

Export report: Review of a social impact assessment prepared by GHD for Santos regarding the proposed Narrabri Gas Project

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Executive summary

1. This expert report finds that the applicant's Social Impact Assessment ("SIA") is inadequate and does not fulfil the basic requirements of an SIA. The key flaw of the SIA is that it is not transparent in relation to the evidence on which many claims about impact significance, likelihood and consequences are made, and there are several significant omissions. It is therefore not possible to provide a comprehensive review of the impact predictions and mitigation measures identified in the SIA. Notwithstanding these shortfalls, this expert report outlines several fundamental weaknesses with the social baseline, the identification of material key issues, the prediction and evaluation of impacts and proposed mitigation measures. Throughout all these stages of the SIA process, the SIA has failed to engage with critical issues of distributive equity, that is, how the impacts and benefits of the proposed project are distributed temporally (across time), spatially (geographically) and socially (amongst different groups within society, particularly those who are marginalised or vulnerable, or least likely to obtain a direct or indirect benefit from the project). We conclude that the SIA is inadequate and does not provide the necessary evidence required to assess the project.

About the authors

2. This report is co-authored by Dr. Rebecca Lawrence and Dr. Alison Ziller.
3. Dr. Rebecca Lawrence has worked in the field of SIA both as an academic and a practitioner for over 10 years. She has undertaken SIAs for both development proponents and impacted communities and has provided multiple peer reviews of SIAs. She has a joint PhD in Human Geography (Macquarie University) and Sociology (Stockholm University) and has published in international academic journals regarding SIA in the natural resource sector. She has also worked for both government and the resource industry. She is a member of the International Association of Impact Assessment.
4. Dr. Alison Ziller is a sociologist with a PhD in Urban Planning. She has extensive experience as an SIA preparer, an SIA reviewer and as an expert witness on social impact issues in the NSW Land and Environment Court.
5. See attached CVs for further details.

Declaration

6. We have read the *Uniform Civil Procedures Rules 2005: Schedule 7 Expert Witness Code of Conduct* and agree to be bound by the provisions under the code.
7. We have made all inquiries necessary and appropriate to matters addressed in this report. No matters of significance, to our knowledge, have been withheld.
8. All due care has been taken in the preparation of this independent report. However, Rebecca Lawrence and Alison Ziller are not liable to any person or entity for any damage or loss that has occurred, or may occur, in relation to that person or entity taking

or not taking action in respect of any representation, statement, opinion or advice referred to herein.

About the report

9. This is an expert social impact review report on the Social Impact Assessment (“SIA”) undertaken by Santos (“the applicant”) for the Narrabri Gas Project (“the project”) as well as the applicant’s Response to Submissions (“RtS”).
10. This expert report is to be read in conjunction with Professor Stewart Lockie’s original expert report on the applicant’s SIA (Lockie, 2017).
11. In assessing the applicant’s SIA, the authors have also read the applicant’s Aboriginal Cultural Heritage Assessment and Management Plan (Appendix N1 & N2) and the Stakeholder and Community Consultation Report (Appendix D).
12. This expert report does not take a position on whether or not the proposed Narrabri Gas Project should be approved by permitting authorities. Nor does it take a position on whether or not the affected community should support the proposed project. It focuses solely on whether the SIA submitted by the applicant provides sufficient evidence for the project to be assessed. In doing so, the SIA and RtS have been reviewed against the International Association for Impact Assessment SIA Guidance¹, the Department of Planning and Environment (“Department”) SIA Guideline², as well as social scientific research standards expected of a social impact assessment,³ and the principles expected to apply to these assessments.⁴

Comments on Stewart Lockie’s review of the SIA and the applicant’s response in the RtS

13. Stewart Lockie’s original review of the SIA (April, 2017) outlined several criticisms of the applicant’s SIA. Below is a summary of Lockie’s main criticisms, followed by an analysis of the extent to which the original criticisms remain valid, or have been adequately addressed in the applicant’s RtS.
14. *The SIA is not transparent in relation to the evidence on which many claims about impact significance, likelihood and consequences are made. It is therefore not possible to provide a comprehensive review of the impact predictions and mitigation measures identified in the SIA (Lockie, 2017: section 3).*

The applicant’s response does not provide any further information on the actual evidence used in the SIA to make claims regarding significance, likelihood or consequences. The response refers to a number of SIA guidelines and principles which

¹ Vanclay, F., Esteves, A.M., Aucamp, I. & Franks, D. 2015 Social Impact Assessment: Guidance for assessing and managing the social impacts of projects. Fargo ND: International Association for Impact Assessment,

² Social Impact Assessment Guidance, For State significant mining, petroleum production and extractive industry development, September 2017, NSW Department of Planning and Environment.

