

Peer Review of an SIA for the Vickery Extension Project

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7 February 2019

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Preamble

I have been asked to provide an independent peer review of a social impact assessment [SIA] prepared by Elliottwhiteing regarding the Vickery Extension Project. I am a social planner and SIA academic at Macquarie University. My CV is attached at the end of this document. I have prepared this peer review based on my extensive expertise in reviewing social impact assessments and having regard to Division 2 of Part 31 of the *Uniform Civil Procedure Rules 2005* (UCPR), and the Expert Witness Code of Conduct (Code of Conduct) contained in Schedule 7 of the UCPR, by which I agree to be bound. I do not have any financial or non-financial interest in the proposed project, the company preparing the SIA or any property or organisation in the region.

I have been asked

- a) to assess whether in my opinion the assessment of social impacts in the SIA, particularly cumulative impacts, is accurate, appropriate and sufficient
- b) to identify any concerns I may have regarding the social impacts of the Project bearing in my the mitigation measures proposed, and
- c) provide any further observations or opinions which I consider relevant.

My report is set out as follows:

- 1 My review report
- 2 A detailed assessment of the social impacts chapter of the SIA
- 3 A detailed assessment of the proposed mitigations
- 4 A completed set of review questions set out in Appendix D of the Department of Planning's SIA guidelines for State significant mining, petroleum production and extractive industry development.

Alison Ziller

7 February 2019

Executive Summary

I have carefully reviewed an SIA prepared by Elliottwhiteing regarding the proposed Vickery Extension Project. In undertaking this review I have had regard to the Department of Planning and Environment's Social impact assessment guideline for State significant mining, petroleum production and extraction industry development, as well as similar, well established standards documented in a number of other guidelines.

In my opinion this SIA does not meet the required standards in a number of ways.

- 1 The consultation process for the SIA appears to have been incomplete. A significant number of objector groups in the region do not appear in the list of organisations consulted. In my view this has resulted in the omission of some social impact issues that ought to have been considered. The consultation process with Aboriginal communities, which is the subject of a number of NSW Government protocols, was particularly inadequate.
- 2 I find the social baseline in the SIA repetitive and ad hoc in its presentation, with poor documentation of the social circumstances of Aboriginal communities in the area and a failure to acknowledge that the rapid increase in mining since 2005 is itself part of the social circumstances which form the baseline for this project.
- 3 The scope of likely social impact issues is restricted. In some cases this is due to the SIA authors deciding that a social impact issue was not important and in other cases due to a number of issues of concern to objector groups not being taken up in the SIA.
- 4 In my view, the impact assessment itself lacks an evidentiary basis. As well, some critical social impact issues are omitted. Taken together these two factors substantially undermine the validity of the impact assessment.
- 5 Seventy two actions are proposed as mitigations of which 56 fall into the category of engage, consult, inform or encourage. In my opinion the mitigations as a whole do not meet basic criteria of tangibility, efficacy or durability.
- 6 Finally I believe it is a matter for concern that the SIA does not address a number of public health issues. There are a significant public health issues relating to current health impacts on local people which have not been

adequately explored. There are also longer term health impacts on the region, the state and the nation through global warming from burning this fossil fuel. Global warming is not in the public interest and it is already affecting the nation. The SIA authors might not agree that global warming is a health hazard or even that burning fossil fuels contributes to it, but they should have dealt with this issue because it is of concern to some members of the regional community.



1 SIA review report

My review of this SIA has identified a number of shortcomings. In this review I deal with those of most significance for the conclusions drawn by the SIA authors. A more detailed review of the major sections of the SIA is in the supporting information provided in Chapters 2, 3 and 4.

Consultation inputs

An SIA should acknowledge the various perspectives and points of view of the stakeholders in a project. This is a basic safeguard for due process, accuracy and completeness.

The EIS at p 4-138 and the SIA at p 27 indicate that for this SIA most consultation with local residents was done at second hand and on a one to one basis, often by phone, with representatives of selected organisations, namely Narrabri and Gunnedah Councils, local business groups and representatives of health and other social service providers including the local hospital and police service. Although the SIA notes (p 26) that consultation workshops were held, these seem to have involved one to one interviews with selected individuals and two families. Two representatives of Aboriginal groups were interviewed.

While a dedicated Aboriginal Cultural Heritage report was prepared for the EIS, cultural heritage is not the only potential social impact issue for Aboriginal people that should have been addressed. In addition to the Burra Charter, consultation with Aboriginal people is the subject of a number of protocols¹. These protocols emphasise early and continuing engagement with Aboriginal community groups. In this context two telephone calls is not enough even to scope the likely social issues that Aboriginal communities might wish to raise. I note that Red Chief LALC requested an extension of time to make a submission to the NSW Department of Planning and Environment [DPE]. This request does not appear to have been granted.

In describing the consultation process, the SIA makes no reference to consultation with the following 13 groups: Lock the Gate Alliance; Armidale Branch NPA; Sustainable Living Armidale; Maules Creek Branch of the CWA; People for the Plains, Boggabri NSW; CountryMinded, Boggabilla NSW; New

¹ For example, the NSW Department of Family and Community Services' [Aboriginal Consultation Guide](#) and the NSW Department of Local Government's [Collaborate NSW](#) resource kit for local governments and Aboriginal Communities to work together

England Greens Armidale, Tamworth, Breeza NSW; Emerald Hill Progress Association; Maules Creek Community Council Inc.; Wando Conservation and Cultural Centre; Boggabri Farming and Community Group; National Parks Association Armidale; Leard Forest Research Node.

Each of these groups has lodged a submission with the DPE and an examination of these reveals that the SIA has not dealt with many of the concerns of these groups. As a result in my opinion, the scope of the SIA is substantially incomplete and appears to be partial.

Social baseline

A social baseline is required in an SIA so as to document the social environment into which a project is proposed to be introduced. This SIA provides a social baseline at pp 29-36 which I have summarised at DPE review question 16 in chapter 4 of this report.

While a number of social characteristics of Narrabri and Gunnedah LGAs have been listed, their description relies heavily on reported consultation inputs. As the consultation, or its reporting, appears to have been incomplete, this reliance means that the accuracy and completeness of the information provided is unknown.

A social baseline is more than a report of community feedback, it should also include available public sector data, such as Census, crime and public health data. While some of this data is included, the authors have only provided data for recent years, or at most for 2011 and 2016 Censuses. However, the social baseline for this project includes the fact that there are already 7 coal mines operating in the area, of which five were in operation before 2011.

The SIA takes these existing mines as given. It does not clearly set out the recent social changes and consequences of the operation of these mines on the current social environment. The Vickery project is proposed to be in addition to 8 approved coal mines of which 7 are currently operating. The sheer number of these, their attendant workforces and the effects they have had on the social context in Narrabri and Gunnedah are part of the social baseline. Further, the very recency of the introduction of these mines means that there is a ready source of comparative, local and relevant data available to inform the social

baseline. Some of this data is in readily available publicly accessible form². This aspect of the social baseline is not clearly set out in the SIA.

The social baseline description of Aboriginal issues and concerns is inadequate. While there is a section on Aboriginal cultural values, there is not a separate section on Aboriginal health, residential location of Aboriginal communities vis-a-vis mining sites, sacred sites vis-a-vis mining sites, housing stress profile. Aboriginal unemployment rates are reported as improved due to mining jobs but remain much higher than for non-Aboriginal people and for Aboriginal people in NSW as a whole. Further, the report relies on comments by (apparently two) Aboriginal community representatives but notes at SIA p 30 that middle aged Aboriginal people were not benefiting from employment initiatives. Failure to provide an adequate consultation process and then a clear social profile of the social circumstances of Aboriginal communities in Gunnedah and Narrabri is unsatisfactory.

Finally the social baseline is not presented in a coherent manner. As the summary at Chapter 4 Review Q16 (of this report) shows, there are 20 topics covered by the baseline but these seem to be in no particular order, of varying relevance, often reliant on unsourced opinion, and generally failing to present a clear picture of the social context for the proposed project. Further where adverse rates or circumstances are reported, there is a tendency on the part of the SIA authors to propose solutions in the form of mitigations. It would have been better to have provided a well-documented and coherent social baseline.

