



**Submission from
Doctors for the Environment Australia
and
Economists at Large
on the
New Acland Coal Mine Stage 3**

**Draft terms of reference for an environmental
impact statement**

Submission from
Doctors for the Environment Australia Inc.
And
Economists at Large Pty Ltd
C/- College Park House, 67 Payneham Road
COLLEGE PARK SA 5069
Phone: 0422 974 857
Email: admin@dea.org.au
<http://www.dea.org.au>
<http://www.ecolarge.com>

Doctors for the Environment Australia

Doctors for the Environment Australia (DEA) is an independent, self-funded, non-government organisation of medical doctors in all Australian States and Territories. Our members work across all specialties in community, hospital and private practices. We work to minimise public health impacts and address the diseases – local, national and global – caused by damage to our natural environment.

Economists at Large

Economists at Large are like “Economists without Borders”; a team of associate economists with a broad range of experience across economics, finance and sustainability. We specialise in environmental economics, project assessment, cost benefit analysis, tourism economics, natural resource economics and public policy analysis. Our special focus is on projects for the not-for-profit sector – community groups and non-government organisations. We also have extensive experience working for government and private sector clients. Economists at Large has been working to promote sustainable economic outcomes for over 20 years.

Project summary

The case should be made for the economic viability of this project taking into account all health, environmental and social costs. The proponent is reminded that the EIS process encompasses health impact assessment which includes all aspects of community health, including social and mental health aspects and social disruption. All these processes are intended to look at the balance of positive and negative impacts upon which informed decisions can be made. From an economic perspective, this balance should be assessed through cost benefit analysis.

Within this wide context of human health and well being we make the following comments:

Page 3

1) *"New Acland coal mine, an open-cut, thermal coal operation"*

Thermal coal is in declining demand due to the global economic downturn and to a shift from thermal coal to gas and renewables. Therefore doubts must exist about the mine's economic viability.

2) *"The mine's expansion would result in an increase from the existing mine's 4.8 Mtpa up to 7.5 Mtpa proposed, rather than the original project proposal's 10 Mtpa.*

A smaller project will also mean a reduction of the proposed mine life from the year 2042 to 2029"

It is abundantly clear that the continued use of coal will contribute to the devastating effects of global climate change. It is plausible that international agreement and public opinion will not tolerate the 16 years of growth in thermal coal production on which New Hope's expectations are built. Premature closure would result in short term gain that could not conceivably compensate for the long term regional damage.

The realisation will come that Queensland's coal mining is an important contributor to climate change which is affecting Queensland's environment and prosperity

Page 4

3) *"The project's disturbance footprint has been reduced by 63 per cent, or 2304 hectares. The proponent has estimated the project will result in a reduction of impacts on strategic cropping land by around 446 hectares."*

The question arises as to whether such short term exploitation can be justified when one takes into account that the mine

expansion will result in the degradation and loss forever of good quality agricultural land and perhaps in addition irreversible damage to aquifers.

Page 5

4) *"The proponent estimates the project would result in an economic contribution of \$8 billion for the life of the mine. Construction costs are estimated at \$700 million."*

This comparison of "economic contribution" (which almost certainly relies on unreferenced multipliers) with one aspect of the project's financial costs is entirely without basis in economic theory and creates a misleading impression as to the efficiency and profitability of the project. Proper cost benefit analysis should be conducted and results presented, rather than display of eye-catching but non-comparable statistics.

The proponent should also be required to take into account the cost of the local environmental damage where the coal is mined, the local environmental and health impacts where the coal is burned, and the ongoing global damage that will result from the greenhouse gas emissions that are released on burning. These costs if accounted for would possibly exceed any short term gain.

1. Executive summary

Page 10

5) *"The executive summary should include:....an outline of the background and need for the project, including the consequences of not proceeding with the project."*

This requirement should take the form of a complete balance sheet that takes fully into account the short term political and, economic advantages of proceeding and balances these against the short term and long term political, economic, and local and global environmental disadvantages (including human health and well-being disadvantages) of proceeding. This aspect of the EIS should be done by an independent organisation such as the Global Change Institute of the University of Queensland, paid for but not chosen by the New Hope Group.

6) *"The executive summary should include:....a discussion of the cumulative impacts in relation to social, economic and environmental factors of associated infrastructure projects proposed within the region."*

Again, this discussion should be the product of an independently appointed expert(s) who are acceptable to the community and paid for but not chosen by the New Hope Group.

3.1. Project proponent

Page 11

7) "Describe the proponent's experience, including:... environmental record, including a list of any breach of relevant environmental laws during the previous ten years."

