (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Cathy Merchant
Organisation: Ryde Hunters Hill Flora and Fauna Preservation Society (President)
Email: rhffps@gmail.com

Address:
PO Box 2127

Boronia Park , NSW
2111

Content:
Ryde Hunters Hill Flora and Fauna Preservation Society
PO Box 2127,
Boronia Park, 2111
3 December 2015.
RE: SSD 6300 Rix's Creek Extension Project.

Dear Sir/Madam,
We wish to object to the extension of Rix's Creek Coal mine.
We are a conservation group which has been active in our local area of Sydney for almost 50 years.
Some of our members have friends and family living in Newcastle who are already affected by Newcastle's increasingly poor air quality.
It is unfair that many tonnes more of coal will be passing through Newcastle for such a long period of time if the life of this mine is extended.
For some time the community and groups such as ours have expressed concern at the lack of cover on coal trucks which further exacerbates the situation.
It seems ludicrous to be extending a coal mine at a time when Australia should be moving towards a renewable energy industry which could provide more jobs in a far safer and healthier industry. The recent emergence of "black lung" is especially concerning. Drier weather conditions make it especially hard to achieve the "wet down" to reduce coal dust and extends the health impacts much further than direct employees. The health and support for affected families is a cost borne by the whole community as tax payers rather than the coal industry.
We have no confidence that the open cut mine will be re-mediated after its life as a coal mine and urge that this application to extend the mine be rejected.

Yours sincerely,
Cathy Merchant,
President.

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Submission: Online Submission from Cathy Merchant of Ryde Hunters Hill Flora and Fauna Preservation Society (object)
https://majorprojects.affinitylive.com/?action=view_activity&id=133296

Submission for Job: #6300 Rix's Creek Extension Project
https://majorprojects.affinitylive.com/?action=view_job&id=6300

Site: #2884 Rix's Creek Coal Mine

https://majorprojects.affinitylive.com/?action=view_site&id=2884

Cathy Merchant

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Rix's Creek Extension Project Submission

Submission

Rod Campbell
December 2015

ABOUT THE AUSTRALIA INSTITUTE

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INTRODUCTION

The economic assessment of the Rix's Creek Extension Project, written by consultants KPMG, heavily overstates the benefits of the project while largely ignoring potential costs. Key flaws are:

- High coal prices.
- Unorthodox treatment of wages.
- Assumption that most external costs are fully offset or mitigated, with no consideration of risk around these impacts.
- Minimal detail provided on economic impact assessment.

COAL PRICES

KPMG base their revenue estimate on World Bank forecasts of Australian thermal coal prices. The prices used are shown in Table 4-5 of the assessment. No date is provided for the source of their forecasts, however the prices used are higher than the World Bank's estimates for January, April and July 2015 and far higher than the latest October 2015 forecast, as shown below:

Table 1: KPMG and World Bank Price Forecasts (nominal USD/tonne)

Year	KPMG forecast	January 2015 World Bank forecast	April 2015 World Bank forecast	July 2015 World Bank forecast	October 2015 World Bank forecast
2013	84.6	84.6	84.6	84.6	84.6
2014	77	70.1	70.1	70.1	70.1
2015	79	67	62	58	58
2016	80.9	69.7	64.4	59.5	50
2017	82.8	72.6	66.8	61.1	51.9
2018	84.8	75.6	69.3	62.6	53.9
2019	86.8	78.6	72	64.3	55.9
2020	88.9	81.9	74.7	66	58.1
2021	91	85.2	77.5	67.7	NA
2022	93.2	88.7	80.5	69.4	NA
2023	95.4	92.3	83.5	71.2	NA
2024	97.7	96.1	86.7	73.1	NA
2025	100	100	90	75	70

Sources: World Bank Commodity Markets Outlook, January, April, July and October 2015.¹

¹ Available at: https://www.worldbank.org/content/dam/Worldbank/GEP/GEP2015b/Global-Economic-Prospects-CommodityMarketOutlook_Jan2015.pdf;

KPMG's economic assessment of the Rix's Creek project is dated July 2015. It is unclear why the authors did not use up-to-date forecasts from the World Bank from that month, or at least from earlier in 2015. Their use of outdated data serves to overstate the value of the project and should be corrected.

Based on the latest World Bank forecasts and the production schedule outlined in KPMG's Chart 4-3, the present value revenue of the project is \$687 million at a 7% discount rate. This lower revenue estimate makes the project financially marginal and may not cover capital and operating costs.

Note that this revenue estimate is in present value US dollars and relates to production from 2019 to 2038. This is because 2018 is the final year that the project will produce coal under the base case scenario, as shown in Chart 4-3. It appears that KPMG's revenue forecast of \$997.5 million is also in present value US dollars for the 2019 to 2038 period, as our calculation using their price forecast and Chart 4-3 is \$997.1 million. As our estimate is based on sight reading of Chart 4-3, there is some small discrepancy.

While revenue estimates appear to be in present value US dollars, it is unclear whether other costs and benefits are in Australian dollars or US dollars. There is no discussion of exchange rates or assumed future inflation rates anywhere in the assessment. It appears that KPMG have compared US dollar revenue estimates with Australian dollar costs.

For example, Table 4-6 is sourced from *Australian Bureau of Statistics Catalogue 6302.0 - Average Weekly Earnings, Australia, Nov 2014, TABLE 10I. Average Weekly Earnings, Industry, Australia (Dollars) - Original - Persons, Total Earnings*.² These figures are clearly in 2014 Australian dollars and serve as the basis for KPMG's estimate of 'wage premium' in Table 4.7.

KPMG should make it clear what units are being used, what exchange rates have been assumed and where necessary make corrections.

https://www.worldbank.org/content/dam/Worldbank/GEP/GEPcommodities/GEP2015b_commodity_Apr2015.pdf;

http://www.worldbank.org/content/dam/Worldbank/GEP/GEPcommodities/Price_Forecast_2015072_2.pdf;

<https://openknowledge.worldbank.org/bitstream/handle/10986/22786/CMOOctober2015FullReport.pdf?sequence=1&isAllowed=y>;

² Note that KPMG incorrectly claim that this refers to NSW weekly earnings by industry, when it is actually for Australia. The catalogue is available here:

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6302.0Nov%202014?OpenDocument>

WAGE PREMIUM

KPMG assumes that if the project goes ahead, all workers will earn mining industry average wages, whereas if the project does not go ahead, all workers will earn average Hunter Valley wages. This is not a realistic assumption, as many experienced mine workers will go on to work elsewhere in the mining industry.

From an economic perspective, KPMG assume that labour is not priced at its opportunity cost. This is contrary to standard cost benefit analysis assumptions and NSW Treasury Guidelines:

The use of resources (manpower, finance or land) in one particular area will preclude their use in any other. Hence the basis for valuing the resources used is the "opportunity cost" of committing resources; ie the value those resources would have in the most attractive alternative use ...

In certain cases, where a resource has a market price, that price may not reflect the marginal social cost of using the resource. Such cases are reasonably rare.³

Treasury goes on, specifically in relation to labour:

It can be argued that in times of unemployment the opportunity cost of labour employed on a project is less than the wage costs, and project costs and benefits should be adjusted accordingly. However, in practice such adjustments are not generally made and are not recommended.⁴

Estimating these values has not been standard practice in NSW mining assessment over many years. This has been emphasised even by consultants to the coal industry:

BCA involves the comparison of the 'with and without' project circumstances. The use of resources with and without the mine must therefore be considered. Without the mine, the resources to be allocated to the mining operation would be engaged in other uses in the economy. These are the opportunity costs of the proposed mine. Given that markets for these resources (land, machinery, labour etc.) in the Australian economy are relatively competitive and not highly distorted by subsidies and regulations, market prices reflect these resources opportunity costs.⁵

³ (NSW Treasury 2007) page 44–45

⁴ Op cit, page 48

⁵ (Bennett 2011) p2

The standard assumption of prices being equal to opportunity cost, including wages, should be applied here and KPMG's results should be corrected to omit this \$104.3 million claimed benefit.

