

## **Application No. SSD 6456**

I object to the proposed Gas mining by Santos and wish to express this following the release of the related Environmental Impact Statement. I object on many grounds, including the mines likely negative impacts on human health, aboriginal heritage, agricultural productivity, riverine and underground water quality, flora, fauna, agricultural land capabilities and the associated social impacts on surrounding communities.

### **Water**

A thorough base line study of all existing groundwater bores and surface water quality by an independent hydrologist to benchmark water quality and groundwater levels to fully assess impacts on surface and groundwater resources during operations and post-closure has not been adequately considered.

The proponent needs to develop a comprehensive water study of all the underground water aquifers and potential threats to quality and flows further downstream as well as in the immediate area.

As proposed by the Narrabri Gas project:

#### **11.2.1 Project Water Extraction in Gunnedah/Oxley Basin**

The project seeks approval to extract 37.5 gigalitres of water over 25 years in the target coal seam in the Gunnedah Basin. (with a high case of 87.1 gigalitres)

Under the Environment Protection and Biodiversity Conservation Act 1999, this project requires demonstration under the 'water trigger' that there will be no significant impact on a water resource if there is a real or not remote chance or possibility that it will directly or indirectly result in a change to:

- The hydrology of a water resource, and
- The water quality of a water resource.

The proponent states that the water they are extracting is in low-value deep groundwater resources that are not utilised. These deep voids will have to be filled and hydrologists can still not predict where the water will come from to fill these voids. There is always some drawdown effect on higher groundwater resources.

After all the studies and comprehensive work by this proponent there is no guarantee that there will be no aquifer interference or any changes in the integrity of hydrological or hydrogeological connections.

Australia is one of the driest continents on earth, water is our most precious resource in these vital and productive inland areas. These rural areas and their economic infrastructure rely on underground water. As the proponent cannot guarantee the quality of underground aquifers and the integrity of hydrological connections, their application should be denied.

Amanda Murray  
Spring Ridge NSW