Restricted scope of the SIA

The scope of the SIA was limited, partly by the scope of reported or actual consultations but also because the SIA authors decided that some potential social impact issues, namely odour, air quality, noise and vibration (with the exception of anxiety and stress cause by these factors), and impacts on built assets (with the exception of roads) would not be included in the SIA. The grounds for these exclusions were:

Odour – likelihood of problems considered very low

Air quality, noise and vibration – impacts would be managed ‘within government

² House of Representatives Standing Committee Inquiry into the use of ‘fly-in, fly-out’ (FIFO) workforce practices in regional Australia, *Cancer of the bush or salvation for our cities?* Report, 13 Feb 2013: http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=ra/ffodido/report.htm

policy’

Built assets (except roads) – there would be no direct impacts. (SIA p 41)

These exclusions matter. Firstly it is clear from objector submissions that a number of groups question the efficacy, validity, reliability and adequacy of monitoring and management systems for noise, odour, dust, fly rock and vibration. Concerns about this were expressed by Cotton Australia, Boggabri Farming and Community Group, NPA Armidale Branch, Leard Forest Research Node, Boggabri Family and Community Group, Emerald Hill Progress Asscn, and Wando Conservation and Cultural Centre. The level of concern expressed should have ensured the inclusion of the social aspects of these issues in the SIA.

Secondly, failures of monitoring, measurement, compliance and regulatory systems result in adverse public health outcomes not just individual anxieties or stress. Coal mining has known public health risks and public health is a critical social issue which should not be dismissed by individualising it or by ruling it out of consideration. In my opinion, the decision to restrict the scope of the SIA in this way, and in view of the concerns expressed by the above groups, was inappropriate,

Further a review of the objector submissions from community groups reveals there were a number of other social impact issues which also did not get a mention in the SIA. These omissions were not supported by an explanation. A summary of omitted issues is in Table. 1. The omitted issues are not trivial.

Table 1: Issues of concern to objector groups not dealt with in the SIA

Omitted issue	Submitting group
Inter-generational equity and the precautionary principle	New England Greens Armidale, Tamworth, Breeza NSW
Climate change, greenhouse gas emissions, an old polluting industry under pressure from newer cleaner ones 'Whitehaven's seeking of economies of scale should not be at the expense of our future.'	Maules Creek CWA Emerald Hill Progress Asscn New England Greens Armidale, Tamworth, Breeza NSW
Adequacy and accuracy of dust impact measurement and monitoring	Cotton Australia Wando Conservation & Cultural Centre NPA Armidale Branch
Adequacy and accuracy of noise measurement and monitoring	Cotton Australia Boggabri Farming and Community Group NPA Armidale Branch Leard Forest Research Node Boggabri FCG Emerald Hill Progress Asscn



Omitted issue	Submitting group
Cumulative health impacts (i.e. cumulative effects of noise, respiratory and mental health issues). A 5- large mine close to Boggabri is too much for this small community to handle	Armidale NPA Emerald Hill Progress Asscn Lock the Gate Alliance
Loss of financial benefits to larger towns and overseas 'Businesses in Boggabri have not seen the benefit from decade of coal mines, if anything the reverse has happened. Only one pub out of three remains in operation.'	Maules Creek Community Council Wando Conservation & Cultural Centre
Mistrust of the applicant company – lack of trust in its commitments, poor consultation in practice, inadequate information provision, poor meeting management poor reputation. 'harassment by mine security', poor record of compliance	Lock the Gate Alliance Maules Creek CWA Maules Creek Community Council Boggabri Farming and Community Group Sustainable Living Armidale Wando CCC Boggabri Business and Community Progress Asscn People for the Plains, Boggabri NSW
Net population loss and damage to social fabric due to farming families not being replaced with settled mining families. 'Already, 76 family farms have been purchased by Whitehaven Coal in close proximity to the town of Boggabri, hollowing out the township, affecting local businesses and tearing the social fabric of the district.' Loss of good agricultural land affecting agricultural future	Lock the Gate Alliance Maules Creek CWA Sustainable Living Armidale Wando Conservation & Cultural Centre Boggabri Business and Community Progress Asscn
Risk of over extraction of water without which communities cannot survive. Risk of contamination of ground water	Emerald Hill Progress Asscn
Impacts of DIDO '... even mine staff who have an address in Boggabri are Drive-in, Drive- out workers. They tend to leave their families in places such as the Hunter Valley towns, and commute weekly to their work. This has not been addressed in the SIA. Boggabri has not received an influx of population, and Whitehaven are understood to encourage workers to live in Gunnedah instead, adding to road traffic.'	Wando Conservation & Cultural Centre

Finally, some issues were mentioned in the SIA but not dealt with. These include masculinisation of mining towns (SIA p 100), disorder and social conflict between non-resident workers and residents (SIA p 53), and loss of low income accommodation (SIA p 109). These are serious social impact issues about which there is a substantial amount of researched information and which should have been the subject of detailed inquiry and consideration in the SIA.

The omitted issues go to the heart of the concerns of social impact assessment (distributive equity and precaution) as well as critical social issues facing communities in mining areas. As a result of omitting these issues, the SIA is incomplete and inadequate.

Unsubstantiated claims; lack of evidence

A social impact assessment is intended to identify likely social impacts that matter and will affect communities. Critical considerations are the distribution of benefits and social costs. An assessment of these should be based on analysis of data and research findings from reliable, preferably peer reviewed, sources, that is to say on an evidentiary basis.

While the SIA authors relied on various public sources for demographic, health and crime data as well as a number of government and council publications, the reference list contains only three references to the academic literature. This is unusual. Most SIA authors use the same published data sources but back up claims as to likely social consequences with careful referencing of academic research, or at least research reports published by reputable public agencies (such as the NSW Bureau of Crime Statistics and Research, the Australian Institute of Health and Welfare etc.). The reference list (and lack of footnotes) indicates that the authors of this SIA have not done this. As a result there are a number of unsubstantiated claims in the document.

Example: The SIA says that some nearby property owners are experiencing stress and anxiety ‘in relation to the perceived potential for impacts on their property’s amenity’. The assessment provided is

Whitehaven’s commitments to impact mitigation, and ongoing engagement and information provision relating to specific areas of community concerns, **are expected to reduce the potential for stress and anxiety**, however concerns may persist for some community members regardless of these strategies. SIA p 114 (emphasis added)

An extensive literature on mental health issues associated with loss of livelihood, damage to livelihood, psychological distress, sustained experience of noise, dust etc. is available and does not appear to have been tapped.

In the social impact section of the SIA, most topics addressed fail to provide any social impact analysis but go from description to suggested solutions usually by way of mitigating management strategies by the applicant. This means that the section in the SIA titled Impact Assessment contains very few impact assessments. This is very inadequate.

Example: The SIA notes that

the Approved Mine would result in total disturbance of 24 Aboriginal heritage sites and partial disturbance of seven Aboriginal heritage sites of low or low-moderate significance, with total disturbance of an additional 24 Aboriginal heritage sites of low or low-moderate significance that were identified for the Project [SIA p 99 para 2]

No assessment is provided of the social impact of these changes and the SIA moves straight on to suggesting consultation and mitigations. There is no information regarding the views of Aboriginal people or community groups regarding either the disturbances or the relevance of the proposed mitigations.

Example: A list of risks and benefits to community cohesion is provided at the top of SIA p 106. The number of concerns listed (8) is greater than the number of benefits (3). There is no analysis. The SIA moves straight on to conclude

Whilst differing views are a part of community dynamics, Whitehaven has a role to play in reducing the potential for conflict.

This might be the case, but where is the impact assessment?

I provide a detailed review of each impact assessment topic selected by the SIA authors in Chapter 2 of this report.

The purpose of an SIA is to provide information to assist decision makers³. An SIA based on description and claims which are unsubstantiated by reference to research findings, and made in the absence of comprehensive consultation inputs, provides little basis for decision making. This is unsatisfactory.

Cumulative impacts

Social impacts accumulate over time and with the addition of developments, projects or other events which add to pressures or trends. Where trends or pressures are adverse and also accumulate over time, the cumulative effects can be serious.

³ This purpose can be found in virtually every set of guidelines for example The Interorganizational Committee on Principles and Guidelines for Social Impact Assessment 2003, Principles and guidelines for social impact assessment in the USA, *Impact Assessment and Project Appraisal*, 21:3, 231-250, DOI: 10.3152/147154603781766293 and DPE 2017, SIA guideline for State significant mining, petroleum production and extractive industry development

The combined current and approved project context for this proposed extension is set out at SIA p 51 and reproduced in part in Table 2. Table 2 shows how coal mining has grown in the region, and supports the concerns of objector groups who say that already the number of mines close to Boggabri is too much for the small town to handle. The table shows the rapidity of mining growth since 2005 and the large numbers of workers involved. Compared with the much longer time perspectives of Aboriginal representatives, other long standing residents and the agricultural sector, Table 2 also reveals the very short term nature of this intrusion. The table makes it clear that none of these mines are in for the long haul.