This list should be comprehensive including all breaches reported to the Queensland Government by members of the public. The listing should be verified and if need be expanded by local residents and community groups for inclusion in the EIS.

We make this point because for a number of years Doctors for the Environment Australia has helped community groups with their concerns over the health impacts of developments. We make the point that the evidence presented to us by communities near to the New Hope mine is more compelling than any we have seen. The TOR needs to identify how the company intends to address previous concerns and set a road map for proper and meaningful cooperation.

In this context it has been expressed to us that The New Acland mine has a history of unreported breaches and substandard monitoring practises.

8) "Describe the proponent's experience, including:... the proponent's environmental, health, safety and community policies."

This description should be contributed to by local residents and community groups for inclusion in the EIS. In the eyes of the community the New Acland Mine has a very poor record of community interaction. These matters need to be fully documented before any consideration is given to the mine's expansion.

9) No reference is made to a Health Impact Assessment (HIA). A health impact assessment that takes into account the probable and inevitable ill-effects of coal mining and combustion on local communities and the global community is essential to the EIS. The HIA should be coordinated by an industry independent public health physician, for instance a Queensland Health employed

Public Health Medical Officer. Although the HIA should be paid for by the New Hope Group the physicians involved must not be chosen by the New Hope Group.

It should be noted that no HIA has been made of the effect of past and present mining activities on nearby residents. There is strong anecdotal evidence, reviewed previously by DEA that the health of nearby residents, both children and adults, is being adversely affected in a variety of ways. It is essential that this is thoroughly investigated and all deficiencies fully rectified before any further mine expansion is considered. The TOR should make provision for this.

3.5. Project alternatives

Page 12

10)"Describe feasible alternatives....and the consequences of not proceeding with the project (including any impacts that would be avoided)."

As for 6 above.

5.1. Climate, natural hazards and climate change

Page 24

11) It is disconcerting to note that the Coordinator General and by inference the Government are aware of the adverse effects of climate change on coal mining operations yet fail to acknowledge the massive role coal has in the causation of climate change. It is deeply disturbing that fossil fuel climate change aggravation (the opposite to mitigation) with attempted adaptation has been chosen as the Queensland Government's compromised means of obtaining economic growth. The injustice is that today's young and those unborn will bear the brunt of this. Future generations will surely hold both to account.

5.5. Air Quality

Page 46

12) It is apparent from past experience that air monitoring at the New Acland Mine has been unsatisfactory. Dust, smaller particulate matter levels and noxious gases e.g. nitrogen dioxide and sulphur dioxide, must not be permitted to exceed accepted

Australian standards. Monitoring must be rigorous, and all breaches and suspected breaches must be fully investigated and appropriate prosecution, rectification and restitution pursued. In our view this has not been the case in the past. Monitoring needs to be done independently of the mine but paid for by New Hope Coal- see our previous assessment.

http://dea.org.au/images/general/Acland_EIS_assessment_Ch_9.pdf

Appropriate real time air quality monitoring has been implemented in the Upper Hunter Valley by the NSW EPA. A similar model needs to be implemented on the Darling Downs. The results need to be readily accessible to the public on a continuous basis.

5.7. Noise and vibration

Pages 50-51

13) This is yet another environmental responsibility which it seems on evidence submitted to us by the community has been disregarded. Noise pollution in excess of standards, particularly occurring at night, continues and in the view of residents takes a significant toll on the health and well being of children and adults alike. Monitoring needs to be done by an independent authority and costs should be met by the mine. Monitoring should be rigorous, and all breaches and suspected breaches should be fully investigated and appropriate prosecution, rectification and restitution pursued.

6. Social values and management of impacts

Page 62-67

14) This is a most important aspect of the EIS that needs to be done by an independently appointed group of experts who are acceptable to the community (including the members of the Oakey Coal Action Alliance) but paid for by the New Hope Group.

6.1 Description of existing social values

6.1,1 Social and cultural area

Page 62

15) "Define the projects social and cultural areas of influence, including the local, district, regional and state level as relevant,

taking into account the:...social conditions, visual amenity and liveability, social harmony, public health and well being, and sense of community.”

The expert group will need to take into account the long history of inaction shown by the New Hope Coal in relation to concerns expressed by the affected residents such as those of Jondaryan. If concerns with the existing mine are not dealt with adequately, it would appear to be unlikely that the future concerns relating to the mine’s expansion would be addressed. This on its own should be sufficient to stop the expansion from going ahead.