³ For example as set out in Ziller A, 2013, The new social impact assessment handbook, Australia Street Company

⁴ see Vanclay F, 2003, International Principles for Social Impact Assessment, *Impact Assessment and Project Appraisal*, 21,1, 5-12

it claims the SIA “broadly reflects”, including the Department’s SIA Guideline, but does not provide any substantive response (RtS, 6-230). The SIA and the applicant’s response, are not aligned with the Department’s SIA Guideline, which require that impact assessment methods and assumptions are transparent⁵. Lockie’s original critique therefore remains valid: it is not possible to provide a comprehensive review of the impact predictions and mitigation measures identified in the SIA, because the SIA is not transparent in relation to the evidence.

15. *The SIA requires more detail on cumulative social impact, including the cumulative impacts on community stress and anxiety due to uncertainty (Lockie, 2017, Section 4.1).*

The applicant’s response (RtS, 6-241) does not appear to address the cumulative social impacts on community stress and anxiety. This is a significant omission given that this is a recurring theme in community submissions to the Department. Lockie’s original critique remains valid.

16. *Conflict over the project should be acknowledged in the SIA and the risk this presents, longer term, to social cohesion should also be acknowledged and managed proactively (Lockie, 2017: Section 4.2).*

The applicant’s response refers to several fora through which they hope to manage community conflict and cohesion, including a Community Consultative Committee and shopfront. They also mention the future development of a grievance mechanism (RtS, 6-239). It should be noted that these kinds of fora can be effective where conflict is low, but where conflict is high, they rarely solve more fundamental disputes where there is a prehistory of conflict⁶. The community submissions to the Department suggest that conflict is high. If there is significant conflict over a project, and substantial protest, the risk is high that social cohesion will be negatively affected once the project is operational and that the developer (and regulatory authorities) will face significant and on-going community opposition (e.g. local protests, legal appeals, complaints to regulatory authorities etc). The Maules Creek Coal Mine is an example of this phenomenon and has been the object of on-going community protests and appeals both during pre-approvals and during operation⁷. Furthermore, an ineffective SIA can in fact exacerbate and reinforce community mistrust⁸. The SIA therefore needs to properly address the question of social cohesion and the risk of on-going conflict over the project. Lockie’s original critique remains valid.

Moreover, grievance mechanisms are neither reliable nor appropriate methods for addressing tangible community concerns about a project. First, they operate after the effect (post consent) with a high risk that the mechanism is powerless to actually deal

⁵ Social Impact Assessment Guidance, For State significant mining, petroleum production and extractive industry development, September 2017, NSW Department of Planning and Environment, pg 10.

⁶ See for example Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of public administration research and theory*, 18(4), 543-571.

⁷ See, for example Kirkwood, I., (2014) “Maules Creek Coal protesters vow to fight until the end” , *Newcastle Herald*, April 28, <https://www.theherald.com.au/story/2245469/maules-creek-coal-protesters-vow-to-fight-until-the-end/>

⁸ See O’Faircheallaigh, C (2012) Effectiveness in social impact assessment: Aboriginal peoples and resource development in Australia, *Impact Assessment and Project Appraisal*, 27:2, 95-110,

with any substantive matters (e.g. pressures on health services or displacement of low income households). Second, because the application has not given any detail on the grievance mechanism per se, but tabled it to be developed as a part of the Social Impact Management Plan (“SIMP”) in the post-approvals stage, its ability to address community concerns remains aspirational rather than evidence-based. Third, and again, because there is no detail on the grievance mechanism, there is no evidence provided that the grievance mechanism would be genuinely independent from the applicant. Similarly, a Community Consultative Committee is not an effective problem-solving mechanism. While community objections concern tangible impacts on social wellbeing in Narrabri, neither a grievance mechanism nor a consultative committee is a reliably effective method through which to manage substantial post-consent impacts.