The concerns of local community groups are with both the short term impacts on social fabric and the sustainability of their communities and the current and longer term impacts of damage to agriculture, water supplies and de-commissioned infrastructure. These accumulating considerations are foreseeable and should have been dealt with in the SIA but were not.

Table 2: Current and approved / proposed projects in the region

Project	Description	LGA	Project life	Construction workforce Approx.. FTE	Operation workforce approx. FTE
Whitehaven mines					
Werris Creek	Open cut coal mine	Liverpool Plains	2005-2032		70
Tarrawonga Coal	Open cut coal mine	Narrabri	2006-2029		120
Rocglen Coal	Open cut coal mine	Gunnedah	2008-2020		55
Narrabri North Coal	Underground coal mine	Narrabri	2010-2031		330
Boggabri Coal	Open cut coal mine	Narrabri	2012-2033		600
Maules Creek Coal	Open cut coal mine	Narrabri	2013-2034		450
Sunnyside Coal	Open cut coal mine	Gunnedah	2009-2020		40
Whitehaven CHPP	Coal handling plant	Gunnedah	2002-2022		10
					1485
Approved / Proposed projects					
Watermark coal project	Approved open cut coal mine	Gunnedah	30 years	600	600

Narrabri Gas project	Proposed natural gas development	Narrabri	N/A	1,300	345
Narrabri South Solar Farm, Canadian Solar	Proposed 60MW solar facility	Narrabri	30 years	200	4
Inland Rail (2 projects Narramine to Narrabri and Narrabri to North Star	488 km new and upgraded rail track and associated facilities	Narrabri and others	24 months to 2025	180	
				2280	

Precaution and equity

Failure to deal adequately with cumulative impacts points also to the failure of the SIA to deal with the underlying precautionary and equity issues. Part of the purpose of an SIA is its role in assisting decision makers exercise precaution and take account of equity (footnote 1).

Objector groups rightly point out that burning fossil fuels such as coal is a serious contributor the global warming. The nation is already experiencing noticeable and adverse consequences of global warming. Global warming arising from coal burning is an adverse social impact and public health outcome. Since global warming is already being experienced, it does not fall into a category of social and public health impacts which will only be experienced afar-off.

A precautionary approach to this proposed project should at least have mentioned this. As it is, global warming is the elephant in the room for this SIA, an elephant that everyone knows is there but the SIA has not mentioned.

Similarly, one of the roles of social impact assessment is to identify and point to inequities in the distribution of impacts. These inequities can arise for the current generation (intra-generational equity) and future generations (inter-generational equity). Again objector groups have raised concerns that the social impacts of the proposed mine have not been adequately considered vis-à-vis the short term profits of the mining company, nor have the longer term social and public health consequences of the proposed mine been adequately accounted for.

The Vickery Extension Project proposes a situation in which local communities as well as the nation experience a number of adverse short and longer term

outcomes while the applicant experiences 16-24 (SIA p 121) years of profits from the mining operation and the State receives some financial benefits.

This is a classic case of distributive inequity. The adverse outcomes are substantial and the offset is private profit and mining royalties. A good SIA should state this distributional situation clearly and provide an assessment as to the impacts on the public good. This SIA does not do so.

In my opinion it is correct to say that the SIA has not adequately addressed either the precautionary issue of global warming consequences for the local and broader communities nor the unequal distribution of alleged benefits and likely social costs. Further, while it may be considered that the mitigations proposed in the SIA address the question of distributing benefits to local residents as well as the mining operator, a careful reading of the proposed mitigations does not, in my view, support this.

Mitigations

Chapter 3 below provides a detailed assessment of the proposed mitigations.

In summary, the basic requirement of mitigation strategies is that they are tangible, able to be delivered by the applicant, likely to be effective and likely to last (be durable).⁴ While the strategies listed in the SIA are able to be delivered by the applicant, they do not meet the criteria of tangibility, efficacy or durability.

The proposed mitigations are vague and non-specific, have not been assessed for their efficacy, and appear to benefit the applicant rather than local residents, not least because they are presented as the applicant providing an effective response to (poorly identified) social impacts. Seventy eight percent (78%) of proposed mitigations rely on consultation, engagement, encouragement and information giving (Table 3). This reliance takes no account of negative feedback from stakeholder groups about previous dissatisfaction with these processes.

Among the remaining mitigations proposed are provision of funds for community infrastructure including a child care centre, support for school education programs, support for a courtesy bus between Boggabri and one of the hostels, and implementation of existing Whitehaven policies (Code of Conduct and support for local suppliers). The net effect of these proposed mitigations

⁴ Ziller A, 2012, *The new social impact assessment handbook*, Australia Street Company, pp 66-69 & 125

appears to be good public relations for the applicant but little that is tangible, timely or relevant to community concerns.

Table 3: Reliance on consultation, information and encouragement as mitigations

Name of strategy	# and % actions to engage, consult, inform or encourage	
Stakeholder engagement and community participation	24 of 26	92%
Neighbour amenity and quality of life	9 of 11	82%
Community infrastructure and wellbeing actions	11 of 13	85%
Housing and workforce management actions	10 of 17	59%
Local Business Opportunities and actions	2 of 5	40%
All strategies	56 of 72	78%

For example, there is not enough information in the SIA to justify a child care centre as the social infrastructure that should be funded. The proposed mitigation takes no account of the time required to plan for the construction of a child care centre and its likely financial viability once the mine reduces its operation after 16 years (SIA p 121). Indeed there is no analysis as to which residents in Boggabri require the childcare centre and the extent to which a childcare centre would be financially dependent on children of mine workers. One objector submission reports:

EIS states the project will “tip the demand” for a childcare centre – condition of consent in the Vickery mine VPA, to which the community has not been made aware of.
Boggabri Business & Community Progress Association

While another states:

There is no child care centre and furthermore Whitehaven Coal approached Narrabri Council and advised them not to invest in child care in Boggabri, which is a disincentive to young families who may wish to relocate there. Community bitterness surrounding the child care centre has caused extreme distress to the Boggabri Business and Community Progress Association, which strives to secure the survival of the town.
Wando CCC

None of this is to say one way or another whether a child care centre is needed but merely to point out that a childcare centre is a complex and regulated

endeavour and not one to be embarked on without careful financial and social planning.

Further, not all adverse impacts identified have a mitigation proposed (gender imbalance), and at least one strategy (for Aboriginal employment) is not included in the list of mitigations. As well, some issues, such as flooding or property rights require a substantive response rather than an engagement response.

Other comments

Social impact assessments often fall into one of two categories. The first category is a situation in which a small number of people are asked to lose something of value for the greater good of everyone else. The second situation is one in which some or many people are asked to suffer one or more detriments for the private profit of the applicant.

In my opinion the SIA for the Vickery Extension Project falls more readily into the second of these categories. The likely social detriments, which have not been adequately explored in the SIA in my view, are substantial and include public health issues for the local communities arising from the actual mining operations and public health issues for the nation arising from the contribution of coal mined and burned to the already present harm of global warming. Against these harms are set private profits and mining royalties. The mining royalties are substitutions for other sources of public revenue. The private profits are unstated. Also unstated is their destination, whether onshore or offshore.

By not dealing with this distributive and precautionary issue, the SIA seems to imply that this imbalance between public harm and the public good is not present. I do not agree with this apparent conclusion.

I do not believe that this SIA has adequately identified, described, analysed or assessed the social impact issues arising from this proposed project nor presented the real and substantial precautionary and equity issues involved.

Supporting information

2 Social impacts identified by the SIA

The section on social impacts in this SIA (SIA pp 89-121) is not presented in order of significance or risk of adverse outcomes. It is also disjointed and repetitive.

The following review has minimised repetition by aggregating material on various topics which the SIA has distributed across more than one section.

Noise SIA pp 90, 97

While the issue of noise was excluded from consideration at SIA p 41 on the grounds that acoustic standards would observe government standards, the social impacts section devoted to Acoustic amenity notes at SIA p 91 that construction noise exceedances are anticipated and that nearby landowners expect to experience operational noise 'regardless of predicted compliance with noise criteria' (SIA p 92). The SIA goes on to note that related effects would include airblast overpressure, fly rock, vibration and air emissions and these are likely to be experienced as intrusive.

Reviewer's comment: The SIA does not assess the social impact of noise and the related effects on the families consulted or those not consulted. It notes that the applicant would provide blasting notification to relevant stakeholders and a complaints system. At p 97, the SIA recommends

that Whitehaven develop property- specific management plans with all interested property owners within this radius to address visual impacts, noise exceedances as assessed, unanticipated noise effects, and any other issues which may affect enjoyment of private property

At best these might be viewed as mitigations, however, they do not constitute an impact assessment.

