

Secretary

Department of Planning and Environment NSW

Level 22, 320 Pitt St

Sydney 2000

LDA McCool

3 RANDALL STR.

DICKSON 2602 ACT

10-5-17

Dear Sir/Madam

**SUBMISSION: NARRABRI GAS PROJECT**

**OBJECTION ON THE BASIS OF INADEQUATE BRINE DISPOSAL AND REVERSE OSMOSIS CONCENTRATE DISPOSAL ASSESSMENT AND MITIGATION MEASURES**

Brine management is a major bottleneck for coal seam gas (CSG) production in Australia. Solid Waste remains, even after 10-15 years of CSG extraction in Queensland, a significant logistics and disposal issue for desalination solid waste and chemical processes.

Coal seam gas brine and reverse osmosis concentrate are highly contaminated materials - they are not suitable for general waste disposal and must be handled as hazardous controlled waste in a licensed waste facility capable of handling the toxicity of the material. There is no current facility available in NSW and unlikely to be one that can handle up to 110 tonnes of brine waste PER DAY.

Both these waste streams will contain toxic heavy metals, ordinary salt, other salts, radioactive solids and hydrocarbon residues.

There is currently no treatment-disposal mechanism in place in Australia for the concentrated (solid salt-waste) produced after the reverse osmosis of CSG brine. This fact will create a legacy issue that the industry will, in all likelihood, pass on to the New South Wales taxpayer.

The Narrabri Gas Project should not be approved based on this issue alone.

re: Figure 1- Treated Water Management Options - Santos Narrabri Gas Project EIS

According to the Narrabri Gas Project EIS disposal could involve an estimated 110 tonnes PER DAY of toxic brine being sent to a registered contaminated waste dump/third-party landfill and/or 2 tonnes toxic of brine PER DAY being discharged into Bohen Creek.

The EIS states that the concentrated solid waste from the NGP Reverse Osmosis plant will be disposed of at a "Licensed Facility". There is none in NSW.

Even using a licensed facility does not make the waste disposal issue miraculously disappear. Santos simply hands the problem on to someone else- the taxpayer.

The eventual fate and impact of this reverse osmosis brine concentrate in the environment is not scientifically dealt with in the EIS.