The Stakeholder report seems to overstate the support for the project and understate the opposition to it. It states that “*Success of the consultation activities is demonstrated by the growing support for project activities in the Narrabri area and a decrease in the level of opposition to exploration and appraisal activities locally*”. The only evidence for this seems to be the establishment of a CSG supportive group “Yes2Gas” (Page v of Appendix D) but it is unclear how the applicant can qualitatively or quantitatively substantiate that “growing support” exists. Equally, the Stakeholder report provides no evidence of a decrease in the level of opposition. This would seem to be related to a more general trend whereby resource companies tend to downplay conflicts and tensions around projects in their reporting of stakeholder engagements⁹. This is problematic because it presumes that support for a project exists where it may not.

Finally, but crucially, the substance of each of the community objections should have been acknowledged and addressed in the SIA. Instead, the applicant appears to have missed this part of the impact assessment process and moved directly to mitigation measures.

17. *The Community Benefit Fund (CBF) does not provide detail on governance and decision-making arrangements (Lockie, 2017: Section 4.2).*

The applicant’s response provides greater detail on the CBF than the EIS does (RtS, 6-242). However, the proposed governance arrangements do not appear to include any measures to ensure that marginalized groups (Indigenous, elderly, youth etc.) are guaranteed influence and a meaningful role in the distribution of funds. Further, there are no criteria against which the fund distribution will be assessed and no apparent capacity to audit or rectify any failures or biases in fund distribution. There is a risk that without such measures the fund may be captured by already powerful segments of the community, which is unlikely to assist with distributional equity. This issue relates to a more general critique of the SIA: that it fails to engage with questions of distributive equity (see further below). Lockie’s original critique has been addressed in part by the RtS, but concerns remain over the CBF in terms of distributive equity.

⁹ Parsons, R., & Moffat, K. (2014) Constructing the Meaning of Social Licence, *Social Epistemology*, 28:3-4, 340-363

18. *Closure planning is treated as beyond the scope of the EIS. The applicant should include closure planning in the EIS (Lockie, 2017: Section 4.3).*

The applicant's response appears to deflect closure issues through the argument that "discussion of potential social impacts of the closure of the project is necessarily limited, as actual social impacts would depend on social baseline conditions at the time of closure". (RtS 6-234). Granted, there are some closure issues that will be specific to the nature of the project and the social baseline at the time of closure. However, the majority of issues are going to be reasonably predictable – out-migration; unemployment; challenges for the region associated with transitioning to a post-CSG economy; loss of health and social services and infrastructure that have built up over time around the region and which are connected directly or indirectly to the CSG development; impacts on property prices as workers leave; and the social impacts of environmental and rehabilitation challenges. The SIA needs to address these closure and post-closure challenges through comparative case studies with other resource developments. Lockie's original critique remains valid.

Further General Comments on the SIA

19. Reference to available research is necessary in order to identify key issues and to make transparent, valid and evidence based social impact predictions. Yet the SIA makes very little reference to relevant research, for example research concerning the social impacts of resource development on host communities of Drive In / Drive Out, Fly In / Fly Out ("DIDO/FIFO") workers. This is a basic shortfall. There is an extensive literature, both academic and from public agencies, readily available. (A small sample reference list has been compiled by Dr. Lawrence and Dr. Ziller and is provided in Appendix A to this expert report below, but it is by no means exhaustive). The literature review in the applicant's SIA, however, was confined to two plans and research reports published between 2010 and 2014. The reason for this very limited time period is unclear. There is also no reference to relevant crime or health statistics in the SIA, notwithstanding that relevant data in these and related fields are abundantly available¹⁰.
20. The social baseline in the SIA is inadequate. First, it overwhelmingly relies on secondary demographic data (ABS census data), which is insufficient for the task at hand. Census data alone cannot provide a picture of the social baseline, for multiple reasons. To give just one example, research indicates that census data in relation to Aboriginal populations may not be reliable¹¹. Qualitative primary data should also be included, particularly in order to capture people's fears and aspirations about their future. Second, the SIA fails to give any sense of the historical and future trends of the social baseline.
21. The issue of distributive equity is key to SIA¹². Distributive equity concerns how the impacts and benefits of a proposed project are distributed temporally (across time),