Visual amenity and use of the natural environment SIA pp 92-94

The SIA notes that visual amenity will be affected for at least 5 km around the site. It makes no social impact assessment of the changes to views or night glow.

The SIA notes that mitigation strategies would include progressive rehabilitation and screening and could include an educational monitoring opportunity. This is not a social impact assessment.

The inadequacy of these assessments is made clear by subsequent text.

Several expressed distrust in the Project's noise, air quality and/or flood assessments, and felt stressed and disempowered about potential changes to their properties' visual amenity and noise levels, and about the possibility of having to 'prove' in future that impacts were occurring at their property, should modelling turn out to be inaccurate or environmental management insufficient. (SIA p 97)

And

Several property owners expressed frustration with Whitehaven in regard to a lack of timely information or consultation about changes in the Project rail spur alignment. (SIA p 98)

Reviewer's comment: The SIA's recommendation for on-going consultation on these matters is not a social impact assessment.

Aboriginal issues SIA pp 99 and 108

The SIA notes that the approved mine would result in disturbance of 24 low to moderately significant Aboriginal heritage sites (SIA p99). No assessment is made of the likely social impact of this disturbance.

The SIA suggests youth training programs and the establishment of a keeping place for cultural artefacts. The SIA notes Whitehaven 'would target' 10% of its operational workforce to be Aboriginal and encourages its suppliers to employ Aboriginal people. Improvement in Aboriginal unemployment rates has been attributed to the mining company's policies. The SIA assumes (p 109) that increased participation by Aboriginal people in the mining workforce is positive.

Reviewer's comment: The material provided on this issue area is inadequate. There is a lack of data to demonstrate employment of Aboriginal people in Whitehaven's other operations including whether targets or other strategies have been effective and to what extent. The section does not report what members of the local Aboriginal community or communities think about these strategies or their views about the proposed target. This is a substantial shortfall.

Homesteads SIA p 100

The extension project would result in removal of weatherboard home (identified as Site 22 in Appendix K of the EIS). There would be some impacts on Kurrumbede Homestead Complex relating to noise, blasting, vibration and views. The SIA says these impacts would be manageable and reversible (SIA p 100).

Reviewer's comment: This issue may have been dealt with in the EIS, however a social impact assessment has not been made.

Construction workforce and housing SIA pp100, 106, 107, 109, 121

The SIA notes that 90% of the additional construction workforce is expected to be non-resident and to live in a hostel. The remaining 10% are expected to drive in from nearby towns. The duration of construction is not stated. At SIA p 100, the SIA notes that the construction population will be mostly male and alter the gender balance of Boggabri. At p 107, the SIA says that there is a shortage of construction workers in NSW generally, also stating that construction workers in the region would experience a significant benefit from the availability of construction work at this project. At p 121 the SIA says that local residents would forego employment benefits if the project were not to go ahead. At p109, the SIA notes that construction workers should be discouraged from using low rental accommodation and caravan parks 'so these options remain available for low-income residents and visitors.'

Reviewer's comment: The shortage of construction workers in NSW generally undermines the SIA's suggestion that construction workers in the region would experience a significant benefit from the availability of work at the project, or would suffer a detriment if the project were not to go ahead.

The SIA identifies two social risks in these sections – masculinisation of the town of Boggabri and loss of inexpensive accommodation – but does not make an assessment about their impacts.

Operational workforce and housing SIA pp 101, 107, 110, 111, 121

The project is expected to operate from 2020 - 2044 and employ 450 FTE onsite personnel. It is expected that 70% of the operational workforce would reside in surrounding towns, the majority in Gunnedah, and 30% are expected to move to these towns from elsewhere (SIA pp 101-2). At 2.5 persons per household this could result in some 338 new local residents spread across these towns, but would require the construction of 89 new dwellings (SIA p 110) to accommodate more workers. The SIA notes that the project will employ workers with various

skills (SIA pp 106-7), the applicant will train local people for jobs in its operations and is likely to employ apprentices – up to 20 across the life of the project. The SIA assesses this potential population increase as small but positive. Although at p 111, the SIA notes that shortage of tradespeople in the region may be exacerbated by the project's requirements.

At SIA p 121 the SIA notes that the employment opportunities will be short term (with the number of jobs declining from year 16 of operation), this is likely to be 'a significant loss to the region's mining labour force' and employment flow-on benefits will also be affected.

Reviewer's comment: The SIA notes that the project is likely only to run at full operational capacity for 16 years. This short timescale is not factored into the social impact assessment. For example, the estimated number of new households and new dwellings needed assumes full operational capacity. The analysis also does not take account of reductions in operational capacity due to (say) declining coal prices and does not deal with the social impacts arising in 16 - 24 years due to the exhaustion of the mine and its closure. Twenty four years is not very long in the life of a rural town.

The SIA should have taken account here (and in other sections) of the fact that the project under consideration is both high impact and short term. At p 121 the SIA proposes that this can be managed by a gradual reduction of jobs and assumes that over the 16 - 24 years 'a large proportion of the long-term residential workforce will seek other local employment within a daily driving range, to remain living within their community'. However this is mere speculation.

While the SIA reports anecdotally (from consultation input) that the reduction in Aboriginal unemployment reflects the applicant's employment strategy, no information is provided regarding the number of Aboriginal people employed as a result of this strategy, or more generally the number of local people trained and employed in any of the applicant's mining operations. Thus no evidence is provided to support the assessment of employment benefits for local people. In addition, there is no assessment of displacement risks for low income households nor of the social impacts on Boggabri if most of the operational workforce locates elsewhere. A strategy is not an assessment.

Community cohesion SIA pp 104-6 & 114

At p 106, the SIA identifies the following issues of concern to residents and potential benefits arising from the project:

Concerns	Benefits
Displacement of local families	Long shifts reduce opportunities for negative interactions between non-resident workers and local residents
NRWs use community resources such as housing and services but don't contribute to social networks	Increased business patronage and trade including hotels and cafés
Poor traffic behaviour	Increased resources and skills for local businesses and for upkeep of community infrastructure
Reduced pedestrian safety	
Low participation rates in community events	
Loss of social networks due to local residents moving away	
Increased travel times due to road closures	
Increased social conflict regarding the desirability of new mines	

The SIA notes the following roles for Whitehaven with regard to the above concerns: maintaining a consistent and transparent engagement process, providing information, maintaining a Workforce Code of Conduct.

Reviewer's comment: The pros and cons listed are not analysed, not supported by any information other than opinion and there is no assessment of the social impacts of the matters raised. Further the list of adverse impacts is incomplete even having regard to the consultation inputs relied on. That is, the SIA does not mention gender imbalance as a community cohesion issue nor consider the potential impacts of increased patronage of local hotels.

The SIA does not note the disparity between the number of matters of concern to local residents and the limited number of social benefits identified. It is unclear what 'Increased resources and skills for local businesses and for upkeep of community infrastructure' means. The SIA notes that there are construction worker and tradespeople shortages already but does not consider the extent to

which work provided by the mine would be a substitution for work that would otherwise be available in different industries.

Health and wellbeing SIA pp 112-114

Air quality and water

The SIA again notes at p 112 that air quality (dust, fumes, flyrock) and water releases would be within permitted levels and the document treats this expectation as satisfactory in social impact terms.

Reviewer's comment: Examination of objector submissions would have indicated that these expectations cannot be taken for granted, some residents do not trust the measurement systems and the levels currently experienced from other operations have given rise to concerns. These concerns should have been identified in consultations and caused the SIA authors to reconsider their optimism and identify the social consequences of inadequate measurement systems, inadequate standards (e.g. for dust) and the fact that poor compliance regimes are difficult to fix, particularly after the event. The SIA should have noted that where these systems fail or are inadequate, local residents suffer the consequences, usually to their health, without adequate recourse. The absence of adequate recourse is in itself an adverse social impact.

Mental health SIA pp 113-14

The SIA says that some nearby property owners are experiencing stress and anxiety 'in relation to the perceived potential for impacts on their property's amenity' and

Whitehaven's commitments to impact mitigation, and ongoing engagement and information provision relating to specific areas of community concerns, are expected to reduce the potential for stress and anxiety, however concerns may persist for some community members regardless of these strategies.

SIA p 114

Reviewer's comment: This assessment of the mental health impacts of this project is reductive and inadequate. It reduces the source of mental health impacts to anxiety about perceptions of future impacts, and the number of people affected are reduced to 'some nearby property owners'. This reduced assessment is inconsistent with a) objector submissions, b) the literature on public health, for example the adverse effect on people's health of pollution, noise, solastalgia. It also fails to

take account of mental health impacts arising from anxieties due to a short term project that will add to climate change (in itself a health hazard) while irrevocably altering the natural environment.

