SECRETARY PLANNING & ENVIRONMENT NSW Level 22, 320 Pitt St, Sydney 2000 GPO Box 39, Sydney NSW 2001

Submission to the Santos Narrabri Gas EIS

I strongly object to this project & recommend that it be rejected. As a tertiary qualified health professional, experienced in nursing education, health promotion and health service management in rural health facilities and universities for over 40 years, a mother and grandmother, my grounds for doing so are as follows:

- 1. The risks to the health and wellbeing of the community are too great and in some cases unknown
- 2. The financial cost to the community by this industry make it uneconomical to develop further.

The World Health Organisation set forward nine principles to define health in 1946 & this remains their constitution.

Coal Seam Gas (CSG) mining puts at risk every single principle of the constitution of the World Health Organisation (WHO).

1. Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

The mining of CSG anywhere impacts on the mental, physical and social wellbeing of the communities in which it exists. Air, water & noise pollution, impacts on farmland imposed upon the farming community and the disintegration of communities when the short term booms are over.

2. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.

The impacts on the physical, mental and social wellbeing of CSG mining on the communities in which it is undertaken are significant and the fundamental right of every human being as outline by the WHO declaration is therefore compromised. Suicide is already of serious concern in rural areas and CSG mining is making this much worse when farmers and their families & communities can no longer have control over their own lives

3. The health of all peoples is fundamental to the attainment of peace and security and is dependent on the fullest co-operation of individuals and States.

The political classes that exist in Australia at present do not cooperate, listen to or work with the communities they purport to represent. There is currently no cooperation and this puts at risk the peace and security each of us should expect in our everyday lives.

4. The achievement of any State in the promotion and protection of health is of value to all.

Health promotion & protection is compromised by the mining of CSG. There are no protections put in place for those 'minor' but nonetheless chronic diseases experienced by those people living within & around the gas field. These illnesses include respiratory illnesses - asthma, chronic nose bleeds, rashes & pain. Our children are the most vulnerable and it is well documented that rural & especially Indigenous children are the most vulnerable. There is little knowledge within the health community itself of what needs to be done in the event of spills and accidents within the CSG workers themselves. Uranium incidents and rig accidents are more frequent than the public are ever advised. Mining is a hazardous occupation.

5. Unequal development in different countries in the promotion of health and control of diseases, especially communicable disease, is a common danger.

The increase in atmospheric temperatures cause the 'greenhouse effect' due to the release of methane - a potent greenhouse gas - include the destruction of and changes to the global ecology and habitat. This in turn creates new problems including the spread of infectious and other diseases globally. That is a direct consequence of CSG mining and the use of fossil fuels of all descriptions.

6. Healthy development of the child is of basic importance; the ability to live harmoniously in a changing total environment is essential to such development.

Many of the chemicals used in the mining of CSG are known to impact the health of the child including birth defects, carcinogens and other impacts such as skin problems, rashes, nose bleeds etc. SANTOS & other CSG miners claim the chemicals are safe & found under our kitchen sinks. However, no accountability is made for the quantity and impact in mixing these together & with the underground ecology of the great artesian basin.

7. The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health.

Insufficient research has been completed in comprehensive studies for anyone to claim the CSG mining is safe for the community. The call for caution in the development of the industry has been largely ignored. The stress to the community over the last number of years while waiting on various parliamentary committees to has been significant.

8. Informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people.

The public appears to be actively kept in the dark as to known impacts of CSG mining. It is impossible to attain cooperation of the public when they are not included in the discussions to any large extent. In fact, the opposite would appear to be true & communities feel they are given uninformed and incomplete information. There appears to be little respect held for the community generally by politicians and the companies that wish to exploit mineral and gas reserves. Some politicians do not even live in their areas!

9. Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures.

The governments at all levels in Australia do not appear to be honouring this responsibility, in fact the complete opposite by allowing an unknown & untested industry to impose itself upon communities across Australia. There is no care taken for social cohesion of communities. People in small towns are pitched against their neighbours and the social fabric is torn apart.