6.1.2 Community engagement

Page 63

16) "Consistent with national and international good practice, and with regard to local and regional strategies for community engagement, the proponent should; undertake a community engagement strategy to engage at the earliest practicable stage with likely affected parties to discuss and explain the project, and to identify and respond to issues and concerns regarding social impacts.”

This is another important requirement which will be very difficult to achieve because of community distrust, based on past experience of the mine’s management. Representatives of the Oakey Coal Action Alliance should be involved in all aspects of the process in order to attain a semblance of credibility.

7. Economies and management of impacts

Pages 67-69

17) It is once again essential that this aspect of the study be conducted by an independently appointed group of experts who are acceptable to the community (including the members of the Oakey Coal Action Alliance) but paid for by the New Hope Group.

The economic assessment of the project should be based on cost benefit analysis, supported by economic impact assessment. Economic impact assessment is not a substitute for cost benefit analysis.

Cost benefit analysis

Although the draft terms of reference (TOR) refer to “a comprehensive assessment of the direct, indirect, cumulative, costs and impacts of the project” and “estimated costs, if material, on industry and the community” (p67), the TOR does not require cost benefit analysis. The DSDIP Project Assurance Framework is explicit in its requirement of cost benefit analysis:

The primary method of economic evaluation of public sector policies and projects is cost-benefit analysis... Cost-benefit analysis generally assesses the impact of a project on the economic welfare of the community, and is therefore a key element in any public sector [economic] analysis (Qld DIP 2011, p18).

The economics profession shows rare unanimity on this point – that project assessment should rely firmly on cost benefit analysis. Commonwealth and other state treasuries make similar statements (Department of Finance and Administration, 2006), as do academic economists (Dobes & Bennett, 2009), private consultants (Ergas, 2009) and the Business Council of Australia:

Over many years, the Business Council of Australia has promoted the importance of using cost-benefit analysis (CBA) to evaluate major public expenditure and regulatory decisions (BCA, 2012, p1)

Despite the entire economics profession and the DSDIP calling for cost benefit analysis to be the centre of project assessment, consultants assessing projects in Queensland routinely ignore these calls if not specified in TOR. Examples include (AEC group, 2010; Economic Associates, 2010a, 2010b, 2011). It is worth noting that coal projects in other states are required to perform cost benefit analysis, see for example (Gillespie Economics, 2012).

Cost benefit analysis is even more important for the Acland project than the others mentioned above, due to the high population density surrounding the mine and transport infrastructure relative to the other mines.

The project’s impacts on the population would pose significant health risks, as outlined in the bulk of this submission. These health risks impose major economic costs. Without quantifying and comparing these costs to the benefits of the mine, the state cannot be sure of the economic efficiency or desirability of the project. Examples coal projects which incur health costs sufficient to outweigh the benefits of the project are outlined in publications such as (Hendryx & Ahern, 2009; Palmer et al., 2010) see also (Muller, Mendelsohn, & Nordhaus, 2011).

Cost benefit analysis of the project should also include assessment of greenhouse gas emissions that will arise due to the project's marginal impacts on coal consumption.

Economic impact assessment

Economic impact assessment should be carried out through computable general equilibrium modelling, such as for the China First Project (AEC group, 2010), not through input-output modelling such as the assessment of the Alpha coal project, railway and Kevin's Corner projects (Economic Associates, 2010a, 2010b, 2011).

The TOR should discourage consultants from using input-output models (IO) which overstate the positive impacts of their client's projects. While cheap and easy to perform IO invariably overstates the impacts of a project on output and employment. Many IO analyses are further hampered by being based on older multipliers, as the ABS now does not publish them regularly and few consultants calculate their own. The ABS took these steps as:

Production of multipliers was discontinued with the 2001–02 issue for several reasons. There was considerable debate in the user community as to their suitability for the purposes to which they were most commonly applied, that is, to produce measures of the size and impact of a particular project to support bids for industry assistance of various forms. (ABS, 2011)

The ABS goes on to discuss some of the reasons why I-O analysis is inappropriate for such assessment:

Lack of supply-side constraints: *The most significant limitation of economic impact analysis using multipliers is the implicit assumption that the economy has no supply-side constraints. That is, it is assumed that extra output can be produced in one area without taking resources away from other activities, thus overstating economic impacts. The actual impact is likely to be dependent on the extent to which the economy is operating at or near capacity.*

Fixed prices: *Constraints on the availability of inputs, such as skilled labour, require prices to act as a rationing device. In assessments using multipliers, where factors of production are assumed to be limitless, this rationing response is assumed not to*

occur. Prices are assumed to be unaffected by policy and any crowding out effects are not captured.