EXTERNAL COSTS

KPMG attempts no quantification of external costs other than greenhouse gas emissions. While this may be necessary due to data limitations, KPMG do not consider any degree of uncertainty around any environmental impact.

For example, KPMG identify that threatened species will be impacted, but claim that impacts on ecology will be negligible due to contribution to an offset fund. They do not make it clear to readers that there is considerable debate in the ecology literature as to whether offset programs actually do compensate for such impacts.⁶ If they do not, then this cost will be borne by the community and the value of the project will be overstated.

Another example is noise. Although noting that noise levels will be similar to current levels, KPMG fail to compare this to the baseline scenario of no extension to the mine. Even if noise levels from the extension are similar to current levels, this is much higher than would be the case if the mine finishes production in 2018 and there is no mine noise for the following 20 years. This cost will be borne by the community and ignoring it serves to overstate the value of the project.

ECONOMIC IMPACT ASSESSMENT

KPMG provide estimates of changes to value added and employment, based on a computable general equilibrium (CGE) model. No information is provided as to the data that was put into the model, nor the assumptions that the model is based on. There are various types of CGE model, but no discussion is provided as to which type has been used here.

One result that should be explained is the estimate that the project will increase mining employment in the wider NSW mining industry by a greater amount than in the local area. This is counterintuitive as the project will compete with other NSW mines for labour, other inputs and sales. Other CGE models of coal projects have shown a reduction in mining employment outside of the project.⁷

⁶ see for example (Bekessy et al. 2010)

⁷ see for example (Fahrer 2015)

Economic models are easily manipulated by their users and their results depend on the data and assumptions behind them. Decision makers should place little faith in modelling results that do not have transparent explanations of the model's inputs and assumptions.

CONCLUSION

There are serious flaws in KPMG's economic assessment of the Rix's Creek project. The lower coal price alone makes the financial and economic viability of the project questionable. If the project is financially marginal, management will have strong incentive to cut corners on safety and environmental standards, as well as reducing community contributions.

The confusion as to whether key results are in US dollars or Australian dollars makes the analysis difficult to verify. Furthermore, the analysts' approach to wages is unorthodox and serves to overstate the value of the project. The assumption that all external costs will be perfectly compensated for is unrealistic and also overstates the value of the project.

The project poses considerable potential external costs on the local community and should be rejected unless a strong case for economic net benefit to the NSW community can be demonstrated.

Bibliography

- Bekessy, S.A. et al., 2010. The biodiversity bank cannot be a lending bank. *Conservation Letters*, 3(3), pp.151–158. Available at: <http://doi.wiley.com/10.1111/j.1755-263X.2010.00110.x> [Accessed March 7, 2012].
- Bennett, J., 2011. Maules Creek Coal Project Economic Impact Assessment: A review. *Research Evaluation*. Available at: [https://majorprojects.affinitylive.com/public/d70ab9717ed8449eafa6b1e7d8e4cea5/Appendix G Bennet Peer Review_lowres.pdf](https://majorprojects.affinitylive.com/public/d70ab9717ed8449eafa6b1e7d8e4cea5/Appendix%20G%20Bennet%20Peer%20Review_lowres.pdf).
- Fahrer, J., 2015. *Carmichael coal and rail project: Economic Assessment. Expert Report by Jerome Fahrer*, Expert report to the Queensland Land Court in the matter Land Services Coast and Country & Anor ats Adani.
- NSW Treasury, 2007. *NSW Government Guidelines for Economic Appraisal*, Office of Financial Management: Policy & Guidelines Paper.

Hamish Aiken

From: system@affinitylive.com on behalf of John L Hayes <jlhayes@bigpond.com>
Sent: Thursday, 3 December 2015 1:26 PM
To: Hamish Aiken
Cc: Howard Reed
Subject: Submission Details for company Correct Planning & Consultation for mayfield Group (org_object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: John L Hayes
Organisation: Correct Planning & Consultation for mayfield Group (convenor)
Govt. Agency: No
Email: jlhayes@bigpond.com

Address:
117 Ingall St

Mayfield East, NSW
2304

Content:
Correct Planning and Consultation for Mayfield Group

To NSW Planning.

http://majorprojects.planning.nsw.gov.au/page/development-categories/mining--petroleum---extractive-industries/mining/?action=view_job&job_id=6300

Re: Objection to Rix's Creek Mine Expansion

Correct Planning and Consultation for Mayfield Group (CPCFM) was established in 2010, and has about 500 members and supporters.

Our members have real concerns about Due Process with regard to Planning; Development Applications; and about Cumulative Impacts that relate to:

Climate and Environment;

Biodiversity;

Traffic Movement - Road, Rail and Ship;

Dust and Health and Pollution.

In relation to the proponent's submission for the proposed expansion of the Rix's Creek Mine we note:

1. The expansion will lead to Additional 3 million tonnes of coal per year down though the rail lines and exported through the Port of Newcastle, until 2038;

We already know that the Rail lines from all the coal mines in The Hunter, Liverpool Plains and Ulan etc to the Newcastle Port are extremely congested - so much so that the coal mines and ARTC are trying to force passenger trains off the lines. They object to new passenger services; and in some cases call for Railway Stations to be closed.

The Station at Lochinvar is a case in point. Coal trains (loaded and unloaded) go though Lochinvar every 8 minutes. There is a brand new subdivision "Huntlee" just being opened up very close to Lochinvar - with no public transport services. It is expected that within a few years Huntlee will have a brand new population of 20,000 to 30,000 people; so they will need a good Passenger Rail service, and a Railway Station nearby

3 million pa extra tonnes of coal from Rix's creek means an extra 25,000 coal wagons, made up into an extra 277 extra loaded trains, or an extra 555 loaded and unloaded train journeys pa.

This proposed expansion cannot be looked at in isolation.

2. There has been no recognition of the cumulative impact on air quality and health in the Hunter region;

3. There has been poor community consultation - no regional people have been informed of the project assessment;

4. There has been no commitment to cover coal wagons;

Or

to ensure better rail transport practices to achieve better Industrial Hygiene on the coal trains to prevent overloading, coal being carried

on the outside of the wagons, including on the Wings, The Platforms and the Bogies;

And

to ensure no carry back coal is carried on the unloaded wagons - going back to the mine;

5. The proposed Increase in coal production will come at the time when the world is trying to cut greenhouse gas emissions, in International meetings at Paris occurring now.

Refusing this application would be a good opportunity to wind back coal production in the Hunter, and move towards transitioning to renewables;

6. There is a very poor assessment of cumulative impacts on the Upper Hunter environment;

7. The proposed expansion will threaten the Squirrel Glider and other critically endangered ecological community in this area, and this impact has been poorly assessed;

8. No biodiversity offset areas have been identified, offered or assessed by the proponent;

9. The proposed expansion will have an increased impact on Rix's Creek, and there has been little or no assessment of this;

And a very poor assessment of surface and ground water impacts has been done.