¹⁰ On websites such as HealthStatsNSW, BOCSAR, PHIDU for example

¹¹ Taylor, J 2006. Indigenous People in the West Kimberley Labour Market. Canberra: Working Paper No. 35/2006, Centre for Aboriginal Economic Policy Research, Australian National University and Taylor, J 2008. Indigenous Labour Supply Constraints in the West Kimberley. Canberra: Working Paper No. 39/2008, Centre for Aboriginal

¹² Vanclay, et al (2015); Social Impact Assessment Guidance, For State significant mining, petroleum production and extractive industry development, September 2017, NSW Department of Planning and Environment;

spatially (geographically) and socially (amongst different groups within society, particularly those who are marginalised or vulnerable). Yet, the question of distributive equity is generally absent in the SIA. The baseline importantly highlights the marginalized status of Aboriginal people in the region (e.g. higher unemployment, lower levels of home ownership) but does not provide any analysis of how the impacts of the project will play out for the Aboriginal population specifically. Rather, the SIA focuses solely on how the positive impacts of the project will benefit the Aboriginal population by way of a specific Aboriginal employment policy, yet makes no mention of the substantial body of research that describes the multiple barriers that exist for Aboriginal people to actually materially benefit from such policies¹³. A policy is not enforceable and thus should carry little weight in the social impact assessment.

22. The SIA has received criticism through submissions that it does not address issues around distributive equity. The RtS attempts to rectify this in the section “Social impacts on vulnerable groups” of the RtS (5-145) but the response is inadequate for the task at hand. For example, Narrabri has a tight rental market and concerns have been raised that the CSG related workforce would push lower-income people further out of the rental market. The applicant’s response is that “*project workers seeking rental accommodation would likely be competing for a different market sector than ... vulnerable groups*”, but there is no evidence given or relevant research cited as to why this would be the case. The SIA only addresses impacts on land owners under the heading 6.2 Impacts on the local study area. There is no section considering impacts on non-landowners, urban dwellers, or vulnerable groups in Narrabri. For example, there is no discussion of social impacts on low income / unemployed men in the town.
23. Much of what should be integrated into an SIA has been treated in 3 separate reports: the SIA (Appendix T1), the Aboriginal Cultural Heritage Assessment and Management Plan (Appendix N1 & N2) and the Stakeholder and Community Consultation Report (Appendix D). While there may have been legislative requirements or other reasons for having these as separate reports, it is a significant methodological failure that the applicant has treated these as silos and not integrated the key findings of the Stakeholder and Aboriginal Heritage reports into the SIA process and report.
24. The SIA is too narrow in scope and fails to identify key material issues. For example, it fails to address the social impacts of environmental issues, particularly concerning what might be called “intangible” community fears around environmental impacts. The Department’s SIA Guideline states that “*Social impacts will often be fundamentally linked to environmental and/or economic matters and impacts and will often also be indirect or interdependent in nature*”¹⁴. Indeed, the overwhelming majority of concerns raised by stakeholders throughout the consultation processes and as reported by the applicant relate to community concerns over the proposed project’s impact on the environment (see Table 5-1, Appendix D). For example, groundwater was a key concern during the consultation phase and through public submissions, yet it is not mentioned in the SIA. Nor are many of the other environmental and health concerns that community members raised in the Stakeholder report. Health is a fundamental component of social wellbeing and these are significant omissions.

¹³ See for example Altman, J.C., & Martin, D.F., (eds) (2009) Power, culture, economy : indigenous Australians and mining, Australian National University. Centre for Aboriginal Economic Research.

¹⁴ Social Impact Assessment Guidance, For State significant mining, petroleum production and extractive industry development, September 2017, NSW Department of Planning and Environment, pg 19.