Instead, economic assessment should be based on cost benefit analysis. If impact assessment is requested by clients, it should be done through computable general equilibrium models (CGE).

8. Hazard and risk

Pages 69-72

18) As was stated at 10 above, no reference is made to a Health Impact Assessment (HIA). A health impact assessment that takes into account the probable and inevitable ill-effects of coal mining and combustion on local communities and the global community is essential to the EIS. The HIA should be coordinated by an industry independent public health physician, for instance a Queensland Health employed Public Health Medical Officer. Although the HIA should be paid for by the New Hope Group the physicians involved must not be chosen by the New Hope Group.

It should be noted that no HIA has been made of the effect of past and present mining activities on nearby residents. There is strong anecdotal evidence that the health of nearby residents, both children and adults, is being adversely affected in a variety of ways. It is essential that this is thoroughly investigated and all deficiencies fully rectified before any further mine expansion is considered.

8.3 Health and Safety

Page70

19) The comments made at 13 and 14 above, apply to this section.

10. Sustainable Development

Page72

20) With the ever-increasing threat of global climate change, it is inconceivable that a coal mine expansion could ever be considered to be sustainable development.

An independent organisation such as the Global Change Institute of the University of Queensland should be asked to review the EIS response to this section.

References

- ABS. (2011). Australian National Accounts: Input-Output Tables - Electronic Publication, Final release 2006-07 tables. Australian Bureau of Statistics. Retrieved from [http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/5209.0.55.001MainFeatures4Final release 2006-07 tables?opendocument&tabname=Summary&prodno=5209.0.55.001&issue=Final release 2006-07 tables&num=&view=](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/5209.0.55.001MainFeatures4Finalrelease2006-07tables?opendocument&tabname=Summary&prodno=5209.0.55.001&issue=Finalrelease2006-07tables&num=&view=)
- AEC group. (2010). Economic Impact Assessment for the China First Project EIS. *Assessment*. Retrieved from <http://www.deedi.qld.gov.au/cg/galilee-coal-project-northern-export-facility.html>
- BCA. (2012). *Cost – Benefit Analysis*. Policy Essentials report for the Business Council of Australia prepared by Deloitte Access Economics.
- Department of Finance and Administration. (2006). Handbook of Cost-Benefit Analysis. *Financial Management*. Financial Management Reference Material No.6, Financial Management Group, Department of Finance and Administration, Commonwealth of Australia.
- Dobes, L., & Bennett, J. (2009). Multi-Criteria Analysis: "Good Enough" for Government Work? *Agenda*, 16(3).
- Economic Associates. (2010a). *Alpha Coal Project (Coal Mine) Economic Impact Study*. Prepared for URS Australia by Economic Associates for the Alpha Coal Environmental Impact Statement.
- Economic Associates. (2010b). *Alpha Coal Project (Coal Railway) Economic Impact Study*. Prepared for Hancock Prospecting Pty Ltd.
- Economic Associates. (2011). *Kevin's Corner Project Environmental Impact Statement*. Prepared for URS Australia by Economic Associates for the Kevin's Corner Coal Environmental Impact Statement.
- Ergas, H. (2009). In Defence of Cost-Benefit Analysis. *Agenda*, 16(3), 31–40.
- Gillespie Economics. (2012). *Cobbora Coal Project Economic Assessment*. Prepared for Cobbora Holdings by Gillespie Economics.
- Hendryx, M., & Ahern, M. M. (2009). Mortality in Appalachian coal mining regions: the value of statistical life lost. *Public health reports (Washington, D.C. : 1974)*, 124(4), 541–50. Retrieved from

[http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2693168
&tool=pmcentrez&rendertype=abstract](http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2693168&tool=pmcentrez&rendertype=abstract)

Muller, N. Z., Mendelsohn, R., & Nordhaus, W. (2011). Environmental Accounting for Pollution in the United States Economy. *American Economic Review*, 101(August), 1649–1675.

Palmer, M. A., Bernhardt, E., Schlesinger, W., Eshleman, K., Fougoula-Georgiou, E., Hendryx, M., Lemly, A., et al. (2010). Mountaintop mining consequences. *Science*, 327(5962), 148. Retrieved from <http://www.sciencemag.org/content/327/5962/148.short>

Qld DIP. (2011). Project Assurance Framework: Cost Benefit Analysis. *Analysis*. Queensland Department of Infrastructure and Planning. Retrieved from <http://www.treasury.qld.gov.au/office/knowledge/docs/project-assurance-framework-guidelines/paf-cost-benefit-analysis.pdf>