

## **Stratford Extension Project – SSD 4966**

### **Submission by Ms Dianne Montague to the Environmental Impact Statement and Development Application**

In 1995 the Stratford mine was promoted as a “boutique” coalmine to operate for 15years. On the strength of this information many people did not object to its construction. In fact ‘tree changes’ still moved to the Stratford village and surrounding areas believing that the mine would cease operation after the designated time. Most people move to Gloucester and the valley for a rural lifestyle. This includes country vistas, clean air, unpolluted water and peace and quiet. None of these qualities are included in the operations of a coal mine.

The Stratford mine, now owned and operated by Yancoal, has extended over the years and is now requesting further extension which includes 24hour operation and an even closer proximity to Stratford village. The community have expressed opposition in many forms to continued and increased mining activity in the Gloucester valley. Over 80% of the population have indicated this opposition in a community survey.

My experience over the past five years with the members of the community of Gloucester and surrounds is that the impact of mining has created untold stress and psychological damage.

I am amazed by the callous disregard of the Governments, both the Liberal/Nationals and the ALP, to the rights of the people involved in this struggle. We are ordinary, law abiding citizens who have been pushed to our limits by the extraction industries, aided and abetted by the Government of the day. Far from the activists we are portrayed as, we are largely middle aged Australians who believe we have the right of ownership of our land and homes without intimidation. I stress, without intimidation, which is what has happened in Gloucester.

The injustice commences from the moment an extraction company takes up an exploration licence. They are allowed to buy land and dismantle heritage infrastructure before they have approval to mine. This causes great fear in the community from the owners directly around the mine and from residents who don't want to live in a mining town.

Therefore, the Stratford coal mine does not have a 'Social Licence' to operate.

#### **Social Licence**

The Social License has been defined as existing when a project has the ongoing approval within the local community and other stakeholders, ongoing approval or broad social acceptance and, most frequently, as ongoing acceptance.

At the level of an individual project the Social License is rooted in the beliefs, perceptions and opinions held by the local population and other stakeholders about the project. It is therefore granted by the community. It is also intangible, unless effort is made to measure these beliefs, opinions and perceptions. Finally, it is dynamic and non-permanent because beliefs, opinions and perceptions are subject to change as new information is acquired. Hence the Social License has to be earned and then maintained.

At community meetings complaints are heard about the noise and air pollution from the mine. Many people from the Stratford village and surrounds have had ongoing conflict with the mine managers. Residents complain but are fobbed off and eventually most stop complaining because “there is no point”.

Now the valley is confronted with yet another extension proposal which comes at the expense of the residents, environment, water, air quality and existing industries like tourism.

This proposal cannot be assessed in isolation. The valley has three extraction industries wanting to exploit its resources. AGL have approval for 110 coal seam gas wells and plan for at least 300. Gloucester Resources Limited currently have an EIS going through the planning process for an open-cut coal mine in the Forbesdale area and the Yancoal extension proposal. All these projects are within the same area of the Avon Valley. The AGL proposal overlaps both of the coal mining proposals. None of the cumulative impacts have been addressed by any of the companies involved. It is not feasible to have open-cut mines interspersed with coal seam gas wells without the danger of contamination of water and the risk of explosions.

These are the main objections to the mine extension.

### **Community Health**

The adverse impacts, of open-cut coal mines on health, have been known for years. Australia still uses levels, for PM10 particles which are known to be unsafe. The US Harvard Six Cities (1993) report stated that the most important cause of health defects was PM 2.5. Yancoal, Stratford mine continues to use monitors for PM10, even with this knowledge. There is no ‘safe’ level for PM2.5 particles. The health danger for the people of Stratford, particularly the children and the elderly, is unacceptable, even now, but should the mine be approved 1km from the town then that danger will increase.

Between 2002 and 2011 Stratford coal exceeded the safe limits fourteen times and the HVS sampling is only done one day in six with no continuous sampling. With increased production and the mine 250-400 metres closer to the village the community can expect to have an increase in asthma, lung problems and cardio vascular complaints. Not to mention greater risks of cancer.

The following landmark review article was released at the same time as this EIS. It summarises the health information which was already in the public domain and available to planners. It reinforces the fact that a mine should never have been approved so close to a built up area.

