



Sutherland Shire

**Environment Centre Inc**

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30 July 2007

Mr Peter Downes  
Southern Coalfield Panel Secretariat  
c/- Department of Planning  
GPO Box 39  
Sydney NSW 2001

Dear Peter Downes

**Submission to the Independent Expert Panel re Inquiry  
into the impacts of underground coal mining in the NSW  
southern coalfields**

Sutherland Shire Environment Centre Inc. (SSEC) has been the environmental voice of the residents and community groups of the Sutherland Shire since 1991.

The objects of SSEC are:

1. To act to defend the environment of the Sutherland Shire and associated bio-regions by supporting members and local community organisations in their efforts to protect and improve their local areas.
2. To develop and conduct environmental education initiatives to encourage behavioural change to achieve a sustainable environment in the Sutherland Shire and its bio-regions.

SSEC was made aware of the damage caused to the Waratah Rivulet towards the end of 2006. Articles published in two local newspapers *The St George and Sutherland Shire Leader* and *The Shire Life* early in 2007 generated many calls of concern to SSEC and led to us convening a meeting at the Hazelhurst Regional Gallery at Gympie. Over 75 invited guests attended including community leaders, businessmen, state and federal MPs, local councillors and senior Council staff.

This meeting of concerned citizens called on the Government to:

- a) Ensure that the Metropolitan and Woronora Special Area Catchments, and other drinking water catchments are preserved so that the ability of these areas to collect and transmit water is not affected by mining operations, and under

- no circumstances would mining operations be allowed to cause surface cracking in these precious catchments;
- b) Establish underground mining prohibition areas of one kilometre around streams, upland swamps and water supply structures and aboriginal heritage areas, and mining protection zones for other vulnerable areas like cliffs and rock overhangs, and to ensure that these controls be made mandatory for all current, as well as future, underground coal mining operations.
  - c) Ensure effective pollution licensing for underground mines in drinking water catchments under the Protection of the Environment Operations Act so that companies are heavily prosecuted for causing any damage to streams and water catchments, and particularly for causing any surface cracking; and
  - d) Develop a Protection of the Environment Policy (PEP) under the Protection of the Environment Operations Act 1997 that makes drinking water catchment preservation the primary consideration for mining operations in these areas.

As a result of the Hazelhurst meeting, SSEC was invited to make a presentation to Sutherland Shire Council on 30 April, 2007. The Council was unanimous in its uneasiness about possibility of damage being caused to waterways and catchment by mining activity and determined to prepare a submission to this Inquiry.

We have seen the submission made by Sutherland Shire Council and we strongly support its conclusions. We are confident that it very adequately addresses many of the issues that are of concern to Sutherland Shire Environment Centre. Therefore, we will endeavour not to repeat large segments of that submission, but to focus our comments instead on issues that fit within the objectives of SSEC.

This submission addresses the following **Terms of Reference** set by the NSW Department of Planning:

1. Undertake a strategic review of the impacts of underground mining in the Southern Coalfield on significant natural features (i.e. rivers and significant streams, swamps and cliff lines), with particular emphasis on risks to water flows, water quality and aquatic ecosystems; and
2. Provide advice on best practice in regard to:
  - (a) assessment of subsidence impacts;
  - (b) avoiding and/or minimising adverse impacts on significant natural features; and
  - (c) management, monitoring and remediation of subsidence and subsidence related impacts
3. Report on the social and economic significance to the region and the state of the coal resources in the Southern Coalfield.

- 1. Undertake a strategic review of the impacts of underground mining in the Southern Coalfield on significant natural features (i.e. rivers and significant streams, swamps and cliff lines), with particular emphasis on risks to water flows, water quality and aquatic ecosystems.**

SSEC agrees with the considered comments in the Sutherland Shire Council's submission to this inquiry, viz.:

- 1. Cracking and fracturing associated with longwall mining results in unacceptable impact in areas of high conservation significance. In particular, impacts on sensitive waterways.*
- 2. Rock falls associated with longwall mining results in unacceptable impacts in areas of archaeological significance. In particular that numerous potential or actual archaeological sites may have been, and will continue to be affected by mining induced damage throughout the Southern Coalfields.*
- 3. Destabilisation of cliff lines associated with longwall mining results in unacceptable impacts in areas of high conservation significance. In particular, impacts on suitable nesting and breeding habitat for bat and bird species.*
- 4. Water Losses associated with longwall mining results in unacceptable impacts on significant waterways, aquifer characteristics, groundwater levels and the capacity of the catchment areas to provide water to the residents of Sydney.*
- 5. The degradation of water quality as a result of longwall mining results in unacceptable impacts on the water quality entering Sydney's drinking water catchments, in addition to having major adverse affects on aquatic organisms and their habitat.*
- 6. Gas release associated with longwall mining result in unacceptable impacts on the quality of water entering Sydney's drinking water catchments, in addition to significant impacts on areas of both terrestrial and aquatic habitat.*

In 2005, the NSW Scientific Committee listed "Alteration of habitat following subsidence due to longwall mining" as a key threatening process under Schedule 3 of the *NSW Threatened Species Conservation Act 1995*. The committee noted that:

*"Species and ecological communities that depend on aquatic habitat and semi-aquatic habitats are particularly susceptible to the impacts of subsidence".*

Five endangered species, twenty-three vulnerable species and four endangered ecological communities were listed as likely to be subject to this key threatening process. In addition, a further eleven species not currently threatened were also listed as "may become threatened" as a result of subsidence induced impacts.

