

Submission to the EIA Improvement Project – 1: Overview of the EIA Improvement Project

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Healthy planet, **healthy people.**

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Doctors for the Environment Australia (DEA) is an independent voluntary organisation of medical doctors and students who work to address the adverse health effects of environmental damage, pollution and anthropogenic global warming in a broad public health context. Our members work across all specialties in community, hospital and private practices.

Previously DEA has made submissions to the NSW government on the health impacts of planning decisions:

NSW State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) Amendment (Coal Seam Gas), Nov 2013².

Amendments to the NSW Department of Planning and Infrastructure - State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) Amendment (Resource Significance), Aug 2013³.

DEA welcomes the opportunity to comment on the Environmental Impact Assessment (EIA) improvement project.

Recommendations

1. Health of the population is inexorably linked to the health of the environment. Health of the population should be of the highest importance in any EIS process.
2. All issues need to be considered in an EIS and it is unacceptable that “other issues” eg health and social disruption and their costs can be ignored at the discretion of the Planning Department.
3. Health Impact Assessments need to be done for all major projects and must be independent from the proponent of the project.
4. The “Precautionary” principle needs to be used when assessing the impacts of a project.
5. Community engagement needs to occur at all stages of the EIS and be based on the transparency of government processes.
6. Transparent guidelines need to be made available regarding the

criteria for project approval by the minister or delegate of the department.

7. Cumulative assessments need to be considered for all major projects.
8. If adequate baseline data regarding the health of the population and the environment is unavailable then new data must be collected.
9. An independent organization, ideally the EPA, monitors and assesses compliance to consent conditions and not the proponent of the project.
10. The EPA is reformed so that it can deliver on its first vision of "improved environmental and health protection"
11. Most "Type 3 Modification Applications" will need to be considered as new development applications.
12. Peer review needs to be done by an independent assessor that has no pecuniary interests in the project, ideally a person from an academic institution.

Preamble

Australians are suffering ill health and Australia is incurring economic loss because of grossly inadequate assessment and management of the health harms caused by resources and other major developments.

The rapid expansion of the coal and unconventional gas industries has not only created widespread community concern over health and environmental issues but it has exposed the inadequate processes whereby the New South Wales (NSW) government is acting as proponent in their perceived interest of economic development whereas they should be acting as arbiter.

It is our understanding that each project is subject to an environmental impact assessment (EIA). As part of this process, there is an expectation that the health effects on workers and communities will be effectively assessed. This process of Health Impact Assessment (HIA) when conducted properly according to guidelines has the confidence of the medical profession. However, this is often not done independently when the HIA is funded by the proponent of the project.

The application of health impact processes appears to us as confusing, inefficient, uneconomic and lacking transparency – and therefore the health of communities have not been adequately protected.

Current national moves to cut 'green tape' at the instigation of developers will render present health assessments even more inadequate and must be resisted unless health assessments are protected and improved. In October 2013, the NSW government released draft legislation reforming

the planning laws covering the NSW planning system. Health was included in 2 of the 11 objectives. These reforms were stalled in the upper house. Unfortunately, in the revised legislation, "health has been removed as a legislated objective for urban planning."^{4, 5}

DEA argues for health to be considered thoroughly and uniformly as part of the approval processes and examines practical areas for reform.

The impacts of a development must be seen in the context of national and international health. These important links are explained in *The health factor: Ignored by industry and overlooked by government, Appendix 1: The need to protect public health.*⁶

DEA maintains that the prevention of harm is the basis of public health. Prevention is based on careful scientific assessment of possible hazards, their risks and methods of prevention. Clean air, clean water and nutritious, uncontaminated food are all crucial contributors to public health. Healthy ecosystems are the life support systems for humanity. Both land and marine ecosystems are being progressively compromised by global environmental changes and human activity, which pose major and increasing threats to sustainability, population health and ultimately survival.

