

Hamish Aiken

From: system@affinitylive.com on behalf of James Whelan
<James.Whelan@envirojustice.org.au>
Sent: Wednesday, 2 December 2015 10:30 AM
To: Hamish Aiken
Cc: Howard Reed
Subject: Submission Details for company Environmental Justice Australia (org_object)
Attachments: Mt Thorley Warkworth Pollution Impacts Sept 2015 EJA.pdf

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: James Whelan
Organisation: Environmental Justice Australia (Researcher and community organiser)
Govt. Agency: No
Email: James.Whelan@envirojustice.org.au

Address:
PO Box 15

Islington, VIC
2296

Content:
Environmental Justice Australia recommends that the PAC reject this application on the grounds of air quality impacts.

We have made (and attach here) detailed submissions on other proposed coal mine extensions in this part of the Hunter Valley. EPA air pollution monitoring demonstrates a clear pattern of the national air pollution standard for PM10 (coarse particles) being exceeded in the Hunter Valley. More than 90% of PM10 emissions in the Hunter are caused by coal mining. The adverse health impacts are well established.

According to the National Pollutant Inventory, PM10 emissions from Australian coal mines have doubled in the last 5 years and trebled in the last decade. Licence conditions and various emission control strategies (e.g. DustStop) are clearly failing to protect community health.

IP Address: - 1.144.96.118
Submission: Online Submission from company Environmental Justice Australia (org_object)
https://majorprojects.affinitylive.com/?action=view_activity&id=133088

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

James Whelan

E : James.Whelan@envirojustice.org.au

The Mt-Thorley-Warkworth mine and Hunter Valley air pollution



The Mt Thorley mine operates within 6 kilometres of the Bulga village in the Hunter Valley. Rio Tinto seeks to expand its operations to within 2.6km of the village by mining Saddleback Ridge which serves as a barrier between the open cut mine and Bulga. This is contrary to Rio Tinto's 2003 agreement with the NSW Government to protect Bulga and the threatened Warkworth Sands woodland. The NSW Land and Environment Court rejected the proposed extension in April 2013.

Health impacts of coal dust

1. There is no threshold below which particle pollution does not contribute to cardiovascular and respiratory ailments. Short-term exposure to elevated concentrations of PM₁₀ trigger health responses that lead to hospital admissions. Every 10 µg/m³ increase in PM₁₀ concentrations, even at levels below the national standard, causes a 1% increase in hospital admissions for respiratory disease (CAHA p.20).
2. Recent modeling by the Climate and Health Alliance¹ estimates that exposure to particle pollution from coal mining imposes a burden of \$47 million on the town of Singleton each year and \$18.3 million each year on Muswellbrook: "The communities most affected by open cut coal mining and coal-fired power generation in the Upper Hunter region and most at risk from poor air quality are the larger regional towns of Singleton and Muswellbrook, and the smaller towns of Camberwell, Warkworth, Maison Dieu, Jerrys Plains and Wybong." (CAHA p.21).
3. Community groups have urged the NSW Government to conduct a comprehensive Health Impact Assessment study in the Hunter for more than a decade, but no study has been undertaken.
4. The Upper Hunter experiences some of Australia's highest particle pollution levels. Additional sources of particle pollution pose a significant health risk and should not be approved by the NSW Government.
5. According to the NSW EPA, 87.6% of the Hunter's coarse particle pollution (PM₁₀) is caused by coal mining.² Fine particle pollution (PM_{2.5}) is caused by combustion processes including diesel locomotives and the off-road diesel vehicles used in mines.