Once again the social impact is inadequately described, lacks an evidentiary base and the assessment relies on mitigations which cannot be conditioned and whose efficacy is unlikely.

Health and emergency services SIA pp 115-117 & p 79

The SIA notes that Boggabri has experienced an increase in the number of GPs from 1 to 3. Current wait times are 1 to 2 days. Other services are not expected to be seriously affected. One practice in Narrabri is the only psychology practice in the region (SIA p 79)

Reviewer's comment: Mental health service provision in the region is not mentioned. This is despite the fact that the social baseline reported that there were 56 hospital admissions in Gunnedah and 185 in Narrabri for mental health related conditions.

Education, child care services, council and community services SIA 117-19

An increase in demand for childcare services is anticipated to cater for an increase in the operational workforce. No impact is anticipated on primary and high schools in the region.

The SIA considers that construction workers will tend to use hostel facilities while new operational workers resident in the area would place some burden on council provided facilities and services. The SIA notes that the applicant proposes to provide funding to support local infrastructure through a VPA. In 2017-8 VPA funding amounted to \$3.5million and other donations in 2018 to \$445,000.

Reviewer's comment: A breakdown of the local infrastructure to which this money was allocated is not provided and so it is not possible to know whether there was a relationship between social impacts or matters of concern and funding allocations.

Cumulative impacts & impacts of non-approval SIA pp 119 -121

This section of the SIA notes that the proposed Vickery Extension Project would commence at the same time as five other major projects in Narrabri and Liverpool Plains. The SIA authors consider that the volume of construction work may result in a shortage of workforce accommodation, pressure on health,

police and emergency services and perceptions of social alienation in the resident communities. The authors recommend increased provision of temporary accommodation. The SIA anticipates less impact in the operational phases of these projects.

If the project were not approved, the SIA considers that Gunnedah and Narrabri would forego employment and business related benefits and the Councils would not benefit from VPA and other funding commitments, local property owners would not experience amenity impacts.

The combined current and approved project context for this proposed extension is set out at SIA p 51 and in Table 2 above (at page 13).

Reviewer's comment: I am unable to say whether this table, provided by the SIA authors includes all the mining activities in the Narrabri, Gunnedah and Liverpool Plains LGAs.

The Vickery Extension Project is a small additional to eight large projects already approved of which seven are currently operating. The currently operating projects are likely to be creating not only the kinds of employment and business benefits on which this SIA tends to rely but also the pressures on housing, social and health services and on the natural environment and agricultural land uses of concern to objectors.

The SIA does not clearly place this extension project and its likely effects in the context of 7 currently operating mines. The SIA does not deal at any point with social impacts arising from the number or extent of the current mining operations on what was till recently a largely agricultural community. That is, it does not deal with the social context of this application in terms of the level of social change and degree of disruption already experienced.

Claims made in the SIA about benefits relating to housing and lack of pressure on health and social services should all have been considered in the context of these approved projects.

Finally, cumulative impacts refer to the accumulation of effects at one period of time and accumulation of impacts over time. This latter aspect of cumulative impacts should have included consideration of climate and the role of coal mining. The SIA is silent on this issue.

Omissions

The following social impact concerns are raised in submissions but not considered in the SIA. The major omissions are:

- community lack of trust of the applicant company based on previous experience;
- purchase of 76 family farms by Whitehaven reducing the local farming population and damaging social fabric;
- number and size of mines close to Boggabri;
- cumulative impacts on public health;
- lack of benefits to Boggabri township from mining operations already in place;
- exercise of the precautionary principle regarding the relationship between the coal mining and global warming and the social impacts of global warming; and
- failure to consider inter-generational equity, for example long term damage to agricultural viability in mined lands.

A full list of these concerns and the groups which raised them is set out in Table 1 above at page 9.

There is also no assessment of the impact on Narrabri and Boggabri of the gender imbalance created by mine workers. The literature refers to this gender imbalance as increased masculinisation which is reported to include increased sense of vulnerability among female residents, increased experience of sexual harassment, including propositioning, increased presence of sex workers, gender based discomfort or lack of security on the street and a reluctance to socialise in public spaces, such as pubs, due to these factors⁵. The SIA does not address how this predominantly male influx of temporary workers will impact the social baseline or identify the consequent social impacts of this. The SIA does not link the possible increase in customers at hotels with the social risks associated with the masculinisation of the town.

⁵ For example: Carrington K, Hogg, R, McIntosh A, Scott J, 2012, Crime Talk, FIFO workers and Cultural Conflict on the Mining Boom Frontier. Australian Humanities Review, 53, November: http://www.australianhumanitiesreview.org/archive/Issue-November-2012/carrington_etal.html; Lozeva S, Marinova D, 2010, Negotiating Gender: Experience from Western Australian Mining Industry, J Economic and Social Policy 13:, Article 7; Scott J, C MacPhail and V Minichiello, 2012, Bang and bust: almost everything you wanted to know about sex and the mining boom (but were afraid to ask) Preview, October 26-31, doi 10.1071/PVv2012n160p26; Shandro JA, Veiga MM, Shoveller J, Scoble M Koehoorn M, 2011, Perspectives on community health issues and the mining boom-bust cycle, Resources Policy, 36: 178-186

3 Assessment of proposed mitigations

The basic requirements of mitigation strategies are that they are tangible, able to be delivered by the applicant, likely to be effective and likely to last (be durable)⁶. While the strategies listed in the SIA are able to be delivered by the applicant, they do not meet the criteria of tangibility, efficacy or durability.

Most of the social impact management strategies, which are also called mitigations (SIA p150) are procedural (proposals to prepare plans / programs, provide information, consult and/or educate) and lack substance in major ways:

- 1 The proposed mitigations do not substantively address social impact concerns, even those identified by the SIA author.
Example: there is no mitigation proposed to address mental health impacts.
- 2 The proposed mitigations state an intention to solve a problem rather than a commitment to do something specific, e.g. provide a named amount of money to a specific end.
Example: NA3 – Property-specific management plans
Establish and publicise a dedicated Project complaint and enquiry line to assist with immediate and adaptive impact management, if and when required. (SIA p 157)
Example: NA5 – Improvements to landscape and amenity values
Work with environmental specialists and interested neighbouring land holders to develop mitigations (e.g. tree screening) which minimise impacts on landscape and amenity values at private properties. (SIA p 157)
- 3 The efficacy of the proposed mitigating strategies and actions is taken for granted and/or is not assessed.
Example: HWA1 – Hire local clause
Encourage construction contractors and suppliers to hire locally where possible through stipulated contractual terms where feasible. (SIA p 162)

⁶ Ziller A, 2012, *The new social impact assessment handbook*, Australia Street Company, pp 66-69 &125

A hire local clause is not the same providing jobs for local people - as is also evidenced by the word 'encourage' and the phrase 'where feasible'.

Example: BA2 – Local Supplier Database

Maintain a Local Suppliers Database to include businesses located in Narrabri, Gunnedah, Tamworth Regional and Liverpool Plains LGAs. (SIA p 165)

Enable local supplier registrations to provide a capability statement/expression of interest to Whitehaven for the Project.

- 4 A number of the proposed strategies are vague from the point of view of townspeople but clearly in the public relations interest of the applicant.

Example: CA3 – Support local community infrastructure

Allocate funds for local infrastructure providers via VPAs and via Whitehaven's sponsorships and donations. (SIA p 159)

Example: CA5 – Support local community development

Initiatives Meet with local schools to scope role modelling programs for positive early years development, where required. (SIA p 159)

- 5 While feedback is relied on heavily as a social indicator, regarding 6 of 9 social matters of concern to the community (SIA p 168), there is little in the document to indicate a commitment to address matters which are the subject of adverse feedback.

Example: SA2 'Use appropriate media to disseminate current Project information and demonstrate how community feedback has been considered in Project execution.' (SIA p 153).

- 6 At least one strategy that appears in the significance table, does not make it into the list of management mitigations.

Example: The Whitehaven Aboriginal Employment Strategy and Cultural Awareness Strategies from which 'up to 50 positions for Indigenous people **are likely to be created**' (SIA p 142) (emphasis added)

does not appear in the list of management strategies.

- 7 Complaints, consultation and engagement processes comprise too large a proportion of proposed mitigating management actions.