Development can have many benefits for society but it may also have unmeasured adverse effects. An EIA is intended to be a comprehensive review of all possible effects on the environment. The assessment of risk to human health by a development is intimately linked to the EIA. It identifies problems of air, water and noise pollution, risks of injury to workers and communities and the effects on the physical and social aspects of community life.

The process of HIA is complex and is conducted by the states under optional guidelines issued by the Commonwealth. The decision about whether a HIA is required for a project is usually made by the same department that is dealing with the EIA.

The opinions of health officials or health experts are not necessarily sought before making this decision. Thereafter there is great variability on which health issues are assessed and how, and in the degree of public consultation and reporting. The HIA process for projects is described in *The health factor: Ignored by industry and overlooked by government, Appendix 2: Tool for assessing health impacts.*⁶

By failing to consider the long-term health of the environment and communities, governments are allowing irresponsible industrial development.

We make these points about HIA because the improvement project document failed to mention the word 'health' and yet health is one of the

main community concerns in the planning process. To put it simply, we as practicing doctors are baffled.

1.3.2 Principles to guide EIS

DEA would firstly like to comment on the underlying principles.

Ecologically Sustainable Development (ESD)

DEA strongly supports the principle of Ecologically Sustainable Development (ESD). It has become obvious that development since the industrial revolution has come at a cost to the environment. Over the last 200 years we have seen extraordinary development and an increase in our standard of living. However, society and the environment have now come to the point where we are counting the cost of this development. The most obvious effect is climate change with the warming of the planet due to the burning of fossil fuels. Certainly, without the use of fossil fuels we would not have developed to our current standard of living but we are now living unsustainably. This is causing irreparable damage to the environment and subsequently the health of the population. According to the Lancet, *"Climate change is the biggest global health threat of the 21st century"*. Consequently, all new developments need to take into consideration the impacts of carbon emissions and subsequently climate change.⁷

However, ESD also needs to take into account other issues such as air quality, water quality and noise levels. The guiding principle is a "Precautionary Principle".⁸

'In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation', World Health Organization (WHO) Rio Declaration, 1992

Proportionality

DEA has concerns regarding the outlined principle of "Proportionality". The implication of this principle is that some issues are of minor importance "other issues" and can be discounted in the submission process. However, who is to decide the importance of the issue at hand? Is the most important issue related to the profitability of a project or to the environmental impact? Are the concerns of 5 or 10 local residents considered a "minor detail" or do these outweigh the importance of multi-million dollar profits?

One way of dealing with this is a cost benefit analysis. *"Cost-benefit analysis is a method used to make decisions about alternative courses of action based on the net welfare gain to the community as measured by criteria such as net present economic value (NPEV) and benefit cost ratio (BCR). Benefits and costs are 'social' in that they are measured irrespective of how they are distributed and they are not limited to actual market transactions. Cost-benefit analysis is particularly relevant to public sector decision making where the costs and benefits of a project are often not reflected in market transactions."*

These economic values of costs and benefits are forecast over the life of the project, costs are subtracted from benefits, and the sum of the resulting net benefits are discounted to give the net present economic value (NPEV) of the project. The NPEV allows project options to be compared on the same basis and hence allows the determination of the greatest net benefit to the community or the most economic use of resources." ⁹

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 statements¹⁰, as do academic economists¹¹, private consultants¹² 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.¹³

To put it simply, the value of a project is usually stated without the externality costs. Without taking into account the health and social costs of the project it is not possible to be sure of the economic desirability of the project. Examples include coal projects which incur health costs sufficient to outweigh the benefits of the project as outlined by publications such as Muller, Mendelsohn & Nordhaus, 2011¹⁴.

Cost-benefit analysis of the project should also include assessment of greenhouse gas emissions that will arise from the project. DEA notes the reference to the paper by Jones and Morrison-Saunders, *"Making sense of significance in environmental impact assessment"* which outlines a framework for making a decision regarding significance however there remains uncertainties regarding the final decision-making process.

