

Air pollution

and the proposed Rocky Hill coal mine



The proposed Rocky Hill coal mine will increase coarse particle (PM₁₀) and fine particle (PM_{2.5}) pollution in nearby residential areas. The mine should not be approved by the NSW Government.

Unsafe levels of particle pollution

Small particles can be inhaled deep into the lungs. Particle pollution contributes to the premature deaths of more than 3,000 in Australians each year. It causes toxic effects, cancer, infection, respiratory symptoms, asthma and premature death.¹ There is no safe level of exposure to particle pollution.

Coal mines are Australia's leading source of particle pollution, accounting for more than 90% of coarse particle (PM₁₀) pollution in coal mining regions like the Hunter Valley. The particle pollution reported by coal mines doubled in the last five years and trebled in the last decade.²

Even without the proposed coal mine, Gloucester's coarse particle (PM₁₀) concentrations already exceed the national standard of 50µg/m³ at Waukivory Road (site GA01) and Fairburns Road (Table 4.20, p.4-69). The EIS attributes these exceedances to bushfire. Bushfires cannot readily be prevented, so in locations that experience high concentrations of PM₁₀ it is essential to regulate and/or polluters such as coal mines.

Gloucester also experiences annual fine particle (PM_{2.5}) concentrations that are as high as the long-term national standard of 7µg/m³. The EIS estimates annual average PM_{2.5} levels are currently between 3-7µg/m³ at locations near the proposed coal mine (p.4-71). Since May 2011, the national standard for 24-hour average PM_{2.5} concentrations (25µg/m³) has been exceeded six times at Jacks Road (North TEOM) and seven times at Fairburns Road (South TEOM).

Outdated air pollution standards

In December 2015, Australia's nine environment ministers agreed to new national standards for coarse and fine particle pollution. The Rocky Hill EIS³, however, refers to the advisory guidelines that were previously used by the NSW Government. The difference is shown in the table below. The new, stricter, national standards are already exceeded near Gloucester, even without the Rocky Hill coal mine.

	PM _{2.5} 24 hour average	PM _{2.5} Annual average	PM ₁₀ 24 hour average	PM ₁₀ Annual average
National standards agreed by Environment Ministers December 2015	25µg/m ³ in 2016 20µg/m ³ in 2026	8µg/m ³ in 2016 7 µg/m ³ by 2026	50µg/m ³	25µg/m ³
Guidelines referred to in the Rocky Hill EIS	25µg/m ³ (advisory only)	8µg/m ³ (advisory only)	50µg/m ³	30µg/m ³ (advisory only)

¹ <http://npi.gov.au/resource/particulate-matter-pm10-and-pm25>

² National Pollutant Inventory <http://www.npi.gov.au>

³ Rocky Hill EIS Section 4.4 'Air Quality', Table 4.21, p.4-73

Too close to residential areas

Particle pollution can travel long distances before settling. The proposed coal mine is just 1800 metres upwind of the closest residential areas that include more than 100 homes in new housing estates. The Gloucester High School, hospital and town centre are less than 5km downwind. Open cut coal mines are not generally proposed, let alone approved, so close to residential areas in the developed world.

No independent air pollution monitoring

How will Gloucester community members be informed of pollution levels in the air they breathe? In the Hunter Valley, the NSW Office of Environment and Heritage operates a network⁴ of 14 air pollution monitoring stations. Data from this network can be downloaded instantly by community members. People can also subscribe to receive air pollution alerts by SMS or email when any pollutant exceeds the national standard. But there is no independent air pollution monitoring in or near Gloucester, and none is proposed.⁵

The NSW Government will argue that the national air pollution standards do not apply in Gloucester. Technically, the National Environment Protection (Ambient Air Quality) Measure only applies to communities of 25,000 or more. With a population of less than 2,500, Gloucester is not entitled to air pollution monitoring, the application of national pollution standards or the right to know what we breathe.

People living near coal mines in the Namoi region of North West New South Wales only have access to air pollution monitoring undertaken by the coal mining industry. It can take up to two months to be published, is not audited by the EPA and has been found to be false and misleading.

No guarantee that pollution prevention measures will be implemented

Companies that propose coal mines invariably promise 'Best Practice' measures to control coal dust. In the Rocky Hill EIS, Gloucester Resources Ltd propose to limit soil excavation during windy periods (p.4-74), delay blasts "if unfavourable weather prevails" and "minimise drop heights" when unloading material". When communities seek to enforce these practices during the operation of coal mines, the NSW EPA responds that the required dust control measures depend on the circumstances. The EPA will not enforce commitments made in EISs.

In other parts of New South Wales, people living in communities near coal mines are exposed to blast fumes containing toxic oxides of nitrogen.⁶ A farmer near Narrabri was hospitalised earlier this year when we was exposed to blast fumes. The EPA was slow to respond and the coal mine has not been prosecuted.

Greenhouse gas emissions

Over the 21-year life of the mine, Rocky Hill will be responsible for at least 38 million tonnes of carbon dioxide. To offset these emissions, the company would need to plant and maintain 23 million trees.

For further information, contact Dr James Whelan 0431 150 928 / James.Whelan@envirojustice.org.au
Subscribe to our free monthly email bulletin: <http://cleanairaction.net.au>

⁴ <http://www.environment.nsw.gov.au/AQMS/search.htm>

⁵ Rocky Hill EIS Section 4.4.11, p.4-106

⁶ Wambo, August 2014: <http://www.abc.net.au/news/2014-08-08/wambo-coal-fined-over-noxious-blast/5657114>; Muswellbrook, February 2014: <http://www.smh.com.au/environment/mine-blast-gone-wrong-spews-toxic-cloud-20140221-335rf.html>