25. Furthermore, it is unclear how community fears around environmental impacts are to be managed by the applicant. The applicant has provided a list of mitigation measures in the Stakeholder report (Table 5-1, Appendix D), which are presented by the applicant as responses to community concerns, but one key piece of information is missing: are these mitigation measures acceptable to the community? Do they actually allay the fears people may hold regarding the environment? Given the concern already expressed that these mechanisms are unenforceable, it seems unlikely that these are adequate responses to substantive and tangible matters of concern.
26. The SIA does not include a “no go” or “null alternative” in its prediction of impacts. A no go alternative is the scenario in which the project does not go ahead, and the social baseline develops according to predicted trends. The no go alternative should be included in an SIA¹⁵, as it is a crucial benchmark in understanding how predicted impacts of the project deviate from the predicted baseline. Without it, the SIA analysis is incomplete.
27. Mitigation strategies aim to address adverse impacts identified in the SIA. In this SIA, however, the mitigation strategies respond to matters which have not been identified in the SIA, suggesting a number of areas of omission. These include:
- a. Risks that the accommodation providers for transient workers source their supplies from out of town (s7.2)
 - b. Aboriginal people fail to benefit from the employment opportunities (s7.3)
 - c. There will be disputes and complaints about the project which may also include complaints about workforce behaviour in the town (s 7.4 & s7.6)
 - d. Impacts on the availability and affordability of private housing in Narrabri (s7.7).
- As a general observation, the mitigation strategies appear to rely on good will or good intentions and are not enforceable as conditions of consent.
28. Given the magnitude and scale of the proposed project, the considerable community concern over it, and SIA best practice, one would expect the applicant to have developed a SIMP prior to submitting their application to the Department. It is through the actual process of developing a SIMP that the applicant can demonstrate whether they have the ability and capacity to manage and mitigate social impacts. It should therefore constitute part of the evidence base for the permitting decision, rather than deferring it as a consent condition that the applicant formulate a SIMP at some point in the future.
29. Further a SIMP would reveal the areas in which the applicant is not able to address social impact concerns because their effective remedy lies outside the scope of the applicant’s responsibilities, skill base and capacity. For example, the applicant is not a housing authority or a health authority and so may not have the capacity, resources or legislative mandate to address some social and health impacts arising from the project. A SIMP would also reveal the extent to which proposed mitigative actions are enforceable as conditions of consent and/or the extent to which they rely on unenforceable statements of intent.

¹⁵ Vanclay, et al, 2015:50

Specific Comments on Workforce Impacts

30. The workforce employment modelling in Section 5 of the SIA is not transparent, as it fails to state either the evidence or the modelling methods on which it relies. It is not clear how the applicant has arrived at figures for the workforce breakdown geographically (i.e. whether they will be sourced locally, regionally, from broader NSW or interstate and the distribution between these scales). For example, on what basis can the applicant say that 10% of the construction workforce will be sourced from within one hours driving distance from the project area? Is this aspirational or a commitment? Is there evidence that relevant skills and labour are available?
31. The SIA notes at p48 that only 10% of workers required at peak construction will be recruited locally. This means that the economic benefit to the town of increased employment opportunity will be limited. While some local people will get work in the construction phase and some businesses will benefit from the DIDO/FIFO workers, it is in the nature of DIDO/FIFO that the high incomes earned are spent elsewhere and thus the economic benefit to the immediate locality or host town is limited¹⁶. Once the project is in its operation phase the SIA anticipates 100 resident workers in Narrabri (p51) of which 50 will be existing Santos Narrabri employees. A further 50 workers will be DIDO/FIFO with another 50 located elsewhere but who may make visits to Narrabri. Thus, in the operational phase half the anticipated workforce will be either DIDO/FIFO or located elsewhere and their incomes are also unlikely to benefit the town.
32. The issues scoped seem mainly concerned with employment and the workforce rather than the social impacts on the town as a whole or on vulnerable groups in the town. Omitted issues include displacement of low income families, and social impacts on the town arising from the presence of a large number of temporary or non-resident workers. The SIA does not consider, for example, likely risks of adverse effects for Aboriginal people, young unemployed men, young women, or single mothers. Each of these population groups is vulnerable to an influx of mainly male and relatively wealthy workers. One social researcher observes '*A men's town is not a place where most people would want to live and work, now and in the future. These gender perspectives are important as women play essential roles in building the sustainability of settlements...*'¹⁷ another researcher notes that '*Local mines rarely employ local Indigenous people*'.¹⁸ In general, the SIA does not address the impact of relatively wealthy non-resident workers on already marginalised people.
33. Submissions to the House of Representatives Standing Committee Inquiry into the use of 'fly-in, fly-out' (FIFO) workforce practices in regional Australia (hereafter the