Mitigation Hierarchy

All new developments will have an impact on the environment and have carbon emissions which will impact on climate change. "Mitigation Hierarchy" is an important principle. DEA agrees that the environmental

impacts should be internalized as much as practical however it is unlikely that all the carbon emission for a project will be able to be internalized. Consequently, it is imperative that all projects have carbon offsets for the project. New projects should have a principle of carbon neutrality. This includes the project itself, ongoing carbon emissions from the project and the effects of the product from the project such as burning of coal. It is no longer acceptable for development to come at the cost of an increase in carbon emissions and worsening of climate change.

Earlier and Better Engagement

DEA supports the principle of earlier and better engagement with the community during the EIS process. In the past, the community engagement has been sub optimal. This has been seen on numerous occasions. A good example has been the Bentley coal seam gas proposal. The proponent was required to engage with the community regarding the project and this was not adequately achieved. The exploration licence was suspended because Metgasco had not undertaken proper consultation with the community. DEA proposes that a consultation panel is incorporated into all major projects. The consultation panel should include community representatives, health professional, environmental experts as well as the proponent of the project. Experts on the panel need to be independent and have no pecuniary interest in the project.

Cumulative Assessment

Cumulative assessment needs to be incorporated into all major projects. It is not possible to consider individual major projects without taking into consideration the impacts of other projects in the area. A good example of this is in the Upper Hunter Valley. Each new project has been assessed individually but has failed to take into account the cumulative damage the individual project has had on the entire region. Singleton has consistently had SO₂ emission above the WHO air quality guidelines for air quality yet this is not taken into account when considering new projects.

For cumulative impacts to be properly assessed, there needs to be adequate baseline data. It is insufficient for data to be collected after the project has commenced. Once adequate baseline data is collated, then a sensible decision can be made as to the cumulative impacts that any new project will have on the region. Once the project has been approved then there needs to be adequate ongoing assessment of its impact. Further modification to the project may then be required to protect the region and its people.

Clarity and Consistency

DEA agrees with clarity and consistency in conditions and compliance.

Building Confidence and Trust in EIA

DEA would like an improvement in confidence and trust in the EIA process. There is considerable scepticism in the community regarding the EIS process. This has resulted from projects having been approved which have considerable impact on the environment and human health when there are serious community concerns. These concerns have subsequently been confirmed when there has been a deterioration in the environment and subsequently the health of the population. In order for the Department of Planning and Environment to regain the confidence of the community it needs to be more transparent in its processes and to engage the community at a higher level.

Additional Principles: Health Impact Assessment

DEA is also adamant that Health impacts need to be added to the guiding principles when considering new projects. Health impacts have not been adequately considered with regards to new projects. It is imperative that the health of the local population as well as the health of the broader community is considered in any new project. It is unacceptable that the health of the population deteriorates from a new project. This relates back to the principles of ESD, proportionality and cumulative assessment.

3.3 SCOPING AN ENVIRONMENTAL IMPACT STATEMENT

DEA supports early and adequate consultation with the proponent of the project, health professionals, community groups and government for any new major project and modification of previously approved projects. However, DEA would like to make a few points.

It is imperative that all issues are discussed and that the process is not simplified to "key issue" and "other issue". This refers back to the statements regarding "proportionality". DEA understands the aim of simplifying the EIS process however this should not come at the expense of an adequate assessment process that encompasses all the issues.

DEA would like to commend the use of the "scoping worksheet" (Guideline3, appendix A) to identify issues surrounding any particular project however a significant omission is the impact on greenhouse gas

emissions. It is critical to identify these emissions from the development of the project, the ongoing activity of the project as well as emission derived from the project (eg burning of coal in another locality). This brings in the principles of ESD, "Mitigation hierarchy" and "cumulative impact".

It is clear from the proposal that the scoping report is to identify the issues related to a particular project but it does not clarify the mechanism by which the department deems a matter significant or not significant. In "estimating material effects" (guideline 3) the proposal is for the project team to make a "professional judgement" regarding the impact of material effects. However, it is unlikely that the project team would have the expertise to make judgements regarding the health impacts of a project. Consequently, an independent health professional needs to be part of this process when decided which matters are of concern. DEA firmly rejects the current circumstances where the proponent for the project submits the HIA.