10. The proposed expansion will leave a 243 ha final void in the landscape.

This is unacceptable cost shifting onto the environment and the community.

11. There must be provision in the final landscape design for:

Any void to be filled;

And

The full costs of such remediation must be covered in a Remediation bond.

A brief background for this proposal follows:

Background

Bloomfield is small Australian company with an underground mine at East Maitland and Rix's Creek open cut & underground close to Singleton

Rix's Creek Mine covers 1,818 ha - 5km NW Singleton

Current approval to June 2019, operating since 1990, plan to extend life of mine to 2038

Small operation producing 1.5mtpa thermal and coking coal; extension aims to increase production to 4.5mtpa

Open cut has high strip ratio 10:1, large area of land needed to dump overburden

Bloomfield has long term contracts with Japan, Korea and Taiwan

Main justification for the Rix's Creek expansion is that Bloomfield Mine at East Maitland will be depleted over next 10 yrs.

However it should be noted that Bloomfield recently purchased the adjacent Integra open cut that has been in care & maintenance (non operational) since last year.

So, probably the Main Justification offered by the Proponent is now in tatters

John L Hayes 3 rd December 2015

Convenor

Correct Planning and Consultation for Mayfield group (CPCFM)**

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117 INGALL ST

MAYFIELD EAST NSW 2304

** CPCFM was established in 2010, and has about 500 members and supporters.

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Submission: Online Submission from company Correct Planning & Consultation for mayfield Group (org_object)

https://majorprojects.affinitylive.com/?action=view_activity&id=133235

Submission for Job: #6300 Rix's Creek Extension Project

https://majorprojects.affinitylive.com/?action=view_job&id=6300

Site: #2884 Rix's Creek Coal Mine

https://majorprojects.affinitylive.com/?action=view_site&id=2884

John L Hayes

E : jlhayes@bigpond.com

Submission on the Rix's Creek Continuation Project

December 2015



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Healthy planet, healthy people.

DEA Scientific Committee

Prof Bob Douglas AO
Prof David de Kretser AC
Prof Robyn McDermott
Prof Hugh Possingham
Dr Rosemary Stanton OAM

Prof Stephen Boyden AM
Prof Dave Griggs
Prof Stephen Leeder AO
Prof Peter Newman AO
Prof Lawrie Powell AC
Dr Norman Swan

Prof Peter Doherty AC
Prof Michael Kidd AM
Prof Ian Lowe AO
Prof Emeritus Sir Gustav Nossal AC
Prof Fiona Stanley AC

Doctors for the Environment Australia is an independent, self-funded, nongovernment organisation of medical doctors in all Australian States and Territories. Our members work across all specialties in community, hospital and private practices. We work to prevent and address the diseases – local, national and global – caused by damage to our natural environment.

We are a public health voice in the sphere of environmental health with a primary focus on the health harms from pollution and climate change. Our submissions, including this one are prepared by highly qualified public health experts.

Doctors for the Environment Australia (DEA) opposes the approval of the Rix's Creek continuation on the grounds that the area, and in particular the inhabitants of Camberwell and Singleton already suffer high levels of particulate air pollution and the extension of mining will exacerbate the probability of respiratory harm in a region with many existing coal mines and poor air quality.

New health research on air quality

Since the NSW EPA adopted the $30\mu\text{g}/\text{m}^3$ annual standard for annual average PM_{10} new research on the health effects of air pollution has been published which indicates this standard is inadequate.

Research on Children

The lung growth of children was studied in cohorts in California and published in March 2015.¹ It showed that improvements in air quality in Southern California were reflected by improved lung function in cohorts of children followed over time. Lung growth over 4 years as measured by FEV1 was 65.5ml better for each $8.7\mu\text{g}/\text{m}^3$ decline in annual average PM_{10} exposure. $8.7\mu\text{g}/\text{m}^3$ was chosen as this was the median decline in pollution over the study period.

This research included adjustment for tobacco smoke exposure, socioeconomic factors, asthma, and indoor exposures, so the observed differences are highly likely to be caused by the improved ambient air quality. The policy implications from this research are to strengthen the evidence base for the introduction of an annual criterion standard for PM_{10} , at a level of $20\mu\text{g}/\text{m}^3$.

The recommended conditions do not provide adequate protection for the respiratory health of children living in Singleton North and in Camberwell.

Research on lung cancer

Cancer of the adenocarcinoma sub type is the only lung cancer to occur in a substantial number of non smokers. The incidence has been shown to be associated with the coarse fraction $PM_{2.5-10}$ more strongly than with $PM_{2.5}$ (Air pollution and lung cancer in 17 European cohorts: prospective analysis from the ESCAPE study²). The hazard ratio was a statistically significant 1.22 for each $10\mu g/m^3$ of PM_{10} while the association with $PM_{2.5}$ was not statistically significant.

These two pieces of recent research on children and on lung cancer illustrate a fundamental mistake in the air quality section of the EIS, which asserts that PM_{10} is only important as a surrogate for $PM_{2.5}$ when in fact PM_{10} has serious health impacts as an air pollutant.

Existing air quality

The standard for ambient air quality in residential areas is for daily PM_{10} to exceed $50\mu g/m^3$ on no more than 5 days a year. The EPA monitor at Camberwell has recorded 23, 36, and 12 exceedances over the years 2012 to 2014. At Singleton NW there have been 30, 28 and 6 exceedance days over the same years. There has not been a day with less than 5 exceedances since the record began.

The NSW EPA incorrectly calls Singleton NW a “diagnostic” station, alleging that the NEPM standards do not apply in that location. However as this station is located only 600m from a suburban residential area we do not accept this assertion. These results show that people, including children, in residential areas are already being exposed to harmful levels of PM_{10} . There are serious implications for both operators and governments if this health hazard is not removed. If this situation cannot be alleviated the implication is that there should be no new mines and furthermore mines adjacent to this area should be closed as soon as current approvals expire.

Blast plumes not addressed

Neither the assessment report nor the consent conditions address the problem of blast plumes. These toxic plumes result from incomplete reactions in Ammonium Nitrate and Fuel Oil (ANFO) blasts and can contain high levels of nitrogen dioxide which is acutely toxic, causing respiratory irritation, pulmonary oedema and even death within a few hours of exposure. Blast plumes sometimes travel rather than dispersing, and in recent years a number of workers at Mt Thorley

were hospitalised after a plume travelled 3km from the Warkworth mine. A similar blast plume asphyxiated miners in QLD after travelling 6km from the blast site. This problem remains a public safety hazard, and has not been addressed. The movement of blast plumes is unpredictable, and allowing ANFO blasting within 3Km of houses in Singleton and 4 Km of houses in Camberwell shows reckless disregard for public safety.

Conclusion

Approval of this mine expansion is inconsistent with the protection of the health of people living in Singleton and Camberwell due to increased exposure to particulates in the PM₁₀ class, and the risks from blast plumes.

References

¹ Gauderman, Association of improved air quality with lung development in children. New England Journal of Medicine, 2015; 372:905-13

² Raaschou-Neilsen, Air pollution and lung cancer in 17 European cohorts: prospective analysis from the ESCAPE study. Lancet Oncology, 2013;14:813-22

“Reclaiming our Valley”

Hunter Communities Network

PO Box 14 Singleton 2330

Hamish Aiken
Major Project Assessment
Department of Planning & Environment
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Sydney NSW 2001

Submission of Objection Rix’s Creek Extension Project SSD 6300

The Hunter Communities Network (HCN) is an alliance of community based groups and individuals impacted by the current coal industry and concerned about the ongoing rapid expansion of coal and coal seam gas exploration and mining in the region.

