



Public Health Association
AUSTRALIA

Submission to the Independent Planning Commission – Narrabri Gas Project

Contact for recipient:

Office of the Independent Planning Commission NSW

A: Level 3, 201 Elizabeth Street, Sydney NSW 2000

E: ipcn@ipcn.nsw.gov.au **T:** (02) 93832100

Contact for PHAA:

Terry Slevin – Chief Executive Officer

A: 20 Napier Close, Deakin ACT 2600

E: phaa@phaa.net.au **T:** (02) 6285 2373

10 August 2020

Contents

Health issues relating to the Narrabri Gas Project	4
Inconsistency with current policies and international agreements to address climate change	4
Undermine ecological determinants of health – clean air and clean water	4
Negative impact on social determinants of health – employment, housing and cost of living	5
Conclusion	6
References	7





Public Health Association
AUSTRALIA

The **Public Health Association of Australia** (PHAA) is recognised as the principal non-government organisation for public health in Australia working to promote the health and well-being of all Australians. It is the pre-eminent voice for the public's health in Australia.

The PHAA works to ensure that the public's health is improved through sustained and determined efforts of our Board, National Office, State and Territory Branches, Special Interest Groups and members.

We believe that health is a human right, a vital resource for everyday life, and a key factor in sustainability. Health equity and inequity do not exist in isolation from the conditions that underpin people's health. The health status of all people is impacted by the social, cultural, political, environmental and economic determinants of health. Specific focus on these determinants is necessary to reduce the unfair and unjust effects of conditions of living that cause poor health and disease. These determinants underpin the strategic direction of the Association.

Our mission as the leading national organisation for public health representation, policy and advocacy, is to promote better health outcomes through increased knowledge, better access and equity, evidence informed policy and effective population-based practice in public health. Members of the Association are committed to better health outcomes based on these principles.

Our vision is for a healthy population, a healthy nation and a healthy world, with all people living in an equitable society underpinned by a well-functioning ecosystem and a healthy environment, improving and promoting health and wellbeing for all.

The reduction of social and health inequities should be an over-arching goal of national policy, and should be recognised as a key measure of our progress as a society. Public health activities and related government policy should be directed towards reducing social and health inequity nationally and, where possible, internationally.

Health issues relating to the Narrabri Gas Project

PHAA welcomes the opportunity to provide a submission to the Independent Planning Commission regarding the pending decision to approve the Narrabri Gas Project (NGP). The PHAA strongly opposes the NGP due to its inconsistency with current environmental health policies and international agreements to address climate change, as well as its direct negative impacts on human health.

Inconsistency with current policies and international agreements to address climate change

The PHAA opposes the NGP due to its potential contribution to greenhouse gas emissions. These emissions further reinforce climate change and its concomitant ecological crises. Approval and development of the NGP would result in an increase of greenhouse gas emissions equating to 5 million tonnes per year. Moreover, mobilising methane from coal seams is highly likely to lock in ongoing emissions of this potent greenhouse gas for decades to come. The life span of 20 years or more for pipelines, terminals, wells and platforms is inconsistent with the need for global gas production to peak this year, to meet the 1.5 degrees of warming targets, and at worst, by 2030, to meet the 2 degrees of warming targets as outlined within the Paris Agreement. Therefore, the approval of NGP would be out of step with the Paris Agreement concerning action to address climate and ecological crises.

Furthermore, an abundance of gas in the global market is likely to be in competition with a transition to renewable energy, as well as contradicting the [NSW Government's own policy framework](#) (1) and recent announcements to develop Renewable Energy Zones (2) within the New England region of NSW. Therefore, the PHAA supports continued investment and development of renewable energy within NSW to meet ongoing energy needs as outlined within the 2020 Integrated System Plan (3) released by the Australian Energy Market Operator.

Undermine ecological determinants of health – clean air and clean water

PHAA is strongly opposed to NGP due to the impact of coal seam gas (CSG) on the environmental determinants of health - clean air, clean water, a safe and sustainable food supply, and a stable climate. The NGP would directly contradict the known evidence linking fossil fuels and health ([see PHAA Policy Position Statement- Health Effects of Fossil Fuels](#)).