If a matter is complex and requires further investigation then it is imperative that the information accessed to make a determination is relevant and up to date. It is not acceptable that reference is made to literature that is out of date. If appropriate references cannot be found in making a decision then new data needs to be collected. If data does not exist then new "baseline" data needs to be collected.

Baseline data is particularly important when assessing the "cumulative impact". In many regions, the baseline data that has been used in other EIS are no longer valid. In areas such as the Hunter Valley, there have been many projects assessed and approved. These have had incremental impacts on the environment. In those areas, it would not be valid to use previous data as the baseline data. New baseline data would need to be collected. Similarly, if a modification is requested from a previous application then it is unacceptable to use the previous baseline data as the circumstances in the region will have changed.

3.4 PREPARING AN ENVIRONMENTAL IMPACT STATEMENT

As noted in the pre-amble, development can have many benefits for society but it may also have unmeasured adverse effects. An EIA is intended to be a comprehensive review of all possible effects on the environment. The assessment of risk to human health by a development is intimately linked to the EIA. It identifies problems of air, water and noise pollution, risks of injury to workers and communities and the effects on the physical and social aspects of community life.

DEA agrees that in preparing an EIS that the existing environment is

assessed. In many circumstances, the baseline data regarding health of the local population is unavailable. Similarly, data regarding the status of the local environment is lacking. Consequently, it is important that adequate baseline data is collected in order to submit an adequate EIS. DEA understands the time constraints for major projects but it is unacceptable for an EIS to be incomplete in the interests of a rapid project assessment.

3.7 APPROACH TO SETTING CONDITIONS

DEA is impressed with the systematic approach proposed for assessing submissions and deciding which issue is most important (guideline 5, appendix B). However, in Approach to setting conditions (guideline 7) it is unclear how the decision maker, whether it is the minister or a delegate within the department, comes to a decision. Certainly, it is important for there to be a framework for imposing conditions however it is unclear whether there is framework for approving the project in the first place. DEA would like to see a transparent, well documented process that is independent of bias and keeps stakeholders and the community involved.

Key principles

It is important to acknowledge that when identifying the “key principles” underpinning the setting of conditions that it is the proponent of the project that is the entity which stands to gain from the endeavour. The benefit to the proponent must not come at the expense of the health of the population or the environment.

The “Key Principles” are aimed at setting appropriate conditions on the proponent however do not put the onus of responsibility for mitigating the impact of the activity on the proponent of the activity.

One of the key principles is “achievable”. Does this imply that if the condition is not achievable that the condition will not be placed on the proponent? Does it mean that if the condition is not “achievable” that the project will not be approved? If the condition is not achieved does this mean the project will be stopped?

Similarly, if the conditions are “enforceable”, what are the criteria for a project not to proceed or to be stopped? How many of the conditions need to fail before a project is stopped?

Monitoring and reporting Compliance

DEA has significant concerns regarding monitoring and reporting. “It is

ultimately the proponent's responsibility to undertake monitoring and reporting to satisfy the Department that the conditions of consent are being complied with and to report incidents to the appropriate regulatory agency". This is unacceptable. It has been seen on a number of occasions that self-monitoring is inadequate to assess for compliance breaches. There needs to be independent monitoring with real time data available for those affected by the project.

"The Performance-based conditions" go some way in trying to address these concerns however it is imperative that this process is carried out independently of the proponent.

Need for strengthening the EPA

The appropriate agency to monitor environmental conditions is the Environmental Protection Agency (EPA). However, the EPA have been found wanting on a number of occasions. This has been highlighted in the recent Environmental Justice Australia (EJA) report into coal fired power stations "Toxic and terminal", where poor monitoring and prosecution of coal fired power stations has occurred over many years. Consequently, if the EIA Improvement Project is "update and developing new guidelines to support the Department's compliance functions" then the EPA also needs to have its processes updated.