HCN objects to the Rix’s Creek Extension Project (the extension) for the following reasons:

1. Poor assessment of environmental and social impacts
2. Poor air quality in the area already exceeds national standards
3. Cumulative noise impacts have significant health and social impacts
4. Proposed 243ha final void
5. No assessment of cumulative impacts on groundwater and surface water
6. Lack of biodiversity offset strategy
7. Poor community consultation
8. Poor justification for the extension

HCN considers that the current approval for open cut operations at the Rix’s Creek Mine until 2019 is an appropriate time to cease cumulative environmental impacts in this area of the Hunter. The economic justification that the extension is needed to absorb jobs from the depletion of the Bloomfield Ashtonfield Colliery is not appropriate in the long-term.

This timing should be used by the NSW Government to encourage jobs growth in diversified industries in the Hunter region.

The Rix’s Creek underground operations have approval to 2027. This will allow job continuity and ongoing production of coal royalties. Bloomfield has also recently purchased the open cut at Integra Mine directly to the north. This will also allow for a smoother transition for employees.

The expectation that all existing coal projects in the Hunter can continue to expand with no limits until all available coal measures are extracted is unsustainable and irresponsible in a world seeking to limit greenhouse gas emissions.

1. Poor assessment

The environment assessment report (EA) is very limited in the level of information provided particularly in relation to cumulative impact.

The Rix's Creek Mine is in an area of high intensive mining with 13 large opencut and underground operations within a 10km radius.

The EA attempts to present a minimal environmental impact by contending that other mines nearby are larger with a larger environmental footprint. The lack of cumulative impact assessment in the context of these large footprints particularly for loss of remnant vegetation, groundwater drawdown and final voids, surface water impacts and loss of Aboriginal cultural heritage is a key failing of the EA.

The ongoing social and health impacts through increased cumulative dust and noise generation and subsequent loss of community through voluntary property acquisition have not been adequately assessed.

This area of the Hunter has been continuously emptied out of rural residents and farming activity since the rapid expansion of large opencut mining operations. The expectation that Rix's Creek opencut would cease in 2019 gave some security to remaining rural communities in the area.

The health and social impact of the extension has not been adequately assessed. The noise and dust models do not appear to include properties in Camberwell village which is closer to the extension than some 'receptors' identified in figures in the EA. Various figures partially cover Camberwell village with a key eg figures 11-3, 11-5, 11-7, 11-9, 11-11, 11-13, 12-1, 12-3.

HCN considers this to be an attempt to disregard the residents of Camberwell village whether in private property or mine owned acquisitions. The cumulative impact of mining on Camberwell village has not been assessed.

Whether properties have acquisition rights from other mines is inconsequential in regard to cumulative health impacts from mine dust and noise. Resident may be coping with impacts from one mine but the expectation that further cumulative impact from neighbouring sources can be acceptable is not reasonable and socially unjust.

The NSW government has a responsibility to protect its citizens from the health impacts of intrusive dust and noise.

HCN does not accept the economic assessment that the benefits of the extension outweigh the environmental costs. Cumulative impact needs to be assessed in this analysis, particularly in relation to the proposed final void.

We do not accept the conclusion in the EA that *‘As the impact of individual factors of the project are minimal, no significant cumulative impact is anticipated’*¹ This is because cumulative impact has not been adequately assessed.

2. Poor Air Quality

The Upper Hunter Air Quality Monitoring Network has measured regular exceedances of the national standard for PM₁₀ at the regional monitors near the Rix’s Creek Mine. This has not been adequately addressed in the EA for the extension or within the model used to predict dust dispersion in the area.

The cumulative impact of dust generation in this area of the Hunter, with 13 large scale opencut mining complexes within a 10km radius, is significant and is not being addressed at any level of government.

A record of recent air quality alerts reporting PM₁₀ levels that exceed the national air quality standards is attached as Appendix 1. The response by government to this regular poor air quality measurement appears to be non-existent. The extension proposal will continue to exacerbate this serious health problem.

The very high strip ratio of 10:1 at the Rix’s Creek Mine causes excessive movement of overburden and associated dust generation. The management of overburden transport and dumping from this operation will continue to cause poor air quality in the region.

The recent Department of Planning & Environment assessment report for the proposed extension of the Mt Owen Mine has identified that further information is required to inform a full and proper assessment of the potential air quality impacts of the project on nearby residential receivers.

HCN maintains that the EA for the Rix’s Creek extension does not adequately address cumulative air quality impacts of these proposed mine expansions that move towards each other. Mt Owen proposes to expand to the south east while Rix’s Creek is proposing to expand to the north west.

This will have a significant cumulative impact on the village of Camberwell which currently suffers from regular air quality exceedances. Camberwell village appears not to be identified as ‘sensitive receptors’ or included in the dust assessment for the expansion. This is a major omission.

The ongoing exceedance of national air quality standards in the vicinity of Rix’s Creek Mine needs to be addressed. If mining ceases in 2019 under the current approval, it is likely that the regional levels of dust generation would fall. This scenario has not been assessed as a base case.

¹ EA Main Report Executive Summary pxiii

The assessment predicts that adverse blast fume impacts could occur beyond the site boundary. The Rix's Creek Mine operation has a poor record of blast management with particular problems over the past year.

The cumulative impact of blasting from surrounding opencut operations has not been adequately assessed. The health impacts from regular and consistent blasting activities in the Hunter coalfields have not been assessed and need to be considered.

The assessment of greenhouse gas emissions from the extension does not include consideration of the cumulative impact of increased emissions from the Hunter region. While the consultant maintains that '*Climate change issues are unlikely to be resolved by dealing with individual Projects*'² the cumulative impact of fugitive emissions, diesel consumption, blast emissions and power generation from the coal industry in the Hunter region is considerable and should be included in assessment of proposed expanded mining activities.

Any additional emission of greenhouse gases at a time when world governments are attempting to reduce impacts of climate change is irresponsible and cannot be justified.

3. Cumulative Noise

HCN is concerned that the result of the noise assessment for the extension is that the exceedance of Project Specific Noise Criteria is likely during adverse weather conditions for all Noise Assessment Groups.

If the proposed mitigation of these noise impacts is to cease operation then this needs to be considered in the economic assessment of the proposal.

The impacts of intrusive noise from the Rix's Creek Mine when combined with noise from nearby operations has been significant. The EA identifies noise sources from 6 nearby mines: Integra, Mt Thorley Warkworth, Hunter Valley Operations, Ravensworth, Ashton and Mt Owen.

Integra, being the closest, is identified as having the most potential for cumulative noise impact. This impact has lessened while Integra has been in care and maintenance for the past year.

However, the recent purchase of Integra opencut by Bloomfield indicates that the operation is likely to be restarted. HCN considers this should occur as a replacement for Rix's Creek production after 2019 thus alleviating cumulative intrusive noise production.

The noise assessment appears to not include residences in Camberwell village. While Noise Assessment Group N covers Camberwell (Fig 12 – 1 p 138) – no properties from the village are identified as sensitive receptors. There appears to be no explanation for this omission.

Camberwell village has experienced lower noise impacts since Integra has been in care and maintenance. The extension will move in a north westerly direction towards Camberwell village. HCN considers that the assessment of cumulative noise impacts on residences within the village must be carried out.