¹⁶ 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, Ch 3: http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=ra/fifodido/report.htm

¹⁷ Lozeva S, Marinova D, 2010, Negotiating Gender: Experience from Western Australian Mining Industry, *J Economic and Social Policy* 13:, Article 7

¹⁸ 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, p5: http://www.australianhumanitiesreview.org/archive/Issue-November-2012/carrington_etal.html

Standing Committee) noted that a consequence of mining and resource projects in rural areas is displacement of existing low income populations. For example, the Narrabri Community Association noted in its submission to the Standing Committee:

The demand for accommodation has driven accommodation costs up - not just for low income but now is impacting on middle income earners. It impacts on our visitors to the town our capacity to host major events and utilise our current facilities. (Submission 208)

At p 63, the SIA notes:

This increase in demand for housing may impact housing affordability in the region; however, it is not possible to predict such impacts on housing affordability
and at p 64

Cumulatively, the non-residential workforce and workers relocating into Narrabri region to pursue employment opportunities have the potential to place excessive demand on the existing private workers camp accommodation facilities, as well as open housing in Narrabri town. This may potentially lead to reduced availability and affordability of housing and accommodation in Narrabri.

This is an inadequate assessment of the displacement effects of the project.

34. The section on demographic impacts treats population increase as an unqualified benefit. However, most of the increase will be confined to the construction phase, the permanent increase in the local residential population will be small, and may add to the gender imbalance created by non-resident workers. The benefits appear to be simplified and overstated.
35. The SIA is unclear in regard to the planned use, and social impacts of, the proposed expansion of short-term accommodation in Narrabri. The SIA notes that the area has a combined capacity of 1000 beds for short term accommodation at present, with approval for a capacity of over 1500 beds. However, it does not consider the social consequences to the town of these additional beds. On the one hand, if these additional beds are fully occupied by an additional 500 non-resident workers, this will place additional burdens on social infrastructure and services as outlined above, yet this is not addressed in the SIA. On the other hand, the SIA suggests, at p 41, that the town has a large tourism industry which requires the provision of temporary accommodation and seems to suggest that this same accommodation can be used by tourists. However, the SIA does not consider whether tourists are suitably accommodated in hostels provided for DIDO/FIFO workers.
36. Under the heading of community values, the SIA asserts, p 60, *'while there has been workforce behaviour related issues and workforce - community cohesion related issues experienced in the past, such issues are no longer prominent due to the workforce management measures implemented by resource companies'*. However, no evidence is provided, 'prominent' is not defined, the adverse social issues are not named and data about their incidence is not provided. These social impact issues are readily identifiable in the literature (e.g. see Appendix A) and some data, e.g. crime data, are readily available, yet are absent from the analysis.
37. The SIA does not consider the issue of domestic violence. The incidence of domestic violence in rural and remote areas of the state is high and the NSW Bureau of Crime Statistics and Research (BOCSAR) data show that the rate of incidence in Narrabri suburb is generally higher than that for NSW as a whole. The rate of reported domestic

violence incidents in Narrabri in 2016 was 753.8 per 100 000 population compared with 376.6 for NSW as a whole and the rate in 2017 was 664.4 per 100 000 persons compared with 366.6 for NSW as a whole, which means it is around double the rate of the state average¹⁹. Further at least 50% of domestic violence is not reported to the police²⁰, suggesting that the actual rates are higher than those presented in the BOCSAR data. The SIA does not consider how the proposed project and predicted workforce will impact upon the Narrabri community in terms of domestic violence. Yet this issue is canvassed in the Standing Committee Report in response to submissions and is also reported in the literature.²¹ The SIA does not refer to these.

38. The SIA does not consider any take-home behavioural issues of DIDO/FIFO workers usually cited as depression and failed relationships²². There should have been a careful consideration of the social and health impacts on DIDO/FIFO workers themselves (depression, strained relationships, family breakdown, excessive alcohol use etc.²³) Non-resident workers experiencing these emotional or mental health issues are rarely working in environments well-resourced with mental health services.²⁴ The SIA does not mention services providing psychiatry, psychotherapy, relationship counselling, addiction recovery or financial counselling. These services are also omitted in the discussion of impacts on health services in the town at p 62.
39. The SIA suggests that the relevant community and recreational assets / activities are those to do with wildflowers, birdwatching, camping etc. This is inadequate as the SIA does not deal with the question of what FIFO workers will do with their time off. Even if they work 12 hours shifts, there is still some time off. There is no discussion about the impact of non-resident workers on the limited recreational amenities in the town. Further, there is nothing in the SIA about brothels, but these are a usual feature of towns that see an influx of male workers associated with large-scale resource developments²⁵.