The provision of clean air will be affected by the NGP due to the production of air emissions containing polluting substances. The PHAA rejects that public health will be maintained or enhanced through the current *Recommended Conditions* regarding air emissions. Firstly, the narrow scope of monitoring i.e. excluding methane and hydrogen sulphide, ignores the direct impacts that these substances and others have on human health. These include impacts on the respiratory and cardiovascular systems and as a potential carcinogenic (4). Secondly, the recommendation whereby *"The air quality criteria in Table 5 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to exceed the air quality criteria, and the Applicant has advised the Department in writing of the terms of this agreement."* would risk the health of landowners and residents, as Santos would be able to conduct their operations outside of safe air pollution levels.

Finally, the PHAA believe mandatory requirements to maintain safe air pollution levels are the minimum requirement, therefore rendering the current recommendation “*The Applicant must ensure that all **reasonable** (emphasis added) and **feasible** (emphasis added) avoidance and mitigation measures are employed so that air emissions generated by the development do not cause exceedances of the criteria listed in Table 5*” would fail to protect public health.

The provision of clean water will be affected by the NGP due to the generation of wastewater and fracturing fluid from CSG extraction. The increase in chemicals, including benzene, fluoride, boron and lead, in water contaminated by CSG extraction have direct health impacts (5). These include, leukaemia due to probable or known carcinogens, cardiovascular disease and reproductive effects i.e. risk of preterm birth, birth defects (4, 5). Furthermore, end uses of contaminated CSG water, including irrigation of agricultural land can create further environmental and health issues. These include the bioaccumulation of metals in crops, an increase in salt affecting soil fertility and increasing farmers exposure to chemicals through aerosolised through water droplets (4, 5).

The fracking process employed in CSG requires large quantity of water, which are modelled to deplete water resources over time in the Pilliga Sandstone. The Australian Government recognises the potential impact of CSG on water security. Based on the ‘water trigger’ provisions of the *Environment Protection and Biodiversity Conservation Act 1999*, it seeks to protect Australian water resources from this threat. It is doubtful if the potential impact of the NGP on water resources, in and around the project site, have been assessed with a high level of accuracy and adopting the precautionary principle. Previous experience indicates concerns may not be given due consideration as they ought to in drilling sites in NSW and Queensland peri-urban areas(9).

Negative impact on social determinants of health – employment, housing and cost of living

PHAA also opposes the NGP due to its potential negative impacts on social determinants of health at the individual and community level in the region. The PHAA believes these impacts will not be outweighed by the promises of investment in the local community through the Community Benefit Fund and claims of employment opportunities.

The PHAA is highly concerned about the impacts of the NGP on employment and housing in the region. Based on the experience of CSG development in regional Queensland, the initial development phase of the NGP is likely to cause an influx of workers into the region, limiting employment opportunities for residents, decreasing housing availability and increasing rental prices (6). This phenomenon will have disproportionate impacts on low-income households and renters. Subsequently, as the labour-intensive period of development ceases, opportunities for employment are likely to decrease in the operational phase, exacerbated by the initial population influx (6). Additionally, impacts on the cost of living are expected due to the increase in rental prices and increased demand for local services, such as air travel (6).

Previous CSG developments have seen changes to the built environment, including an increase in food outlets and liquor stores, to meet the increased demand during the development phase, infringing on residents ability to make healthy lifestyle choices (6). Evidence from the community experiences in regional Queensland, proximal to coal seam gas developments, demonstrated residents concern of the increased availability of food outlets selling unhealthy food and liquor stores (6). Increased consumption of these foods and alcohol negatively impacts on diets, increasing the risk of diet-related non-communicable diseases, including obesity and cardiovascular disease, and fuels alcohol-related behaviour (6).