Good health & wellbeing are dependent upon clean air, clean water, a safe sustainable food supply and a stable climate. There are serious threats to these determinants of health from unconventional gas development. The cost to the community is too great when more economic alternatives exist.

The state of well-being is associated with:

- Self-perceived health.
- Longevity.
- Healthy behaviours.
- Mental and physical illness.
- Social connectedness.
- *Productivity.*
- Factors in the physical and social environment.

(https://www.cdc.gov/hrqol/wellbeing.htm)

It is in our collective interest to promote and maintain, to the best of our ability, the health & wellbeing of our communities. Unfortunately the health & wellbeing of the community cannot be guaranteed within and around a CSG field.

Human, animal & environmental health are all potentially impacted by CSG mining due to localised environmental changes occurring to soil, water & air quality. Coal Seam Gas well integrity from leakage & poor well integrity will occur. 6-7% of wells fail in the first year of production & 50% fail prior to being shut down (http://stopcsg.org/csg-risks/), releasing gases into the atmosphere, contaminated water into the aquifers and chemicals into the soils.

There are serious threats to soil quality, especially agricultural soils and pollution of water and air. These risks are increased due to the lack of due diligence by the industry itself, despite the existence of legislation requiring them to do so. Contamination has already occurred in the Pilliga and been poorly reported to the regulatory authority by SANTOS. Management of damaged land remains poor with little or no regrowth or microbial or insect activity after many years. There is considerable risk in how the accumulated salts from the waste (produced) water are dealt with. Currently there is no plan for how it should be disposed of.

Coal Seam Gas is a fossil fuel and its product, methane, is the most toxic of all gases adding to the already active greenhouse effect, increasing global temperatures and producing adverse weather conditions. Changes are evident in the polar ice caps with increasing sea temperatures and loss of ice, melting of glaciers and tundra. Further increases in temperatures occur as a direct result of the melting and warming of the atmosphere in response to the lack of reflective properties of ice. Drs for the Environment state that climate change is '<u>one of the greatest threats to</u> <u>humanity</u>' and outline the financial costs as:

- increasing costs of health service provision to deal with the resulting problems (mental health, infectious diseases, increasing cancer rates, numerous minor & major illnesses not yet identified & researched)
- cost to governments in dealing with pollution caused by well leakage and produced water spillage and poor/no well maintenance when the well ceases to be used
- poor or no rehabilitation to destroyed mining sites caused by the industrialisation of the landscape
- disruption to farming enterprises when farming communities are industrialised. Farming & the fossil fuel industry cannot co-exist
- large monetary and other subsidies provided by government to the Petroleum & Gas industry
- poor taxation returns to government by the Petroleum & Gas industry for the extraction of Gas or other fossil fuels

The collective costs are enormous & have the potential to grow even larger. The economic value of the extraction of Coal Seam Gas is highly questionable. (*Drs for the Environment*)

It is alarming that governments at all levels and of all political persuasions encourage this industry to proceed.

Based on the risks outlined above I would ask that :

- 1. the licence for all CSG mining activities proposed in the Pilliga & surrounds be bought back
- 2. the government actively support sustainable energy production which comes with fewer risks, and is more cost effective to the health & prosperity of the community.

Lynda Row [BNurs, MNurs (Adv Practice), Grad Cert Health Management]

REFERENCES

https://www.cdc.gov/hrqol/wellbeing.htm http://www.who.int/about/mission/en/ http://stopcsg.org/csg-risks/ https://www.dea.org.au/images/general/DEA_Position_Statement_-_Unconventional_Gas_Development_-_April_2015.pdf http://www.nswnma.asn.au/wp-content/uploads/2017/05/Banning-CSGinNSWnotgoingforward-withNewSantosNarrabri-CSGProposal.pdf