² EA Main Report p290

The assessment of Low Frequency Noise (LFN) for the extension has not used the requirements of the Industrial Noise Policy ie C-weighted minus A-weighted with a modifying factor of 5 dBA if the difference is 15dB or more.

HCN strongly objects to the use of a night time limit of LCeq 60dB and a day time and evening limit of 65dB. These criteria are unacceptable because they will cause significant health impacts. The assessment of LFN predictions for the extension needs to be redone. We consider that predicted noise impacts will be far greater if assessed properly.

The assessment of sleep disturbance will not be correct because of the criteria used to predict LFN.

HCN considers that the assessment of intrusive noise impacts and loss of amenity caused by the extension is very unsatisfactory and does not provide accurate information on which to fully assess the social impacts of the proposal.

We have submitted strong objections to the proposed changes to the Industrial Noise Policy and consider that the impacts on health from LFN and sleep disturbance in the Hunter Region have not been adequately assessed or monitored.

The current monitoring requirements for intrusive noise emissions from large opencut mining operations are inadequate and need to be changed to real time monitoring reporting, as proposed by the Planning Assessment Commission in the approval of the Warkworth Mine expansion.

HCN considers that noise emissions from this mine are a key issue that have not been adequately addressed in the EA.

4. Final Void

There has been no assessment of the cumulative impact on groundwater and surface water sources in the Hunter region caused by the retention of multiple final voids in the landscape. The long term drawdown of groundwater sources, increased volumes of highly saline water held in open pits and potential large scale contamination of land and water in the region has not been assessed.

This is a major failure of the NSW planning system.

HCN objects to the proposal to leave a 243 ha final void in the landscape on this site. The high overburden strip ratio for this mine should leave ample material to backfill all areas. There has been no valid justification provided for the retention of a final void.

The discussion of the final void in the EA Main Report is contradictory and confusing:

25.6.7 Final Void³ -

'Create a final void of relatively low safety risk as the depression grades can be climbed safely by foot ie no remaining highwall'

'The highwall would also be rehabilitated..... and revegetated with species that are appropriate for its steepness, aspect and water retention capabilities.'

'Appropriate measures would be used to limit access to steeper areas around the final void to restrict cattle, pedestrian and vehicle access.'

The proposed final landform for the Rix's Creek Mine site has been left for future consideration. This means that no adequate information has been supplied on which to develop appropriate conditions of approval for mine closure.

Therefore, this aspect of mine approval will be impossible to regulate.

HCN expects that climate change impacts by 2038 will probably inhibit the success of mine rehabilitation. The possibility of future productive land use on mine sites after this time is highly speculative and needs to be more closely considered now – not cost shifted onto future generations.

The final land form approved for mining completion in 2019 will have a much better chance of success. HCN considers this to be a very strong argument for not approving the extension.

5. Surface Water & Groundwater Impacts

The loss of 22% of Rix's Creek catchment area, while the mine progresses, is a significant impact. There is no assessment of the cumulative loss of catchment area to the Hunter River across the coalfield area.

The capture of runoff from the proposed new large overburden emplacement to prevent pollution of Unnamed Tributary to Hunter River (Dead Man Gully) needs to be quantified in relation to downstream water use. This gully provides water storage on downstream properties. The management of polluted mine water and loss of natural flows in this part of the catchment has not been adequately assessed.

The management of large storm events such as the 2007 'Pasha Bulka' storm and recent hail storms and heavy localised rain events is not clearly assessed.

HCN does not support the conclusion that the extension will have insignificant impact on Hunter River flows because there has been no cumulative impact data provided.

In regard to the groundwater assessment HCN does not accept that an independent peer review was conducted. Peter Dundon of Dundon Consulting conducts groundwater assessments for many mining companies in the Hunter Region. This consultant has a clear conflict of interest and cannot be considered to be independent.

³ EA Main Report p 307

This highlights the community's concern about the need for an independent group of water experts who do not work for the coal mining industry.

HCN does not support the conclusion that there are no Groundwater Dependent Ecosystems (GDEs) impacted by the extension. The presence of riparian vegetation such as Swamp Oak-Weeping Grass grassy riparian forest is an indication of GDEs in the area. There appears to be no consideration of GDEs in the ecological assessment. Riparian vegetation on intermittent streams is dependent on groundwater in dry times.

The mine would require additional groundwater licences during the life of the mine with a predicted peak inflow of 305 ML/year and a current total groundwater licence of 100ML/yr.

There appears to be no discussion about the availability of these additional licences and where they may be obtained.

The predicted level of drawdown over 100 year period includes residual alluvial drawdown outside the mine lease boundary. There appears to be no cumulative assessment of predicted longterm drawdown from the neighbouring mines including Integra and Ashton underground operations.

HCN does not accept that the groundwater impacts are minimal in the context of regional cumulative impact.

6. No Biodiversity Offset Strategy

The assessment of ecological impacts is very poor. HCN is concerned that figures appearing in the Main Report (Figs 13 – 1, 13 -2, 13- 3) have a hatched area labelled as investigation area. There appears to be no explanation about this area, what was investigated or how.

The Ecological Assessment Report (App I) (the report) does not include figures with the same investigation area outlined. If this is a significant area where biodiversity surveys were conducted then it is highly inadequate because it does not include the main forested remnant on the mine site.

HCN has serious concerns about the adequacy of the ecological assessment and the lack of biodiversity offset arrangements. No areas of land have been identified or assessed to provide offsets for the loss of threatened ecological communities or threatened species habitat.

It is interesting that the ecology consultant points out that '*there has been no comprehensive and thorough assessment of native fauna in the Hunter Valley*'⁴ This observation confirms the community's concerns about the integrity of the planning system and assessment process in NSW.

The report uses no baseline data (2.3.4), though there have been a number of assessments conducted on this site over a number of years. The report also claims to make no assumptions in

⁴ Bell, Stephen AJ October 2015 Ecology Report Appendix I p 12

relation to the proposed development and its impact on flora and fauna (2.3.6). However, assumptions are made in relation to assessments undertaken for the Upper Hunter Strategic Assessment (UHSA) process that are contradictory to previous vegetation assessments.⁵

HCN is concerned that flora surveys were impacted by cattle grazing on the site during the entire time of the ecological assessment. This has prevented a systematic targeted survey for threatened orchids across the whole site. The issue of the rating of derived native grasses using the UHSA determination is problematic in the failure to recognise regeneration capacity.⁶

The key failure of the ecology assessment is the reliance on information provided to the UHSA that does not appear in the EA. These are two separate processes. HCN does not support the use of a process that has not yet been finalised and is not appropriate at the single project scale.

While the Director Generals Requirements (DGRS) allow for the use of this approach, it is inconsistent with the approach taken for other mining projects in the Hunter. The UHSA has not been completed and should not be relied on the assessment of biodiversity impacts of individual projects.

The Biodiversity Certification Assessment Methodology (BCAM) has been used for this project when it is a regional process used for strategic assessments. The Bio Banking Assessment Methodology (BBAM) has a different set of rules to BCAM in regard to derived native grasses.

It is not appropriate for the report to conclude that 1400 credits have been calculated using BCAM.

The NSW Biodiversity Offset Policy for Major Development requires the BBAM to be used. This inconsistency demonstrates a key failure of the NSW planning system.

In regard to fauna surveys, only three targeted surveys were conducted, for the Squirrel Glider, Phascogale and Green-thighed Frog. HCN considers this survey effort to be inadequate

The Large-footed Myotis has suitable habitat on site with farm dams and riparian vegetation on suitable stream order. There are records of this species nearby the study area. HCN does not agree with the report that there is no riparian vegetation on the site.