The six **key result areas** that deliver on the EPA's vision, foundational statements, and priorities for 2017-21 are:

1. Improved environmental and human health protection
2. Innovative waste management
3. Effective management of environmental incidents
4. Sound strategic and planning advice
5. Effective communication and stakeholder engagement
6. Exemplary and innovative organisation.

In order for the EPA to achieve its vision of "Healthy Environment, Healthy Community, Healthy Business" it urgently needs to:

1. Strengthen its role to include the ability to monitor and regulate greenhouse gas emissions, and to promote climate protection.
2. Move from a harms-based "regulatory risk model" to a "preventative, precautionary approach" in determining it scientific, regulatory and enforcement activities.
3. Regulate other sectors other than Industry/business, in particular transport.

4. Change its funding model to one that is sustainable, independent and commensurate with its duties.

It is clear that the primary focus of the EPA is to protect the environment and consequently human health. McMichael (2004) documented the environmental impacts on health especially with respect to climate change. This has been reinforced by the West Australian EPA. The EPA needs to be given the ability to perform its functions with adequate regulatory strength and independence. The importance of this cannot be understated.^{15, 16, 17}

3.8 MODIFYING AN APPROVED PROJECT

The main concern for DEA in the modification of applications is the "Type 3 Modification Applications". Any significant change to the original proposal should be considered a new proposal. This is especially important if there has been a significant time difference between the initial approved proposal and the modification.

In the case of a large time difference, for instance greater than 5 years, there will have been a change in the baseline health and environmental conditions. These changes need to be taken into account for any modification. Consequently, a new proposal should be submitted.

If a new EIS is required than a new Health Impact assessment needs to be done as well. If this amount of new documentation is needed then it implies that the modification is more than a minor change and should trigger a new proposal.

If a modification is being considered than it needs to consider all the factors involved in the original (approved) application. It is not appropriate that "matters raised during the original development application cannot be revisited if these are not relevant to the Modification Application".

3.9 PEER REVIEW

DEA welcomes the involvement of an independent process undertaken by a consultant to review various assessments and reports in the EIS process. The main concern is the level of independence and the ability to find a truly "independent" assessor. It is likely that the consultant will need to come from an academic institution for the best chance to have an independent assessor.

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Appendix 1

The need to protect public health

'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being.' World Health Organization (WHO).

The prevention of harm is the basis of public health. It is based on careful scientific assessment of possible hazards, their risks and methods of prevention. Clean air, clean water and nutritious, uncontaminated food are all crucial contributors to public health. Healthy ecosystems are the life support systems for humanity. Both land and marine ecosystems are being progressively compromised by global environmental changes and human activity, which pose major and increasing threats to sustainability, population health and ultimately survival.

Almost a quarter of the disease burden and deaths in the world can be attributed to environmental factors. The WHO estimate for Australia is 22 per cent.¹ We cannot begin to alleviate this burden of ill-health unless we address the environmental pathways and antecedent causes.

Additionally, the WHO recognises the importance of taking action on the social aspects of health to reduce health inequalities. These are the conditions in which people are born, grow, live, work and age, and are shaped by the distribution of money, power and resources at global, national and local levels.²

Increasingly, public health has a global dimension because actions in one country may affect the health of, people in other countries. This theme is described in the documents;

- Report of the World Commission on Environment and Development: Our Common Future
- The Millennium Development Goals
- United Nations Environment Programme

Rapid and continued increases in scale and scope of modern development have resulted in commensurate increases in short term, long term and cumulative risks to human health from environmental changes and degradation. Preventive health strategies are essential in protecting and maintaining the health of the individual and the community against the harms.

Public health is largely preventative and so does not usually carry the political weight of an immediate crisis. Understanding by the public and policy-makers about public health is often poor.

While there have been major successes in public health in Australia, such as immunisation and tobacco control, there are many examples of failure of delivery of adequate health protection in the environmental domain where there are fewer counterbalances to the needs of government. Some initiatives are relatively easy to promote to government for their action, but others involve an appreciation of risk and potential long-term harm.