New air pollution standards and licencing

6. The NSW Government, along with other state and territory governments and the Commonwealth, is currently varying national air pollution standards to protect community health. A stricter standard for PM₁₀ pollution is proposed (shifting from 50 micrograms per cubic metre to 40 µg/m³) for 24 hour average concentrations, not to be exceeded more than 5 times per annum.
7. The NSW EPA and industry monitor air pollution extensively in the Hunter Valley. The EPA network was expanded in 2011, in response to community concerns, and there are now 14 monitoring stations within 20km of the Mt Thorley-Warkworth mine.³
8. Daily average PM₁₀ levels recorded by the EPA at Upper Hunter monitoring sites exceeded the current national standard of 50 µg/m³ on 49 occasions during 2014. Levels above the national standard were recorded at all of the Hunter Valley's 14 monitoring stations.
9. The recommended conditions of consent are based on an interim NSW guideline of 30 µg/m³ for annual PM₁₀ average concentrations (Appendix G, p.18). **There is not yet a national standard** for annual average PM₁₀ concentrations. Australia's environment ministers are currently considering⁴ three options: 12, 16 and 20 µg/m³. The least stringent of these three options is exceeded at most Hunter Valley monitoring sites most years. In 2014, the annual average PM₁₀ concentration at the three closest monitoring stations were 21.5 µg/m³ at Mt Thorley, 20.6 µg/m³ at Warkworth and 22.7 µg/m³ at Maison Dieu – all above the proposed standard.
10. Pollution alerts are issued when 24-hour average PM₁₀ concentrations exceed the national standard. The EPA issued 161 air pollution alerts in the Hunter Valley during 2014. To date, 50 alerts have been issued for the 14 Upper Hunter monitoring sites during 2015.
11. The Warkworth mine has breached their air pollution conditions of their Environmental Protection Licences (1976 & 1376) 14 times since 2000.

Controlling coal dust

12. Mt Thorley Warkworth Operations reported emissions of just under 9 million kilograms of PM₁₀ in 2013-14, making it the fifth most polluting mine in NSW and the 17th most polluting in Australia.⁵
13. In 2011, the NSW EPA commissioned Katestone Environmental Pty Ltd to produce the *NSW Coal Mining Benchmarking Study: International best practice measures to prevent and/or minimise emissions of particulate matter from coal mining*. The conditions of consent prepared by DPE make no reference to this Best Practice Guide and, instead, simply direct the proponent to “ensure that all reasonable and feasible avoidance and mitigation measures are employed so particulate matter emissions generated by the development do not cause exceedances...”
14. The NSW EPA have introduced several programs to reduce particle pollution from Hunter Valley coal mines, including the Dust Stop program which aims to reduce coal dust emissions by 80%. **These programs are failing.** Both short term (24-hour) and long-term PM₁₀ concentrations continue to exceed the relevant standards and are increasing rapidly.

Air pollution impacts from this proposed mine

15. Pollution impacts are down-played in the mine's EIS which states that “maximum 24 hour PM₁₀ concentrations were *on occasion* above 50 µg/m³. In 2014, the highest 24-hour average PM₁₀ concentrations at the three closest EPA monitoring stations were 58 µg/m³ at Mt Thorley, 67.9 µg/m³ at Warkworth and 63.7 µg/m³ at Maison Dieu. By comparison, Sydney's 15 monitoring sites recorded only 2 days with concentrations above 50 µg/m³. The highest 24-hour averages recorded at inner city suburbs Randwick and Rozelle were 46.1 µg/m³ and 43.8 µg/m³.

Air pollution levels in the Hunter Valley – and this part of the Valley especially – already exceed the current particle pollution standards. Pollution in the Hunter has a major impact on public health and the region's economy. The proposed mine will adversely impact an already polluted airshed and should not be approved in its current form.

When the Planning Assessment Commission deliberated on this project on 30 June 2015, EJA urged commissioners to seek a briefing on the proposed new air pollution standards and their implications for the determination of this project. **Has this happened?**

Dr James Whelan
Researcher and Community Organiser
James.Whelan@envirojustice.org.au | 0431 150 928

¹ Climate and Health Alliance, 2015, Coal and Health in the Hunter, <http://caha.org.au/projects/hunter-coal/>

² Senate Inquiry into the Health Effects of Air Quality, May 2013 p.55

³ Upper Hunter Air Quality Monitoring Network <http://www.environment.nsw.gov.au/aqms/uhunteraqmap.htm>

⁴ In 2011, the World Health Organisation set a guideline for annual average PM₁₀ concentrations of less than 20 µg/m³. http://www.who.int/mediacentre/news/releases/2011/air_pollution_20110926/en/

⁵ National Pollutant Inventory, <http://www.npi.gov.au>