Name of strategy	# and % actions to consult or inform					
Stakeholder engagement and community participation	24 of 26	92%				
Neighbour amenity and quality of life	9 of 11	82%				
Community infrastructure and wellbeing actions	11 of 13	85%				
Local Business Opportunities and actions	2 of 5	40%				
Housing and workforce management actions	Actions to encourage	Actions to 'work with'	Actions to inform / promote	Actions to consult	Actions to implement existing policy	Total
	4 of 17: 23.5%	4 of 17: 23.5%	4 of 17: 23.5%	2 of 17 11.8%	3 of 17 17.7%	17 of 17 100%

Reviewer's assessment.

- 8 A number of adverse social impacts identified as significant by the SIA are similarly proposed to be resolved by consultation, engagement and encouragement.

Examples:

Re. 4.1.4 Flooding: 'engagement on flood modelling results should ease concerns.' (SIA p 136)

Re. 4.2.3 Property rights: 'Ongoing engagement with property owners to monitor the effectiveness of mitigations in reducing noise, dust and visual amenity impact ' (SIA p 137)

Re. 4.4.1 Population size: 'Encourage in-migrating personnel to relocate permanently to the Narrabri and Gunnedah LGAs' (SIA p 139)

- 9 Concerns about the efficacy and benefit of so many consult/inform/encourage strategies is reflected in submissions.

Gunnedah resident, Gary Rennick, objected to the proposed extension, noting

'With the proposed increase in rail movements through Gunnedah, I would expect the impact to residents to be considered. Currently there has been no noise mitigation surrounding the western approach to town. The current situation where loaded trains are brought to a stop as early as

3.30 am is having a profound effect on local residents quality of life. It disrupts sleep, drowns conversation and devalues effected properties. There has been absolutely no attempt at protecting these properties from the protracted, invasive noise generated by stopping a fully loaded coal train. With the increase in rail movements, the frequency and disruption will only increase. I am disappointed in Whitehaven's failure to address this problem and sadly envisage no change in the companies attitude towards the long suffering residents affected.' Source DPE website.

More detailed concerns along similar lines are expressed in submission by Sustainable Living Armidale which provides a list of concerns in support of the statement that

The experience of our environmental representative on the Community Consultative Committee (CCC) of Whitehaven Coal's Maules Creek mine does not bode well for the community should this extension be approved. It shows that both the community and the environment are treated as collateral damage for company gain. Source DPE website

The stated concerns include stalling, lack of co-operation, vague minutes, disregard, harassment and failure to communicate.

Similarly People for the Plains, Boggabri NSW wrote in submission

Throughout the social impacts assessment of the EIS it made it very clear there is already a very high level of distrust of the proponent, concerns for the likely impacts and scepticism of the models. The proponent spends considerable time explaining that the project was approved five years ago. Surely this would indicate ample time in which to consult with key people, build trust with them and explain in detail, the project. And yet, the result of all that time is actually less trust and open and more hostility. Source: DPE website

CountryMinded, Boggabilla NSW submitted

The mine managers have a track record of breaching environmental standards in relation to noise, water and pollution management as reported widely and confirmed by the

NSW EPA. This demonstrable culture for deception and non-compliance indicates a corporate culture that undermines trustworthiness of the EIS and attitude and adherence to the objectives of environmental protection legislation generally.

Source DPE Website

New England Greens Armidale, Tamworth, Breeza NSW submitted

NEGAT are concerned that Whitehaven continues to ignore their responsibilities in relation to cultural heritage as set out in the Burra Charter and the policies set out by the Office of Environment and Heritage. There has been a lack of consultation with the traditional custodians within the Red Chief Local Aboriginal Land Council boundaries.

Source DPE Website

Boggabri Farming and Community Group submitted

Throughout the Social Impact Assessment it is made evident that there are very low levels of trust and respect for the proponent in the Boggabri community. This is very evident when talking with community members and most business people in the area. Source DPE website

It is noted that these groups were not listed as consulted in the preparation of the SIA.

Overall, the mitigating management strategies and actions are so vague as to provide no guide to what will or is likely actually to eventuate from them. In this respect the SIA fails to meet both the concerns of objectors and its own criterion that 'its key aim is to enable the Project to have good social outcomes and contribute to socially sustainable development' (SIA p 14).



4 DPE SIA review questions

Q	SIA REVIEW QUESTION	REVIEW ASSESSMENT
	General	
1	Has the applicant applied the principles in Section 1.3? How?	<p>The principles in section 1.3 are named as: action-oriented, adaptive, distributive equity, impartial, inclusive, integrated, life cycle focus, material, precautionary, proportionate, rigorous, transparent.</p> <p><i>Precaution/precautionary</i> is not mentioned in the SIA.</p> <p><i>Distributive equity</i> is mentioned once (SIA p14) but only as a requirement of the DPE guidelines. The SIA does deal with the distribution of mine workers but not the associated equity issues.</p> <p><i>Action-oriented</i> is not mentioned as such, however, at p14 the SIA notes SIA 'is a process not a product' (citing Vanclay et al. 2015).</p> <p>However, demonstrably the SIA prepared by Elliottwhiteling is a product (a report). It also has the potential to affect subsequent actions and therefore impacts on the locality. Treating SIA as a process in this context suggests that the SIA authors believe a) the project will go ahead (the appeal is immaterial) and b) all impacts even the most serious and long term can be managed so that there can be 'good social outcomes' (SIA p14). I do not agree with this approach to SIA in the appeal context.</p> <p>In so far as <i>action-oriented</i> refers to actions to modify and mitigate adverse impacts, I find this SIA wanting as set out in the attached report.</p> <p>My assessment of the process requirements for impartiality, inclusion, life-cycle (cumulative impacts) focus, identification of material (important) impacts, proportion, rigour and transparency are dealt with in context in this and the attached report.</p>
2	Does the lead author of the Scoping Report meet the qualification and skill requirements in Box 2?	<p>Unclear</p> <p>Has a social science qualification. No CV. Skills unstated</p>
3	Does the lead author of the SIA component of the EIS meet the qualification and skill requirements in Box 4?	As for Q 2
4	Has the lead author of the SIA component of the EIS provided a signed declaration certifying that the assessment does not contain false or misleading information?	Yes at p 168
	Community engagement	
5	Does the SIA include adequate explanations of how the engagement objectives have been applied? How?	<p>EIS pp 4-138 and SIA p 27 indicate that most consultation with local residents was done at second hand and on a one to one basis (viz. with representatives of Narrabri and Gunnedah Councils, local business groups (Boggabri Business Promotion and Community Progress Asscn.) and representatives of health and other social service providers including the local hospital and police service.</p> <p>A table at SIA p 27 says there were SIA workshops in Gunnedah, Boggabri and Narrabri and that these included five one to one interviews. The duration of workshops and list of attendees is not provided. There is no record of a discussion with any <i>groups</i> of people (residents, staff etc.) in any of these local government areas. The only reported engagement with a group of people was with the Vickery CCC about which the SIA notes the SIA author attended a phone conference 'to listen to community concerns</p>

Q	SIA REVIEW QUESTION	REVIEW ASSESSMENT
		<p>and invite discussion about the Project's potential social impacts and benefits' (SIA p27)</p> <p>The table at SIA p 27 shows that one to one interviews were often by phone. For example consultation with one Aboriginal group, the Vickery CCC and with five landowners was by phone. For some 'interviews' it is unclear whether this was face to face or by phone.</p> <p>The SIA states that the 17 landowners interviewed were owners of property directly adjacent to the mine. The map at SIA p 38 shows there are many more than 17 private dwellings within the visual, auditory, cultural and environmental catchments of the proposed mine.</p>
6	<p>Does the SIA demonstrate that there has been a genuine attempt to identify and engage with a wide range of people, to inform them about the project, its implications and to invite their input? How?</p>	<p>The SIA authors do not appear to have met with objectors or provided objectors with the same level of opportunity for interview or discussion as was provided to the selected representatives.</p> <p>Not mentioned in the list of organisations consulted, met with or telephoned are the following groups which submitted feedback to the Department of Planning:</p> <ul style="list-style-type: none"> - Lock the Gate Alliance; - Armidale Branch NPA; - Sustainable Living Armidale; - Maules Creek Branch of the CWA; - People for the Plains, Boggabri NSW; - CountryMinded, Boggabilla NSW; - New England Greens Armidale, Tamworth, Breeza NSW; - Emerald Hill Progress Association; - Maules Creek Community Council Inc.; - Wando Conservation and Cultural Centre; - Boggabri Farming and Community Group; - Boggabri Business & Community Progress Asscn.; - National Parks Association Armidale; - Leard Forest Research Node. <p>The SIA does not demonstrate that a genuine attempt has been made to meet and speak with opponents of the project. This is an important omission.</p> <p>Although it may appear that there are more supporters than objectors (e.g. on the DPE website) an SIA is not a vote but an assessment of critical social impact issues against public interest criteria.</p>
7	<p>Does the SIA demonstrate that an appropriate range of engagement techniques have been used to ensure inclusivity and to ensure the participation of vulnerable or marginalised groups? How?</p>	<p>No</p>
<p>Scoping – social influence</p>		
8	<p>Does the Scoping Report identify and describe all the different social groups that may be affected by the project?</p>	<p>SIA states, p 13, that due to transitional arrangements a scoping study was not required.</p>
9	<p>Does the Scoping Report identify and describe all the built or natural features located on or near the project site or in the surrounding region that have been identified as having social value or importance?</p>	<p>SIA states, p 13, that due to transitional arrangements a scoping study was not required.</p>
10	<p>Does the Scoping Report identify and describe current and expected</p>	<p>SIA states, p 13, that due to transitional arrangements a scoping study was not required.</p>