This appears to be a contradiction of the goals expressed in the *Special Areas Strategic Plan of Management 2007*.

“Special Areas are those lands declared under the Sydney Water Catchment Management Act 1998 for their value in protecting the quality of the raw water used to provide drinking water to Sydney, the Illawarra and the Blue Mountains and for their ecological integrity. The Special Areas are a critical barrier in a multi-barrier approach to protecting water quality, which includes the management of the hydrological catchments, storage management, delivery system management and the treatment of water in the water treatment plants. They act as a filtration system for water entering water storages by reducing nutrients, sediments and other substances that can affect water quality. *The greater the ecological integrity of the Special Areas, the more effective their role as a barrier.* In some instances, the Special Areas constitute all or nearly all the water storage’s entire catchment area, for example the Metropolitan Special Area.” (*Special Areas Strategic Plan of Management 2007*).

Government documents such as this lead the community to feel safe in the knowledge that all is being done to protect Special Areas – but this is not true. Damage is left long after the miners have left the area, completely ignoring the reason the Special Areas were created.

Either, all mining should cease in Special Areas until mining companies can prove *beyond doubt* that they can successfully remediate any damaged areas so that there will be *no net long term damage* done to the Special Areas, or, as per the resolution from the meeting of concerned residents mentioned in the introduction, the Government should:

*Establish underground mining prohibition areas of one kilometre around streams, upland swamps and water supply structures and aboriginal heritage areas, and mining protection zones for other vulnerable areas like cliffs and rock overhangs, and to ensure that these controls be made mandatory for all current, as well as future, underground coal mining operations.*

**2. Provide advice on best practice in regard to:**

- (a) assessment of subsidence impacts;**
- (b) avoiding and/or minimising adverse impacts on significant natural features; and**
- (c) management, monitoring and remediation of subsidence and subsidence related impacts**

Sutherland Shire Environment Centre would make the following points:

- (a) Previous attempts at remediation by mining companies to correct damage in the Cataract and Georges Rivers and the Waratah Rivulet is powerful evidence that mining causes damage.
- (b) *There appears to be little evidence to suggest that remediation is in fact successful.* For example, the need to supplement flows by pumping water from the catchments into the waterways to restore the waterflow is powerful evidence that the system has failed.
- (c) Evidence of gas leaks, oxides in the water (water pollution) and lower ground water levels show the enormous potential for destruction of flora and fauna and to a serious reduction in the water quality of the catchment.
- (d) The authority to sign off on a Subsidence Management Plan should be the same authority that bears the responsibility for the area subject to damage and *not* the authority that approves the damaging activity. The Sydney Catchment Authority should have *the power to enforce effective remediation* and if this remediation does not occur then to suspend the offending activity until all damage is remediated and procedures are put in place to prevent such damage occurring again.
- (e) Report on the social and economic significance to the region and the state of the coal resources in the Southern Coalfield.**

Putting water supplies at risk to achieve a one-off economic gain from coal extraction does not make economic sense. The problem arises because the cost of coal does not reflect its true cost to the community which undermines the proper functioning of the market.

At a time when national, indeed international, concerns are raised about global warming, it is essential that fossil fuels reflect their true cost of production and extraction. Carbon trading schemes will not work efficiently if they are subsidised by environmental damage.

If, in order to avoid such damage, new technologies are required for extracting the coal, or if remediation activity adds to the cost of extraction, then any extra costs should be considered as essential costs of mining and should be reflected in the final cost of the coal.

More expensive coal would allow the community a better chance to examine the opportunity cost of other fuel options. Unmined coal would be preserved for future generations to use if and when extractive technologies are developed that do not threaten a basic necessity of human life (water).

**Conclusion**

For many years the people of NSW have had confidence in their government's continued stewardship of the water catchment areas. They have readily accepted the principle of strict exclusion in order to ensure the ecological integrity of these pristine areas.

Allowing a damaging activity to take place, hidden from public view as it is, is contrary to the spirit of the Act and a betrayal of the trust of the people of NSW.

We would be happy to meet with you face to face to talk to you further about our concerns. Please feel free to contact me on 0409 905 011.

Yours sincerely

Graeme Booth  
Development Officer