¹⁹ NSW Bureau of Crime Statistics and Research, Crime Maps: <http://crimetool.bocsar.nsw.gov.au/bocsar/> viewed 21 May 2018

²⁰ Birdsey, E., Snowball, L., 2013, Reporting Violence to Police: Survey of victims attending domestic violence services, Crime and Justice Statistics, BOCSAR, Issue Paper 91, October; and ABS, 4530 Crime Victimization Australia, 2014-15, Reporting of Crime to Police: <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4530.0~2014-15~Main%20Features~Reporting%20of%20crime%20to%20police~10005>

²¹ 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, pp 28 & 30; Carrington K, Hogg R and McIntosh A, 2011, The resource boom's underbelly: Criminological impacts of mining development, *ANZ J of Criminology*, 44:335-354, p341

²² Bowers J, Miller P, Mawren D, Jones B (2018) Psychological distress in remote mining and construction workers in Australia, *The Medical Journal of Australia*.

²³ Carrington K, Hogg R and McIntosh A, 2011, The resource boom's underbelly: Criminological impacts of mining development, *ANZ J of Criminology*, 44:335-354; House of Representatives Standing Committee Ch 4

²⁴ Hossain D, Gorman D, Chapelle B, Mann W, Saal R and Penton G, 2013, Impact of the mining industry on the mental health of landholders and rural communities in southwest Queensland, *Australasian Psychiatry*, 21:32-37; Petkova V, Lockie S, Rolfe J, Ivanova G, 2009, Mining developments and social impacts on communities: Bowen Basin Case Studies, *Rural Society*, 19:3 211-228

²⁵ Breanna Chillingworth, Sex probe: Revealing the bare facts of Industry, *The Armidale Express* 1 May 2013: <https://www.armidaleexpress.com.au/story/1469850/sex-probe-revealing-the-bare-facts-of-industry/>; Scott J, C MacPhail and V Minichiello, 2012, Bang and bust: almost everything you wanted to know about sex and the

40. Indeed, there is no discussion about the impact on the town of the gender imbalance created by DIDO/FIFO workers. The literature refers to this gender imbalance as increased masculinisation. Masculinisation of a town 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 factors²⁶. The DIDO/FIFO workforce is likely to be 87% male²⁷ whereas the usually resident population of Narrabri is 49% male²⁸. 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.
41. Local council submissions to the Standing Committee also mentioned costs to local councils relating to social infrastructure and services, provision of town services such as water, roads, and safety issues e.g. accidents arising from fatigued DIDO workers driving home²⁹. These have not been addressed in the SIA.

Specific Comments on Aboriginal Issues

42. It is unclear why the group “Gomeri Traditional Custodians”, who submitted a lengthy response to the EIA, were not listed in table 4-6 Appendix D as an Aboriginal Stakeholder. This raises the question of whether they were consulted or whether they were included under the category “Gomeri Native Title Claimants”. In their submission, they state that they have not been adequately consulted, and that the applicant has failed to adequately address several issues of importance to them, including the impact of the proposed project on their cultural values, sacred sites and intergenerational equity. This is a clear red flag for any SIA specialist and it is of significant concern if this group has been marginalized throughout the consultation process.
43. There is no description of the consultation outcomes with the Narrabri Local Aboriginal Land Council.
44. The Stakeholder report notes that a document outlining “Principles of Land Access” was signed by Santos, AGL, NSW Farmers, Cotton Australia and NSW Irrigators Council at NSW Parliament House in 2014 to “*give the community confidence that Santos seeks respectful long-term relationships with landholders*”. Among other things, the principles state that “*Any landholder is at liberty to say “yes” or “no” to the conduct*

mining boom (but were afraid to ask) *Preview*, October 26-31,

<http://www.publish.csiro.au/PV/pdf/PVv2012n160p26>

²⁶ 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;