There is also suitable Koala habitat in the Red Gum grassy open forest. Targetted surveys should have been conducted for both these species.

The report fails to adequately identify all endangered ecological communities (EECs). Spotted Gum Ironbark forest should be identified as 'Central Hunter Ironbark-Spotted Gum-Grey Box Forest in the New South Wales North Coast and Sydney Basin Bioregions' as listed under the

⁵ Ibid p18

⁶ Ibid

Threatened Species Conservation Act 1995 (TSC Act). This community should have been subject to a 7 Part test and the usual considerations under the TSC Act.

The 7 Part Test for the Squirrel Glider needs a clearer assessment of connectivity. The loss of 17.6 ha of habitat should have been assessed against the extent of the habitat in the study area.

HCN is concerned that the loss of 5.8ha of Central Hunter Valley Eucalypt Forest and Woodland CEEC has not been adequately assessed in relation to loss in the local context and reduction of extent on a regional scale.

The cumulative loss of habitat values in this part of the Hunter is significant and has not been considered

The failure to identify or assessed any biodiversity offset areas in the report leaves the biodiversity impacts unmitigated. The calculation of 1400 biodiversity credits to be retired in the UHSA is unacceptable and inconsistent with the approach taken for the assessment of impacts at other mines.

HCN considers the cumulative impact on biodiversity values in the Hunter region from mining operations is significant and has not been adequately assessed for this project.

7. Poor community consultation

The broader community consultation for the extension was entirely inadequate. The DGRS identify that during the preparation of the EA the proponent must consult with community groups.

The proponent has relied solely on the website, contact with directly affected landholders and the Community Consultative Committee (CCC) for consultation during the development of the EA.

Regional community representative groups such as HCN were not consulted. This is inappropriate and a failure to meet the requirements of the DGRs

8. Poor justification

HCN considers that the justification for the extension based on the depletion of the Ashtonfield Mine and the supply of long term contracts to Japan and recently established long term contacts with Korea and Taiwan is not a valid reason.

These contracts are a business risk entered into by Bloomfield with no secure basis of supply. The recent purchase of Integra opencut and the ongoing production from the Rix's Creek underground should be able to meet these commitments.

The proposal to mine a further 32 tonnes of coal up until 2038 by causing further cumulative impact on air quality, noise and blasting emissions, leaving a 243 ha void with a groundwater drawdown for over 100 years and destroying critically endangered ecological communities with

no identified biodiversity strategy is a cost shifting exercise onto current and future generations of Hunter communities.

The cumulative increase of greenhouse gas emissions has not been adequately assessed and will leave a long term legacy that is far more costly than any perceived benefit from the mine.

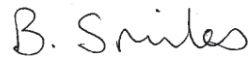
The costs benefits analysis for the extension does not adequately assess the social and environmental costs of the project. It cannot be justified as an ecologically sustainable development.

Conclusion

HCN strongly objects to the proposed Rix's Creek extension. The assessment of environmental impacts is very poor and does not provide adequate information on which to make a balanced decision.

HCN recommends that the extension be rejected on the grounds that it cannot be justified

Yours sincerely



Bev Smiles
Convenor

Appendix 1

Air Quality Alerts in late 2015 from regional monitors near Rix's Creek Mine

Air quality alert: Camberwell PM10 levels exceeded national air quality standards Wed 02/12/15 00:00

Air quality alert: Singleton NW PM10 levels exceeded national air quality standards Wed 02/12/15 02:00

Air quality alert: Maison Dieu PM10 levels exceeded national air quality standards Wed 02/12/15 01:00

Air quality alert: Camberwell PM10 levels exceeded national air quality standards Tue 01/12/15 21:00

Air quality alert: Singleton South PM10 levels exceeded national air quality standards Fri 27/11/15 00:00.

Air quality alert: Singleton NW PM10 levels exceeded national air quality standards Fri 27/11/15 00:00

Air quality alert: Mount Thorley PM10 levels exceeded national air quality standards Fri 27/11/15 00:00

Air quality alert: Maison Dieu PM10 levels exceeded national air quality standards Fri 27/11/15 00:00

Air quality alert: Singleton PM10 levels exceeded national air quality standards Fri 27/11/15 00:00

Air quality alert: Camberwell PM10 levels exceeded national air quality standards Thu 26/11/15 23:00

Air quality alert: Singleton PM10 levels exceeded national air quality standards Thu 26/11/15 20:00

Air quality alert: Singleton South PM10 levels exceeded national air quality standards Thu 26/11/15 18:00

Air quality alert: Mount Thorley PM10 levels exceeded national air quality standards Thu 26/11/15 12:00

Air quality alert: Singleton NW PM10 levels exceeded national air quality standards Thu 26/11/15 10:00

Air quality alert: Maison Dieu PM10 levels exceeded national air quality standards Thu 26/11/15 07:00

Air quality alert: Camberwell PM10 levels exceeded national air quality standards Wed 25/11/15 23:00

Air quality alert: Mount Thorley PM10 levels exceeded national air quality standards
Sat 21/11/15 01:00

Air quality alert: Singleton NW PM10 levels exceeded national air quality standards Sat 21/11/15 00:00

Air quality alert: Camberwell PM10 levels exceeded national air quality standards Sat 21/11/15 00:00

Air quality alert: Mount Thorley PM10 levels exceeded national air quality standards Fri 20/11/15 22:00

Air quality alert: Singleton NW PM10 levels exceeded national air quality standards Fri 20/11/15 19:00

Air quality alert: Camberwell PM10 levels exceeded national air quality standards Fri 20/11/15 06:00

Air quality alert: Camberwell PM10 levels exceeded national air quality standards Thu 19/11/15 19:00



Hunter Environment Lobby Inc.

PO Box 188
East Maitland 2323

1st December 2015

Rix's Creek Extension Project Submission of Objection

Hunter Environment Lobby (HEL) is a regional community-based environmental organisation that has been active for well over twenty years on the issues of environmental degradation, species and habitat loss, and climate change.

HEL has particular interest in biodiversity and water management issues in the Hunter Region and has held positions on the Hunter River Management Committee and on the Hunter and Paterson Environmental Water Advisory Group. HEL also has a position on the Upper Hunter Air Quality Monitoring Network Advisory Committee.

HEL would like to make a number of points in opposing this expansion, they are concentrated on the issues of cumulative impacts on biodiversity, air quality, noise, ground and surface water.

The impacts on social amenity by the change in operations are important also, as well as the proposed impacts on Aboriginal cultural heritage.

The cumulative impacts are concentrated even further by realizing that there are eighteen coal mines within a ten kilometer radius, and the size of the final void adds to these impacts as a multiplier effect.

HEL also sees that there is no justification for this mine extension to provide jobs, royalties and product for contracts, as this company has recently acquired the nearby Integra open cut mine.

DGR's

In the DGR's, HEL sees that there is to be a progressive rehabilitation of the site. HEL sees that leaving a final void of the size proposed, that is 243 ha is not meeting these requirements, and we wish this issue to be highlighted in responses by both the Department of Planning and the proponent.

The DGRs also require a comprehensive biodiversity offset strategy. This has not been provided as outlined below.

An assessment of reasonable and feasible measures to mitigate greenhouse effects is also a DGR – we find this proposal to directly counter this requirement.