Q	SIA REVIEW QUESTION	REVIEW ASSESSMENT
	social trends or social change processes being experienced by communities near the project site and within the surrounding region?	
11	Does the Scoping Report impartially describe the history of the proposed project, and how communities near the project site and within the surrounding region have experienced the project to date and others like it?	SIA states, p 13, that due to transitional arrangements a scoping study was not required.
	Scoping – social impacts	
12	Does the Scoping Report adequately describe and categorise the social impacts (negative and positive), and explain the supporting rationale, assumptions and evidence for those categories?	<p>Although a scoping report was not required for this SIA, the authors have used stakeholder inputs derived from the above consultation processes to identify the scope of the SIA.</p> <p>This can be seen in <i>Table 2-3 Stakeholder inputs to SIA</i> (SIA pp 28-36) in which inputs from these stakeholders are used to describe the social baseline and identify likely social impacts. This feedback also seems to have been used to identify the assessment focus of the SIA – found in <i>Table 2-5 SIA Assessment Focus</i> (SIA pp 42-45).</p> <p>Table 2-5 also lists the scope of investigations of the social impacts of each issue. These investigations do not include consulting with objector groups.</p>
13	How has feedback from potentially affected people and other interested parties been considered in determining those categories? Does the Scoping Report outline how they will be engaged to inform the preparation of the SIA component of the EIS?	<p>As a scoping exercise this methodology is flawed by the failure to consult objector groups. A flow-on flaw is that some matters that are important to objector groups have not been mentioned or scoped for consideration. And some matters considered important by objector groups have been determined by the SIA authors as unlikely to have significant social impacts and have been excluded from the SIA (SIA p 41). These matters are:</p> <ul style="list-style-type: none"> -- odour -- air quality, noise and vibration impacts except as the basis for resident anxiety and stress, and -- direct impacts on built assets, with the exception of roads. <p>Had objector views been considered in the SIA the scope of social impacts is likely to have included these omitted matters.</p>
14	Does the Scoping Report identify potential cumulative social impacts?	<p>No</p> <p>The failure to identify potential cumulative impacts in part arises from the limited consultation process and in part from a lack of research on the part of the SIA authors.</p>
	Social baseline study	
15	Does the SIA component of the EIS discuss the local and regional context in sufficient detail to demonstrate a reasonable understanding of current social trends, concerns and aspirations?	<p>No.</p> <p>The SIA provides stakeholders' inputs regarding 'social baseline characteristics' SIA pp 28-36. However, these inputs have been obtained from the limited consultations undertaken and do not represent the views of groups not consulted.</p>
16	Does the SIA component of the EIS include appropriate justification for each element in the social baseline study, and provide evidence that the elements reflect the full diversity of views and	<p>The SIA provides stakeholders inputs on 'social baseline characteristics' SIA pp 28-36 However, much of the input listed is more accurately described as consultation feedback than baseline social data.</p> <p>Under the heading Social Baseline (SIA pp 46– 87), the description is grouped into the following categories:</p> <p>Surroundings: largely settlement history and demographic data.</p>

Q	SIA REVIEW QUESTION	REVIEW ASSESSMENT
	<p>potential experiences in the affected community?</p>	<p>Amenity: a qualitative assessment by the project team. May have been developed from consultation input but sources not stated.</p> <p>Natural heritage: the Namoi River and Vickery State Forest are described as features of social value to sense of place.</p> <p>Mining Development: Table 3-1 (SIA p 51) shows there are currently 6 open cut coal mines near the proposed Vickery extension with one more approved. There is also one underground coal mine, one proposed natural gas development and a proposed solar energy farm. There are existing and proposed coal handling facilities. According to the Table, existing mines and facilities currently provide an estimated 1675 FTE jobs. All but 50 of these jobs are in projects with an estimated life to 2029 – 2034</p> <p>Aboriginal cultural values: relies on 2012 research for the EIS’s Landscape section 4.15.1. The SIA notes Whitehaven’s Aboriginal Reconciliation Action Plan’s 10% Aboriginal employment target.</p> <p>Historic heritage: relies on the EIS for a list of homestead sites</p> <p>Rural values: reports strong attachment to rural character and ‘sense of a ‘resource hierarchy’ where water and soil are the ultimate assets that must be protected’ (SIA p53) Relies on research by U Newcastle in 2016 for this assessment. Notes loss of farming families in Boggabri due to mining. Suggests that mining brings in a new population ‘providing additional people ...available for participation and involvement’.</p> <p>Community representation: lists elected representatives and the Vickery CCC but none of the objector groups.</p> <p>New England NW Regional Planning: brief summary of the Regional Plan</p> <p>Council plans and strategies: Summary of aims of strategic plans and LEPs</p> <p>Population characteristics: summary of Census data, incl. education, housing costs and future population. Refers to but does not provide any data on Whitehaven’s Indigenous employment record (SAI p58).</p> <p>Diversity and vulnerability: provides scores for the SEIFA Index for Narrabri and Gunnedah LGAs. Both scores are lower than the Australian median. The SEIFA Index of Relative Advantage and Disadvantage is not disaggregated to smaller areas which would reveal social differences between town and rural residential areas.</p> <p>Community cohesion: the SIA uses residential mobility as the main indicator of social cohesion and also mentions, volunteering and an unreferenced CSIRO report. There is no explanation linking residential mobility or lack of mobility with social cohesion.</p> <p>Way of Life: this seems to be a project team assessment; no evidence base</p> <p>Employment and Economic strengths: SIA states that agriculture has been the mainstay of the local economy but has ‘declined in proportional terms since 2001’ (SIA p 65.) Narrabri had 1006 residents working in coal mining in 2016 (Table 3-14 SIA p 68) but also had non-resident workers in mining jobs (SIA p 66) and 1000 beds in two non-resident workers hostels (SIA p 75) whereas Gunnedah has mining workers resident in the LGA but working elsewhere, primarily Narrabri (SIA p 101). However, the relationship between coal mine employee’s place of residence and place of work is not made clear in the SIA. For example while the SIA notes that there are 2 non-resident worker’s hostels in Narrabri, it does not examine the relative contribution to the coal mining workforce of Narrabri residents, Gunnedah residents and non-resident workers from further away, even though this would be relevant to the social baseline.</p> <p>The SIA also reports some data on mining jobs without specifically identifying coal mining jobs.</p>