#### ***‘Health and Social harms of Coal Mining – Spotlight on the Hunter’***

*Beyond Zero Emissions commissioned this report by Sydney University researchers (Colagiuri R et al) which reviews 50 international peer reviewed articles detailing the harms of open cut coal mining and power generation. It’s key finding is that living near coal mines can cause serious harm to human health. It states Adults in coal mining communities have been found to have:-*

- 1) Higher rates of mortality from lung cancer and chronic heart, respiratory and kidney diseases.*

- 2) *Higher rates of cardiopulmonary disease, chronic obstructive pulmonary disease (COAD) and other lung diseases, hypertension, kidney disease, heart attack, stroke and asthma*
- 3) *Increased probability of a hospitalisation for COPD (by 1% for each 1,462 tons of coal mined) and for hypertension (by 1% for each 1,873 tons of coal mined)*
- 4) *Poorer self rated health and reduced quality of life.*
- 5) *Children and infants in coal mining communities have been found to have:-*
- 6) *Increased respiratory symptoms including wheezing and coughing; increased absences from school due to respiratory infections.*
- 7) *A high prevalence of any birth defect, and a greater chance of being of low birth weight (a risk factor for future obesity, diabetes and heart disease).*
- 8) The government restricts smoking and is even putting restrictions on passive smoking but ignores the health risks from open-cut coal mines.

## **Noise and Blasting**

The NSW Industrial Noise Policy states that project-specific noise levels should not be automatically interpreted as conditions of consent, and that community views should be taken into account in setting noise limits.

The largest number of complaints from the residents about the Stratford mine is the unacceptable level of noise, and blasting comes a close second. The Industrial Noise Policy (1999) which is currently being reviewed has greater emphasis on 'Non-auditory' adverse health effects, including impairment of sleep, concentration, learning and communication with consequent cognition, emotional and behavioural effects. Using the 'A' weighted monitoring system (as in the EIS) is unacceptable when the environmental noise which affects the community is, to a large extent, lower frequencies. Very large diesel engines, of which the mine will have many, have a noise level lower than two octaves below middle C (64Hz), which is often not recorded. The EIS does not have details of the wavelengths covered. Because the 'A' weighted system understates the sound energy for low frequencies. 'C' weighted measurements need to be used.

The fact that 'C' weighted measurements are not used in the current Stratford coal noise monitoring program may explain why residents complain about noise which the mine operators say does not show on their measurements. Add to this the signed compensation agreements which require the residents to cease making any complaints about the mining operations and psychological compliance through helplessness and you will end up with very few complaints.

Why is it that wind farms are legislated to be two kms from properties but coal mines have no such restrictions?

## **Blasting**

The residents of Stratford and surrounds are currently experiencing adverse affects from blasting. These include excessive bright orange and yellow dust which blows towards Gloucester, cracks in

house walls, rattling of windows and psychological damage. One owner of a property near to the mine was advised by the mine management to leave his home when blasting occurred. Notification to the community of blasting is issued via an A4 page stuck up at the local petrol station. What happened to 'Best Practice'?

While driving south along the Bucketts Way late in 2012 my partner and I experienced a blast from the Stratford mine. A very large plume of orange dust rose into the air and proceeded to drift slowly north towards Gloucester town. It took several minutes to dissipate and even then there was still dust in the air.

Blasting is a regular cause of complaints and blasting is to be increased from 3 to 5 times per week with the extension. The orange ( Nitrogen Oxides) plume of wet or poorly controlled blasts is a health hazard which is being allowed to go unmonitored. By not measuring 1hour Nitrogen dioxide levels after blasting the mines don't take this danger seriously.

### **24-hour mining operations**

Stratford Coal propose to conduct mining operations in the Avon North and Stratford East open cuts on a 24-hour, 7-days-per-week basis. This proposal is rejected by the Community Consultative Committee, The Gloucester Shire Council, residents of Stratford at a community meeting and anyone who is impacted by the mine. The mine asserts that it will not be economically viable to operate lesser hours but gives no justification for that assertion. This does not satisfy the Director General's Requirements.

24hour operations will reduce the Gloucester valley to an industrial estate with increased noise, pollution, traffic and drive in, drive out workers.

### **Embankments and voids**

The proposed mine plan leaves the finished site with a series of raised embankments and 3 final voids that will fill with water. There is no technical reason why the valley should be left with this legacy.