Cumulative Impacts

Biodiversity:

In the EIS Appendix 1 Ecology Report, states that, ‘the Singleton-Muswellbrook portion of the Hunter Valley currently supports approximately 18 active coal mines, all situated within a predominantly agricultural landscape. Current operations for Rix’s Creek lie adjacent to the north and south-east of the Project Area, while Camberwell and Mt Owen mines lie further to the north and north-west. Collectively, the cumulative impacts of all of these mines on biodiversity are substantial, involving the loss of habitat, breeding and feeding sites, and reduced options for the dispersal of offspring. Relative to the larger mines in the district, the extent of habitat loss for flora and fauna under the Project is minimal.¹

HEL maintains that this statement does not account for those very same cumulative impacts, and instead, downplays the very notion of cumulative impacts. Cumulative impacts means an exponential worsening by adding, not a misguided disregard.

The cumulative loss of various threatened ecological communities and threatened species habitat in this central area of the Hunter due to recent mining activity and expansion has not been quantified. The additional disturbance of 211ha of native vegetation is not a minimal impact in the context of the scale of recent clearing undertaken for mining projects, in addition to traditional clearing for agriculture.

Every area of remnant vegetation, scattered mature trees and derived native grasses is critical habitat providing linkages and stepping stones across a significantly degraded landscape.

There has been no identification of biodiversity offset arrangements for the proposed disturbance of native vegetation and habitat values. The proposal relies solely on the calculation of biodiversity credits as part of the Upper Hunter Strategic Assessment process undertaken by the Office of Environment and Heritage.

HEL has attended a number of consultations on this process and are very concerned that it will not provide adequate outcomes for biodiversity protection or mitigation of the ongoing loss of endangered ecological communities and species habitat in the Hunter.

¹ Ecology Report for Continuation of Rix’s Creek mine p36

The lack of any information in the environmental assessment report in regard to the required comprehensive biodiversity offset strategy is a key failing.

Air Quality:

The proposal assessment fails to identify that the Upper Hunter Air Quality Monitoring Network has reported frequent exceedances of the national standard for PM₁₀ in the vicinity of the Rix's Creek project.

The monitors at Camberwell, Maison Dieu, Singleton NW and Singleton have measured air quality exceedances particularly in dry windy weather conditions.

While the assessment contends that the impacts will be moving away from Singleton, it does not identify the closer proximity to the Camberwell and Maison Dieu communities.

The cumulative impact of opencut mining operations on ambient air quality in this area of the Hunter is already excessive. The health impacts on the nearby citizens is unacceptable.

Because this project has a 10:1 strip ratio, the movement of overburden is considerable and dust levels cannot be adequately managed. The proposed expansion of the Mt Owen Mine will cause considerably increased dust production to the north of Camberwell village.

The cumulative social and health impacts of these projects have not been adequately assessed and will be impossible to mitigate.

Noise:

There are a significant number of residents impacted by noise from the current operations. The cumulative intrusive noise impacts, loss of amenity and health problems caused by sleep disturbance have not been adequately assessed.

The cumulative impact of noise from this proposal and the Mt Owen extension project have not been assessed. The social impacts on this area of the Hunter are considerable and need to be taken into account.

Water:

With ground and surface water, the scale of the drawdown, loss of base flows to the Hunter River and accumulation of highly saline water bodies in the landscape has not been adequately assessed at any level of the opencut mine approvals process in the region.

The Federal Independent Expert Science Committee has recommended against final voids. HEL strongly advises again that the Planning Department undertake an independent cumulative impact study of final voids in the Upper Hunter.

Greenhouse Gas emissions:

Notwithstanding the scale of carbon export from the Hunter region the cumulative impact of diesel consumption for mining operations, road transport of employees and train movements plus the fugitive emissions from opencut

mining operations and power station emissions is a considerable volume of annual greenhouse gas emissions from the region.

This cumulative impact until the year 2038 is not adequately assessed in the context of the total greenhouse gas emissions of the coal industry in the Hunter.

Unviable Proposal

In addition, HEL does not support the approval of any final voids on this mine site. We contend that there is limited or no knowledge of the cumulative impacts of the existing final voids approved in the Upper Hunter.

HEL maintains that if this proposal, or any other, will not generate enough income to allow for the backfilling of all voids, then the project is unviable.

The ongoing loss of critically endangered habitat, irreversible damage to water sources and broadscale landscape legacies in the form of large toxic final voids is creating an enormous environmental debt for future generations.

This cumulative impact has not been adequately assessed or mitigated for this proposed Rix's Creek mine expansion. The principles of ecologically sustainable development and inter generational equity have not been met by this project.

Sincerely,

A handwritten signature in cursive script that reads "Jan Davis".

Jan Davis
President Hunter Environment Lobby Inc.



Nature Conservation Council

The voice for nature in NSW

Department of Planning and Environment
GPO Box 39
Sydney NSW 2001
Submitted via webform

3 December 2015

Submission: Rix's Creek Extension Project (SSD 6300)

Dear Sir/Madam,

The Nature Conservation Council of NSW (NCC) is the peak environment organisation for New South Wales, representing 150 member organisations across the state. Together we are committed to protecting and conserving the wildlife, landscapes and natural resources of NSW.

The NCC objects to the Rix's Creek Extension Project (SSD 6300) on the basis that there has been an inadequate assessment of the cumulative impacts on air, noise and groundwater quality and loss. Additionally, the project would destroy almost 70 hectares of native habitat including numerous endangered ecological communities such as the critically endangered Central Hunter Valley Eucalypt Forest & Woodland. Despite its impacts on biodiversity there are no offset sites identified to account for the damage of the mine extension. Furthermore we are concerned that the project would leave a 243 hectare void that will not be sufficiently rehabilitated.

Our main concerns are outlined below.

Biodiversity impacts:

The proponent has stated *"The Project proposes to remove 17.6 ha of native vegetation, together with 52.2 ha of derived native grassland. Of this, 0.8 ha of State-listed Hunter Lowlands Redgum Forest EEC, 1.62 ha of State-listed Central Hunter Grey Box-Ironbark Woodland EEC, and 5.8 ha of Commonwealth-listed Central Hunter Valley Eucalypt Forest & Woodland CEEC will be removed. Within the context of the Project Area, NSW endangered ecological communities comprise only 1.2%, and Commonwealth-listed endangered ecological communities only 2.8%, of the 211 ha planned for disturbance"*.

Although the proponent has provided that there are endangered and threatened species and critically endangered ecological communities within the Project area and there is a required 1400 offsets credits of the project, the proponent has not provided any specific details pertaining to a biodiversity offset plan or site to account for these offset credits. The proponent has stated that "The Bloomfield group intends to provide the required offsets in accordance with the Upper Hunter Biodiversity Plan including monetary contributions to the Upper Hunter Offset Fund as calculated

through OEH calculators.”¹ The Bloomfield group must be required to outline an appropriate biodiversity offset plan and to make it available to the public for comment before any recommendation for the project’s approval is made.

A section of the Central Hunter Valley Eucalypt Forest and Woodland Critically Endangered ecological community (CHVEFW CEEC) exists in the proposed mining area as indicated by the proponent. The Central Hunter Valley eucalypt forest and woodland is a critically endangered ecological community under EPBC Act 1999 as of the 7th of May 2015² and the current version of the proponents EIS is dated 26th of October 2015. The Australian Government Department of Environment provided advice on the Central Hunter Valley eucalypt forest and woodland (21st of November 2014)³, prior to the decision concerning the CEEC status of the Central Hunter Valley eucalypt forest and woodland and prior to the final revision of the proponents EIS. The proponent has not taken sufficient action or assessment for this eventuation in their EIS; therefore, a proper assessment and referral is required by the proponent and the Australian Government’s Department of Environment to account for the CHVEFW CEEC current status. The removal of this section of the CHVEFW CEEC will set a precedent for the steady and cumulative removal of an already critically endangered ecological community in the Upper Hunter and this is unacceptable.