Q	SIA REVIEW QUESTION	REVIEW ASSESSMENT																				
		<p>Unemployment: Indigenous and youth unemployment is significantly higher than the total unemployment rates for Gunnedah and Narrabri (SIA pp 71-72)</p> <p>Housing: The SIA provides some Census data on housing and on workforce accommodation. Does not include % households in housing stress and provides no information on displacement effects of mining although housing affordability is mentioned by stakeholders and reported in the SIA at p 31.</p> <p>Recreation: this is a list of mainly outdoor amenities or facilities, no information as to quality or level of use.</p> <p>Health and Wellbeing: Higher rates of asthma in the region compared with NSW (SIA p 77) These rates are relevant to the decision of the SIA team not to include dust as a social impact consideration.</p> <p>The two LGAs have higher rates of smoking, risky alcohol consumption and mental illness in rural NSW, particularly among young men and shortage of services in the region.</p> <p>Vulnerability to crime: notes high rates of domestic and non-domestic assault and incidents of sexual offences. All rates are higher than for NSW as a whole. Only two years of data are provided (2016 and 2017).</p> <p>Data from BOCSAR shows that over the past 7 years the rates of these crimes have been consistently higher for these two LGAs as compared with NSW as a whole – with the exception of theft in the year to September 2018.</p> <p>Data on malicious damage to property and disorderly conduct (often alcohol-related crimes) are not included in the SIA but show the same profile.</p> <table border="1" data-bbox="592 1084 1369 1384"> <thead> <tr> <th>Year to Sept 2018</th> <th>Assaults per 100 000 population</th> <th>Malicious damage to property per 100 000 population</th> <th>Disorderly conduct per 100 000 population</th> <th>Theft per 100 000 population</th> </tr> </thead> <tbody> <tr> <td>Gunnedah</td> <td>1147.3</td> <td>1362.4</td> <td>509.9</td> <td>3625.2</td> </tr> <tr> <td>Narrabri</td> <td>1305.5</td> <td>1068.2</td> <td>600.8</td> <td>2796.5</td> </tr> <tr> <td>NSW</td> <td>822.0</td> <td>765.8</td> <td>269.1</td> <td>2881.2</td> </tr> </tbody> </table> <p>Source: http://crimetool.bocsar.nsw.gov.au/</p> <p>Childcare and education: Shortage of childcare and that non-resident workers do not use local education services. Notes that Whitehaven have proposed support for education and child care in the region.</p> <p>GPs: The region has difficulty in attracting and retaining medical practitioners</p> <p>Hospitals and health services: Limited local facilities. Regional centre in Tamworth</p> <p>Police and emergency services: Difficulties in attracting and retaining staff</p> <p>Community services: limited provision particularly in Boggabri</p> <p>A social indicators summary is also provided at SIA pp 87-88</p>	Year to Sept 2018	Assaults per 100 000 population	Malicious damage to property per 100 000 population	Disorderly conduct per 100 000 population	Theft per 100 000 population	Gunnedah	1147.3	1362.4	509.9	3625.2	Narrabri	1305.5	1068.2	600.8	2796.5	NSW	822.0	765.8	269.1	2881.2
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17	Does the social baseline study include an appropriate mix of quantitative and qualitative analysis, and explain data gaps and limitations?	The social baseline is based on the project team’s qualitative assessment, Census or other public sector data and inputs from the people consulted. The reliance on consultation inputs which did not include objector groups is an important flaw.																				

Q	SIA REVIEW QUESTION	REVIEW ASSESSMENT
		<p>The key adverse social indicators relate to population decline and the decline of the agriculture sector, an ageing population, high unemployment rates particularly for Aboriginal people and young people, shortfalls in social infrastructure, higher rates of asthma than for NSW as a whole, mental health issues, the fact that Narrabri has more mining jobs than resident miners resulting in people travelling to Narrabri to work but living elsewhere.</p> <p>There are some omissions and shortfalls in the profile noted above. For example, rates for a number of indicators are only provided for last 2 years. The extent to which data refers to coal mining is not always clear.</p> <p>While there is a section on Aboriginal cultural values, there is not a separate section on Aboriginal health, residential location of Aboriginal communities vis-a-vis mining sites, sacred sites vis-a-vis mining sites, housing stress profile. Aboriginal unemployment rates are reported as improved due to mining jobs but remain much higher than for non-Aboriginal people and for Aboriginal people in NSW as a whole. Youth unemployment is also high.</p> <p>Where adverse rates are apparent, the profile has a tendency to include 'solutions' as part of the profile. These solutions include council plans or the applicant's health program, however the former are plans or intentions not current services, and the latter are not services for the population as a whole. While the social profile includes population forecasts there are no forecasts for employment by the coal mining industry sector.</p> <p>Seven coal mines have opened in Narrabri, Gunnedah and Liverpool Plains LGAs since 2005 (SIA p 51) During this time, the presence of the mining industry has affected the profile of economic activity and employment in these areas. Two hostels containing 1000 beds have opened in Narrabri, people are travelling to Narrabri to work. The expansion of the coal and other mining sectors may have resulted in local benefits in the form of social infrastructure and services since 2005 but this is not described. The expansion of this sector and its travelling workforce may have had other impacts for example on rates of alcohol-related crime, displacement of low income residents, loss of local supply chains but this mining related history is not described in this baseline.</p> <p>This SIA is about a proposal to increase the presence of mining in the area but fails to provide a social baseline which describes the social effects of the recent increase in coal mining activity to date. Because these recent changes are so substantial, in my opinion the impacts of these recent changes should have been included.</p>
	Prediction / analysis of impacts	
18	Does the SIA component of the EIS include an appropriate description of the potential impacts in terms of the nature and severity of the change and the location, number, sensitivity and vulnerability of the affected stakeholders?	The SIA's identification of positive and adverse social impacts is reviewed above (Chapter 2 of this report)
19	Does the SIA component of the EIS identify potential impacts at all stages of the project life cycle?	No
20	Does the SIA component of the EIS appropriately identify and justify any assumptions that have been made in relation to its predictions?	No

Q	SIA REVIEW QUESTION	REVIEW ASSESSMENT
21	Does the SIA component of the EIS include appropriate sensitivity analysis and multiple scenarios to allow for uncertainty and unforeseen consequences? If relevant, does it include comparisons with studies of similar projects elsewhere?	The SIA does not include sensitivity analysis, does refer briefly to the possibility of the project not proceeding (SIA p 121), does not appear to allow for uncertainty or unforeseen consequences. Does not refer to studies of similar projects elsewhere.
Evaluation of significance		
22	Does the SIA component of the EIS explain how impacts were evaluated and prioritised in terms of significance?	As the identification of impacts was inadequate, lacked an evidentiary base and relied on partial consultation inputs, the section on evaluation of significance is considered inadequate.
23	Does the evaluation of significance consider cumulative aspects where relevant?	No, does not consider cumulative consequences for intergenerational equity, or the cumulative social and health impacts of 8 mines already approved with 7 already operating in the area.
24	Does the evaluation of significance consider the potentially uneven experience of impacts by different people and groups, especially vulnerable groups?	No
Responses and monitoring and management framework		
25	Does the SIA identify appropriate measures to avoid, reduce, or otherwise mitigate any significant negative impacts of the project, and justify these measures?	See Chapter 3 of this report
26	Does the SIA explain and justify measures to secure and/or enhance positive social impacts?	See Chapter 3 of this report
27	Does the SIA component of the EIS impartially assess the acceptability, likelihood and significance of residual social impacts?	See Chapter 3 of this report
28	Does the SIA component of the EIS propose an effective monitoring and management framework?	See Chapter 3 of this report
Modifications		
29	Are the social impacts associated with the modification expected to be new or different (in terms of scale and/or intensity) to those that were approved under the original consent? If yes, apply the review questions above to the SIA component of the environmental assessment.	No modifications proposed in the SIA

Short curriculum vitae: Alison Ziller

Current positions

Lecturer in Social Impact Assessment. Department of Geography & Planning, *Macquarie University*, 2012 -

Visiting lecturer in social sustainability *University of Technology, Sydney*, 2010 -

Alison Ziller social planning consultant (previously with Australia Street: 1996 -

Qualifications

Bachelor of Arts, Honours (Sociology), *London School of Economics & Political Science*, 1966

Master of Arts (Sociology) *Columbia University, New York*, 1969

PhD, School of Urban and Regional Planning, *University of Sydney*, 2004 Thesis title:

The Role of Planning in Community Building

Previous positions

1996 - 2017 Director, Australia Street Company

2002 – 2008 Member, Social Impact Assessment Panel, NSW Liquor Administration Board

1990 - 1995 Director, Community Resources, Warringah Council

1980 – 1989 Director of Equal Opportunity in Public Employment, Statutory appointment to the NSW Government.

Selected publications

Ziller, Alison 2019, Letter to the Editor, SIA reviewers (in Australia) need a different set of guidelines. *Impact Assessment and Project Appraisal*, forthcoming

Ziller, Alison 2018, Online retail of alcohol, some dilemmas for professional SIA practice, *Impact Assessment and Project Appraisal*, 36:5, 383-389, DOI: [10.1080/14615517.2018.1452368](https://doi.org/10.1080/14615517.2018.1452368)

Ziller, Alison, 2017, Eroding public health through liquor licencing decisions, *J Law and Medicine*, 25/2

Ziller, Alison, 2016, The NSW Joint Expert Report Policy – an SIA practitioner’s reflection, *Local Government Law Journal*, December

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Ziller, Alison, 2015, Social infrastructure and A Plan for Growing Sydney, *New Planner*, 103, June,

Ziller, Alison, Social impact assessment in alcohol related decisions, in Manton E, Room R, Giorgi C, Thorn M, eds. *Stemming the tide of alcohol: liquor licensing and the public interest*, Canberra: Foundation for Alcohol Research and Education in collaboration with The University of Melbourne, 2014.

Ziller, Alison, 2013, The question of locality: Case study - development application for a bulk discount liquor outlet at East Nowra, NSW, *Local Government Law Journal*, 18, 196-207