

My name is Michael Dangar and I live at Exeter. My wife and I acquired the property in October 2016 and moved around 7 months ago. Our property is approximately 8 hectares of farm land, located to the east of the proposed Hume Coal mine and close to the historic town of Bundanoon. The property has several natural watercourses and a spring servicing 4 dams. My wife Catherine has submitted an objection to the Hume Project. This is my submission.

Impact on water

My wife's submission sets out our concerns of the impact the mine will have on the groundwater resources and air quality in the area. I reiterate them.

I would also like to state that if the Ground Water Study on the Hume Project: Sutton Forest Coal Exploration Licence EL 349 obtained on behalf of the Southern Highlands Coal Action Group in April 2014 is even remotely possible, and I have no reason to believe it is not, the environmental consequences for the local water table, are disastrous and the NSW government should not even entertain Posco's proposal. The potential area affected is likely to extend to some 180 square kilometres over the life of the mine and into the future. If Posco's Environmental Impact Study (IES) is wrong, the environmental damage and economic impact on the region is incalculable. Has the NSW Government not learned from the experience in the Hunter Valley Region?

In reality the environmental impact of the mining industry have a strong influence on other industries. Its water use, air pollution and expansion into farmland has a particularly strong impact on agriculture. The most heavily affected industries are agricultural industries, including horse studs and vineyards. The Southern Highlands region is no different to the Hunter Valley, which has been heavily impacted by mining.¹ Like the Hunter, the Southern Highlands is home to no fewer than 20 vineyards, which grow cool climate grapes, and many famous horse studs. The investment by these businesses must be considerable given the time it takes to establish the vineyards, the necessary equipment and the facilities used by horse studs.

Southern Highlands is also home to many horse studs such as the famous Think Big Stud is located at Bowral on the banks of the Wingecarribee River.

Recently in the news:

"One of New Zealand's top boutique Thoroughbred breeding operations, Lime Country, is transferring its business across the ditch to the NSW Southern

¹ Seeing through the dust: Coal in the Hunter Valley community., The Australia Institute, June 2014.

*Highlands - avoiding the Hunter Valley because of fears for the valley's future"*².

And;

"the Highlands, with its vibrant pastures and consistent rain, offered a pristine environment for breeding and raising Thoroughbreds."

I believe that allowing coal mining in the Southern Highlands has the potential to damage the tourism industry as will heavily impact the environment by damage to the water table.

The coal industry is a major user of water and has an influence on water quality. Coal mines use water mainly for controlling dust by spraying water on piles of coal and excess dirt and also for processing coal.³ This creates two issues, firstly the runoff of this contaminated water into nearby rivers, and secondly the use of water by the mine. These coal storage piles may lead to sediment runoff to streams and surface waters may be rendered unfit for agriculture, human consumption, bathing, or other household uses. These streams empty into the Wingecarribee River, which in turn forms part of the Warragamba Dam catchment.

Impact on Air Quality

I suffer from Emphysema and any exposure to particulates in the air has the potential to be detrimental to my health. I am extremely concerned about the stockpiles of the mined coal impact on the air quality. Coal is likely to be a source of significant air pollution if not properly managed during extraction, storage, and transport. Particulate pollution is linked to cardiovascular and respiratory diseases, types of cancer and premature death. Of all the air pollutants produced by coal mining activities, particulate matter is the most significant health threat. There is no threshold below which particle pollution exposure is not harmful to health (World Health Organisation).

I understand the Environmental Impact Study (EIS) prepared by Posco, shows two stockpiles of coal approximately 800 metres long and six stories high. A conveyor belt will transfer the coal from the stockpile to loading facilities for shipment by train to Port Kembla. The prevailing winds in the area are from the West, North West. The stockpiles being open to the elements are subject to wind erosion and will allow coal dust particles to be blown over properties lying east of the mine including Exeter and Bundanoon. Coal mines and community health are in juxtaposition. If the NSW Government needs proof, just look to the Hunter Valley where health issues from the coal mining are prevalent in the community.

Water not coal! I object to the Hume Coal Project in the strongest terms.

² <https://www.limecountry.com.au/blog/post/1438/Thoroughbred-horses-bolt-to-NSW-Southern-Highlands/> January 2017.

³ NSW Minerals Council (2011) Water use in the NSW minerals industry.