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²⁷ <http://www.abc.net.au/news/2017-02-10/failures-in-persuading-fifo-workers-to-live-locally/8248508>

²⁸ ABS Census 2016

²⁹ House of Representatives Standing Committee Ch 3

of [CSG] operation on their land". (Appendix D, pg 4-10). It is unclear whether a similar agreement has been signed with Indigenous land-users. It is also unclear whether Santos has committed to equally respect the right of Indigenous peoples to say yes or no to resource developments on traditional lands. If not, this failure to engage with Aboriginal people as rights-holders in an equitable fashion would appear to risk breaching the principle of Free Prior and Informed Consent (outlined in the United Nations Declaration on the Rights of Indigenous Peoples, and referred to in the IAIA SIA Guidance and the Department's SIA Guideline³⁰). It would also appear to risk being in breach of a non-discriminatory human rights based approach to SIA, which seeks to "ensure the non-discriminatory engagement of rights-holders and the prioritization of especially-vulnerable or marginalized individuals or groups (e.g. women, elderly, children and youth, minorities and Indigenous peoples)"³¹.

45. There seems to be a significant disconnect between the applicant's own perception of the project's impacts on sacred sites and the perception of Aboriginal custodians. Take, for example, the applicant's response to Aboriginal concerns of the project's impacts on the Bohena Creek. Aboriginal custodians have raised concerns that the project will impact upon the creek, which is sacred and part of a dreaming and songline. The applicant's response is that the water quality of the creek is already poor and that the project will only have a negligible impact upon the geomorphology and water quality etc. This is an inadequate response, because it is a technical and scientific response to what is essentially a cultural and sacred concern. It also presumes that because the applicant is satisfied that the project will not impact upon sacred sites, this should be accepted as sufficient. However, it is acknowledged by international best practice in impact assessment that Aboriginal custodians are themselves the best judge of whether a proposed project will harm sacred sites³². Indeed, good SIA practice and guidance, reiterates the basic principle that: "*The acceptability of likely impacts and of proposed enhancement measures must be determined by local people themselves, otherwise such decisions would have no legitimacy*"³³. This is not only relevant to sacred sites, but to the practice of SIA more generally.

³⁰ Vanclay et al, 2015:v; Social Impact Assessment Guidance, For State significant mining, petroleum production and extractive industry development, September 2017, NSW Department of Planning and Environment, pg 15.

³¹ Vanclay et al, 2015:v

³² Secretariat of the Convention on Biological Diversity (2004). Akwé: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessment regarding Developments Proposed to Take Place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities Montreal, 25p. (CBD Guidelines Series).

³³ Vanclay et al, 2015:40

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- **Honorary Research Fellow** 2013- present
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- **Research Fellow** 2012- present
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- **Human Rights Advisor** 2006 – 2009
Human Rights Unit, Saami Council, Norway/Sweden/Finland
- **Indigenous Affairs Officer (Internship)** 2003-2004
Newmont Mining Corporation, Tanami Operations (FIFO), Tanami Desert, Australia
- **Town Planner** 2000-2002
EJE Architecture, Newcastle, Australia.

EDUCATION

PhD, Doctor of Philosophy (Joint degree) Awarded 2009
Department of Environment and Geography (Human Geography), Macquarie University, Australia and Department of Sociology, Stockholm University, Sweden.
PhD thesis title: “*Shifting Responsibilities and Shifting Terrains: State Responsibility, Corporate Social Responsibility and Indigenous Claims*”

Bachelor of Social Science (1st Class Honours) Awarded 2002
Department of Human Geography and Department of Sociology, Macquarie University, Australia
Honours thesis title: “*Governing Warlpiri Subjects: Indigenous Employment and Training Programs in the Central Australian Mining Industry*”

SELECTED PUBLICATIONS

Lawrence, R., & Kløcker Larsen, R., (2017) “The Politics of Planning: Assessing the Impacts of Mining on Saami Lands” *Third World Quarterly*, 38:5.

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Qualifications

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

Thesis title: The role of planning in community building

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

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

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Ziller, Alison 2018, Online retail of alcohol, some dilemmas for professional SIA practice, *Impact Assessment and Project Appraisal*, online 19 April,

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Appendix A: Some recent relevant literature on the social impacts of DIDO/FIFO

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