The potential impacts of this project on Aboriginal Cultural Heritage are inadequately addressed in the *Recommended Conditions*, even if they are all 100% adhered to. The *Recommended Conditions* states “*if any previously unknown Aboriginal object or Aboriginal place is discovered or suspected in the project area during operational or construction activities: (b) a 10 metre buffer area around the object or place must be cordoned off*”. This is inadequate to either protect heritage sites from the environmental impacts which will extend far beyond a 10m border with the immediate project area, nor will be it adequate protection to maintain connection to country for the Gomeri people. The recent contemptible destruction of Aboriginal sacred sites in Western Australia in the name of mining should serve as a warning of the potential disastrous impacts when mining operations do not give due consideration to these issues.(7)

The impacts of CSG on communities should not be underestimated, and have been acknowledged by the Commonwealth Government’s own assessment report on the socioeconomic impacts of CSG in Queensland. This report noted multiple concerns including the need to ensure development is sustainable and responsible, and the importance of community engagement and building trust. (8) The level of community opposition to this Narrabri Gas Project, with concerns raised regarding the impacts on the local agricultural community, farmers’ mental health, declines in tourism and agriculture, and impacts on Aboriginal Cultural Heritage, clearly indicate that a social licence to operate for this project has not been achieved.

Conclusion

To summarise, PHAA strongly opposes the Narrabri Gas Project for the following reasons:

- Inconsistency with international, national and state climate change policy commitments and targets to reduce greenhouse gas emissions and halt global warming
- Public health risks in the local communities arising from the release of chemical substances resulting in air and water pollution with adverse effects on human health
- Negative impacts on social determinants of health in the region, due to the impacts on cost of living, housing affordability, employment, and connection to country, with disproportionate impacts on low-income households and First Nations people.

The PHAA is grateful for the opportunity to make this submission to the Independent Planning Commission to ensure social and ecological determinants of health are given the highest priority and urgency in the consideration of planning decisions in NSW. Please do not hesitate to contact us should you require additional information or have any queries in relation to this submission.



Terry Slevin
Chief Executive Officer
Public Health Association of Australia



Patrick Harris
PHAA Branch President
New South Wales

10 August 2020

References

1. State of NSW and Office of Environment and Heritage. NSW Climate Change Policy Framework. Sydney, Australia: Office of Environment and Heritage; 2016.
2. NSW Government. Renewable Energy Zones Sydney, Australia: NSW Government; 2020 [Available from: <https://energy.nsw.gov.au/renewables/renewable-energy-zones#:~:text=The%20NSW%20Government's%20Electricity%20Strategy,England%20and%20South%2DWest%20regions.>
3. Australian Energy Market Operator. 2020 Integrated System Plan. 2020.
4. Haswell M, Shearman, D.,. The implications for human health and wellbeing of expanding gas mining in Australia: Onshore Oil and Gas Policy Background Paper. College Park, South Australia; 2019.
5. Navi M, Skelly C, Taulis M, Nasiri S. Coal seam gas water: potential hazards and exposure pathways in Queensland. International Journal of Environmental Health Research. 2015;25(2):162-83.
6. Mactaggart F, McDermott L, Tynan A, Gericke CA. Exploring the determinants of health and wellbeing in communities living in proximity to coal seam gas developments in regional Queensland. BMC Public Health. 2017;18(1):51.
7. <https://www.theguardian.com/australia-news/2020/may/26/rio-tinto-blasts-46000-year-old-aboriginal-site-to-expand-iron-ore-mine#:~:text=2%20months%20old-,%20Rio%20Tinto%20blasts%2046%20000%20year%20old%20Aboriginal%20site,to%20expand%20iron%20ore%20mine&text=This%20cave%20in%20the%20Juukan,heritage%20laws%20drafted%20in%201972.>
8. Department of Industry (2015) Review of the socioeconomic impacts of coal seam gas in Queensland. https://www.industry.gov.au/sites/default/files/June%202018/document/pdf/review_of_the_socioeconomic_impacts_of_coal_seam_gas_in_queensland.pdf?acsf_files_redirect
9. Dingsdag, D.P. (2016). Risks of Coal Seam and Shale Gas Extraction on Groundwater and Aquifers in Eastern Australia. In: Maheshwari, B., Singh, V., Thoradeniva, B. (eds) Balance Urban Development: Options and Strategies for Liveable Cities. Water Science and Technology Library, 72. Springer. https://link.springer.com/chapter/10.1007/978-3-319-28112-4_16