Air quality:

The health impacts of air pollution from coal mining and associated infrastructure are well documented. Thus far in 2015, there have been 34 PM10 24-hour exceedances in the area including nine (9) at the Camberwell station and seven (7) at the Mount Thorley station⁴. There have also been 22 hourly air quality alerts over the last month from the regional air quality stations, five (5) hourly alerts on the 25th of November 2015 and six (6) on the 26th of November 2015⁵.

An expansion of this mine within an area that already has eighteen (18) open cut mines will add to the cumulative impacts on air pollution in the Upper Hunter area and will lead to more instances of air pollution exceedances. Members of the local community should not be expected to live with such poor air quality.

¹ AECOM, “Rix Creek Mine – Continuation of Mining Project, 2015, “Vol.1 – Main Report – Part 9”, accessed at https://majorprojects.affinitylive.com/public/41b2a273bf8efdc3f7fdf54742e0eec2/16.%20Rix's%20Creek%20EIS_Main%20Report_Part%20F_%20P09.pdf, accessed on 1st of December 2015, p.177.

² Australian Government - Department of the Environment (2015). Central Hunter Valley eucalypt forest and

² Australian Government - Department of the Environment (2015). Central Hunter Valley eucalypt forest and woodland in Community and Species Profile and Threats Database, Department of the Environment, Canberra. Available from: <http://www.environment.gov.au/sprat>. Accessed 2015-12-02T11:54:55AEDT.

³ Tregurtha, J, 2014, Decision of Referral – Rix’s Creek Continuation of Coal Mining Project, Singleton, Hunter Valley, NSW (EPBC 2014/7348), Department of Environment, Canberra, https://majorprojects.affinitylive.com/public/a18d1b9299081afd522975917ae53168/30.%20Rix's%20Creek%20EIS_App%20F_%20EPBC%20decision%20letter.pdf, accessed 2nd of December 2015.

⁴ NSW Government – Dept. Of Planning and Environment, “Upper Hunter air quality monitoring network”, accessed at <http://www.environment.nsw.gov.au/aqms/upperhunter.htm>, accessed on 1st of December 2015

⁵ See Appendix A.

Mine Site Void:

Although the proponent has stated that they will rehabilitate the mined area to restore it back 'to pastures' there will still be a final unrecoverable void of 243 hectares. In addition, there will be a 10.5:1 strip ratio of overburden to coal extraction. This will produce high overburden walls and hills attributing to the air quality problems. The company has failed to sufficiently outline how the final void will be rehabilitated and managed in the long term; this must be required prior to the mine proceeding.

Groundwater:

The proponent has not provided an adequate groundwater assessment with reference to the mine water usage and changes to the water table, nor considered the cumulative impacts of the surrounding mines on groundwater levels. The water inflow data provided by the proponent is inadequate and in some cases unusual. For instance, the Pit 1 predictions state that "the Pit 1 Portal range from 150 to 800 m³ /d (550 to 290 ML/a) over the duration of mining". This suggests there is an assumption that over the duration of mining, Pit 1 will have an intake of 289 ML/a to 550 ML/a, if so this needs to be taken into account for the cumulative total water inflow numbers, as the 550ML/a would exceed the predicted 350 ML/a stated in the EIS⁶. We request that more definitive water loss prediction be provided for the project, including an assessment of cumulative water losses from the surrounding mines to be included for this project prior to its assessment.

The Nature Conservation Council is of the view that if this project were extended it would significantly impact on the biodiversity of the upper hunter and the cumulative impacts on air, water and noise must be appropriately considered. If this project were to be approved the impacts on Federally listed critically endangered ecological communities and threatened species are simply too great and it is our view that this project should not go ahead.

Please do not hesitate to contact me on 02 9516 1488 or dbarham@nature.org.au if you would like any further information.

Yours sincerely,



Daisy Barham
Campaigns Director
Nature Conservation Council of NSW

⁶ RPSGroup, 2014, "Rix's Creek Consultation of Mining Project Groundwater Assessment", available at NEW Government – Department of Planning and Environment - Rix's Creek Extension Project, https://majorprojects.affinitylive.com/public/a5939f3f0afc662998f4627a6ae43cf5/49.%20Rix's%20Creek%20EIS_App%20S_%20Groundwater%20Impact%20Assessment_Pt%201.pdf, pp.51-52

Appendix A:

Air Quality Alerts in late 2015 from regional monitors near Rix's Creek Mine, provided by the NSW Office of Environment and Heritage – upper Hunter Air quality Monitoring Network.

- Air quality alert: Camberwell PM10 levels exceeded national air quality standards Wed 02/12/15 00:00
- Air quality alert: Singleton NW PM10 levels exceeded national air quality standards Wed 02/12/15 02:00
- Air quality alert: Maison Dieu PM10 levels exceeded national air quality standards Wed 02/12/15 01:00
- Air quality alert: Camberwell PM10 levels exceeded national air quality standards Tue 01/12/15 21:00
- Air quality alert: Singleton South PM10 levels exceeded national air quality standards Fri 27/11/15 00:00.
- Air quality alert: Singleton NW PM10 levels exceeded national air quality standards Fri 27/11/15 00:00
- Air quality alert: Mount Thorley PM10 levels exceeded national air quality standards Fri 27/11/15 00:00
- Air quality alert: Maison Dieu PM10 levels exceeded national air quality standards Fri 27/11/15 00:00
- Air quality alert: Singleton PM10 levels exceeded national air quality standards Fri 27/11/15 00:00
- Air quality alert: Camberwell PM10 levels exceeded national air quality standards Thu 26/11/15 23:00
- Air quality alert: Singleton PM10 levels exceeded national air quality standards Thu 26/11/15 20:00
- Air quality alert: Singleton South PM10 levels exceeded national air quality standards Thu 26/11/15 18:00
- Air quality alert: Mount Thorley PM10 levels exceeded national air quality standards Thu 26/11/15 12:00
- Air quality alert: Singleton NW PM10 levels exceeded national air quality standards Thu 26/11/15 10:00
- Air quality alert: Maison Dieu PM10 levels exceeded national air quality standards Thu 26/11/15 07:00

- Air quality alert: Camberwell PM10 levels exceeded national air quality standards Wed 25/11/15 23:00
- Air quality alert: Mount Thorley PM10 levels exceeded national air quality standards Sat 21/11/15 01:00
- Air quality alert: Singleton NW PM10 levels exceeded national air quality standards Sat 21/11/15 00:00
- Air quality alert: Camberwell PM10 levels exceeded national air quality standards Sat 21/11/15 00:00
- Air quality alert: Mount Thorley PM10 levels exceeded national air quality standards Fri 20/11/15 22:00
- Air quality alert: Singleton NW PM10 levels exceeded national air quality standards Fri 20/11/15 19:00
- Air quality alert: Camberwell PM10 levels exceeded national air quality standards Fri 20/11/15 06:00
- Air quality alert: Camberwell PM10 levels exceeded national air quality standards Thu 19/11/15 19:00

Other alerts occurred at these monitoring sites on November 13 – 16, October 4 – 21, September 16 – 18, August 9 – 23