Below is an excerpt from the Newcastle Herald which explains the reasons for concern.

Joanne McCarthy 18<sup>th</sup> January 2013

"In the Hunter Valley barren voids are created by active open-cut mines and the knowledge that even 1000 years from now, according to NSW government estimates, more than 1200 hectares will still be that way, complete with saline "lakes".

Increasingly scientists are also raising concerns about the long-term impact underground, at aquifer level. And it's the "never-never" nature of responsibility for those impacts, despite the march of coalmine approvals, that has environmentalists taking extreme steps to sound the alarm.

Large open-cut mines depressurise aquifers and cause millions of litres of groundwater to seep into the voids they leave long after the mining ends. But governments have accepted mining industry arguments that backfilling voids, which can be 200 metres deep and kilometres long, would be financially crippling.

Natural lakes have a ratio of depth to surface area of about 5 per cent. Post-mining voids range from 10 to 40 per cent.

These "post-mining voids", complete with projected saline "lakes", are recognised as part of the mine approval process. They are as a legacy of the Hunter coal boom.

But at what cost to the environment?

In an important study in 2004, which was the first of its kind, long-term final void salinity prediction for a post-mining landscape in the Hunter Valley, Newcastle University Associate Professor Greg Hancock painted a disturbing picture of the region's future, long after coal.

It was what he couldn't predict – the future unknown impacts – that was of most concern.

The long-term water-quality implications for these final voids and their impact on the surrounding hydrological system are largely unknown," Hancock said in 2004.

"There has been very little research into the long-term [in this study hundreds of years] water-quality issues that arise from opencast mining and no risk assessment has been conducted."

One of the biggest problems for the mining industry and the NSW Government, which relies on mine royalties to keep the economy moving, is that the economic benefits argument for mining is under serious challenge because of the obvious negative social and environmental impacts of mining in the Hunter region.

Dust exceedances, mine-related road deaths, final voids with toxic lakes and threats to other industries were being seen as too high a price to pay for keeping people in jobs."

## **Embankments**

The raised embankments have different but equally disturbing consequences for the land.

Natural land and vegetation is covered and the ecosystem destroyed;

Agricultural land is covered with poor quality waste rock and its productivity reduced;

Waste material from the mine is stored above ground in the embankment with the potentially dangerous heavy metals, acid forming rock and coal reject material leaching into the surrounding areas;

Until they are properly re-vegetated they are a source of dust and airborne chemical pollution;

The artificial soil profile can erode and pollute other land and watercourses;

In the case of Stratford the embankments are irrigated with saline water creating a new problem;

Their high visibility detracts from the natural visual landscape;

They change the surface water flow patterns and infiltration into the groundwater; and

During construction they substantially increase noise pollution due to heavy machinery operating above the natural ground surface.

Mine waste is just that, waste. Embankments are waste dumped on the land and the expectation is that the land will integrate the waste and we will once again have fertile fields and biodiversity. Currently the Stratford coal embankments are an eyesore in the valley and getting bigger every day. With the approval of the Stratford extension the valley will have more eyesores and if the Gloucester Resources Limited, Rocky Hill Mine is approved then the embankments will extend right up the valley. It will be the destruction of our rural identity and definitely the decline and eventual destruction of our thriving tourist industry.

### **Offsets**

The true intent of offsets is to compensate for the destruction of the environment. If the offset is a paddock of weeds then what is the point. One of the offsets for the Stratford extension is just that, a bare paddock of weeds. No trees or native vegetation.

### **Coal Transportation**

A recent ARTC study confirmed that rail wagons emit dust and spraying the wagons with water does not alleviate this problem. The rail line between Stratford and Duralie has homes within a hundred metres of the track. With extra rail activity this will increase the risk to the people near the tracks.

### **Traffic**

The Bucketts Way is the main artery in and out of town. It is a single lane road with no sections for overtaking. The traffic on this road has increased dramatically, mainly because of mining vehicles. The Stratford mine asserts that it employs local workers wherever possible but the definition of local includes Taree Shire and Great Lakes Shire. This means that drive in, drive out workers are constantly using the road and often travel at greater speeds than the local travellers. It is common knowledge that coal mines employ people who have to travel to the mine. This causes a dislocation between workers and their community where they work and can have detrimental effects on the local community.