¹ Social determinants of health, WHO

² Preventing disease through healthy environments, WHO

Appendix 2

Tool for assessing health impacts

A Health Impact Assessment (HIA) can be described as a holistic and systematic process that identifies and examines both the positive and negative health impacts of a development during its planning and development stages, and provides decision makers with information about how it may affect the health of people.

HIA involves the scientific processes of hazard identification, quantification, characterisation and risk assessment within a structured process. Risk management/mitigation strategies are developed within the overall HIA and the outcomes and recommendations of the process provided to decision makers such as politicians and regulators.

HIA is similar in concept to EIA. It can be incorporated into overall decision making or be a stand-alone process. HIA requires good qualitative data and methods to measure effects on social structures, life-style and inequality. The outcomes of HIA should promote health - not just mitigate risk - so that there are better health outcomes for communities.

The horizon for HIA is usually short (for example, five years) but the entire life time of the proposal must be considered and indeed health impacts may continue to arise once the project is terminated.

The scope of HIA can be wider and be applied to all policy involving planning and development. For example, how we design urban environments and our travel systems have complex and neglected implications for individual and community health. In all planning and development, it is also important to consider the particular needs of vulnerable groups or at-risk populations and address inequity arising from development.

The health of Australians is also tied to global issues such as climate change, increasingly extreme weather events and food security.

It is important that those with expert or local knowledge are given opportunities to provide input. As a holistic process, HIA requires input from all potential stakeholders, or their representatives, and particularly focuses on the needs of those most vulnerable in communities.

HIA has been under development in Australia since 1994. The processes that can protect the community are well defined in principle, but their adoption has been problematic. This failure of preventative health ultimately results in higher costs to our increasingly strained healthcare budgets.

HIA Stages

Many frameworks for HIA exist but in the main they are similar to those for EIA and have the following stages:

1. Screening

Should the project be subject to a health impact assessment?

This must become an independent process in the same way that the Office of the Commonwealth Director of Public Prosecutions (CDPP) or state DPPs are independent services. The DPP provides for a fair, safe and just society to provide public confidence in the justice system. The same ideals should apply to public health. An independent experienced health office should make the decisions.

2. Scoping

What issues must be addressed in the health impact assessment? Scoping identifies the key health issues and

public concerns to be addressed, and these are then reflected in the terms of reference for an EIA/HIA. It involves discussion with Health departments for their input, consultation with public and stakeholders and decisions on the type of studies and processes.

3. Profiling

What is the current status of the affected population and the local environment? Profiling considers the characteristics of the environment and community. It describes the community, identifying vulnerable or disadvantaged groups and includes the social determinants of health. Environmental legislation tends to consider only the local community but 'community' must include all those affected even when they are remote; for example, they may be impacted by transport generated by the development.

4. Appraisal

Risk Assessment and Risk management: What are the health risks and benefits? Who will be affected? This is a process requiring skills from a range of health disciplines such as environmental health, other public health agencies, disaster management, epidemiology, psychology, occupational health and safety. It requires management of content and process. The risks are then presented in ways that decision makers can assess. Often occupational

health and safety is dealt with separately from a health impact assessment. This should not be so, because the worker in the mine is also often a resident in the community.

5. Implementation and decision making

Does the assessment provide sufficient, valid and reliable information for decision-making? Is there a conflict to be resolved? How will conditions be enforced? How and by whom will impacts be monitored? How will post-project management be resourced?

6. Monitoring, environmental and health auditing, post-project evaluation

This stage monitors the conditions applied to a development and monitors the health impacts before, during and after the development is completed. Is the project complying with its conditions? How well is the E&HIA process as a whole achieving its aims of protecting the environment and health?

7. Reporting

The conclusions and recommendations in the EIA should include specific measures to remove or mitigate negative and enhance positive health impacts.

Source: Department of Health and Aging, Health impact assessment guidelines p11, 2001.