To my knowledge this increase in traffic volume, causing deterioration of the roads, is not compensated by the mining companies. Our rates are used for road maintenance, even though, the industry in town causing the damage and employing workers from out of town do not contribute.

### **Agriculture and cumulative impact**

The EIS states that the project will have 1% impact on agricultural land and that cumulative impact is not considered significant.

The valley is covered by exploration licenses for coal and coal seam gas. Coal exploration licenses cover approximately 25,000ha and gas 14 blocks (roughly 1,000 square kilometres) and these areas overlap. There are active coalmines at Duralie and Stratford (Yancoal, YAL). Gloucester Resources Limited, Rocky Hill Mine has an EIS for development east of Forbesdale. A gas field of 110 wells with processing plant and pipeline to Hexham by AGL Upstream Energy, has been approved, with additional stages of development up to 330 wells that are only described conceptually. These enterprises coincide with much of the best agricultural land of the valley floor and many creeks and rivers run through or near them. GRL owns some 35 properties (2200ha) and YAL at least 22 properties, but probably many more.

The properties which have been bought out by the mines have in many cases been left to go to weed. The homes, once occupied by farmers working the land, are now largely rented by miners or people employed in non rural pursuits. How can Yancoal or the Government assert that all this mining development will not have cumulative impacts? You would have to be stupid, or perhaps negating cumulative impacts is a way out of confronting the obvious, that coal and coal seam gas projects taken cumulatively have enormous impacts on the communities they invade. It is easier to mark the residents and the small communities as collateral damage, or as in the AGL EIS, 'receptors'.

### **Economic and Social Issues**

"The Socio-Economic Assessment indicates a net benefit of between \$145 million and \$174 million would be foregone.....If the Project is not implemented. In addition, the Project would generate total royalties to the state of NSW in the order of \$130 million over the life of the Project."

The assumption that Gloucester will not generate any net benefit if the mine is not approved is ludicrous. Nothing is written about other opportunities which will be lost if the mine is approved. What of food production? Gloucester is the area most considered to be of benefit, for food production, in NSW when Australia suffers from Global Warming. This will not be possible if the land is destroyed by coal mining and its aftermath. Several organic growers who have properties near the mine area are considering their futures with the possibility of further approval of mines.

The net benefit does not take into account the health costs, the lost tourism, the loss of dairies and agriculture, the cost to the environment, social and cultural costs and the loss of potential of other industries.

### **Tourism**

Gloucester attracts thousands of tourists a year. They come for the rural backdrop, country atmosphere, beautiful vistas and clean green image. This will not be maintained if further coal mining is approved. The future of Gloucester is in the balance. Further mining will bring a shift in the town. It will no longer be a town with a mine but a mining town. Tourists will not want to visit a mining town. There is nowhere in NSW, apart from historical reasons, that coal mines are a place tourists want to

visit. Even towns with mines have all their advertising showing the beautiful aspects of their town. Tourists will not be interested in visiting Gloucester if it is a mining town.

### **Tree Planting**

It must be noted that the planting of trees in rows on the roadside should not be seen as a satisfactory way of obscuring the mine workings from view. This tunnel of trees approach is not consistent with the valley landscape and in fact is a poor attempt at a quick fix. It also obscures views of the valley from many key areas. No attempt has been made to consider what would be more appropriate for the valley. It is just easier to do what mines do everywhere: plant trees in a row. And we wonder why the mine has not been granted a 'social licence'. Perhaps it is because the mine owners do not care about the valley or its inhabitants. Yancoal will obey the conditions but will never initiate any actions to benefit the town which are not in the conditions.

### **Lighting**

Every night the bright yellow glow from the Stratford mine working fill the sky. It is an eye sore on the valley. Because the Gloucester area is mainly agricultural with only small towns the night lights are small. This enables full view of the stars. But it also means that any bright, man made lights, are very obvious. No effort has been made to shield these lights at Stratford. 24 hour operation would mean more lights in the night sky and resultant impact on residents who live near the mine.

### **Conclusion**

Approval of the proposed Stratford extension will have unacceptable consequences for the residents living near the mine and the community at large. The supposed 'net benefit' does not justify the destruction of this valley and the community.

Ms Dianne Montague  
'Wooralook'  
660 Berrico Creek Road  
Berrico 2422