



Media Release

28 November 2011

Origin confirms treated CSG water is safe and meets environmental guidelines

Contrary to ABC online reports, Origin today confirmed that the quality of treated coal seam gas water consistently meets with drinking water standards and rigorous environmental licence conditions and guidelines.

Consistent monitoring and reporting indicate that releases of treated water from its Talinga facility do not present a risk to health or the environment.

Origin CEO Upstream, Mr Paul Zealand said CSG water is consistently and reliably treated to standards better than Australian Drinking Water Guidelines (ADWG) to ensure it is safe for release into the Condamine River which is a source of public drinking water.

"The quality of treated water from the Talinga water treatment facility is rigorously managed and monitored in line with well established guidelines as part of environmental licence conditions which protect health and the environmental values of the river," Mr Zealand said.

Recent online reports by the ABC have sought to draw attention to parameters contained in the environmental licence by comparing them to Australian and New Zealand Environment Conservation Council (ANZECC) guidelines for fresh and marine water quality.

"ANZECC guidelines are intended to apply to the receiving aquatic environment. On this basis, recent downstream monitoring shows Origin has not exceeded ANZECC guidelines," Mr Zealand said.

"It is also important to note that ANZEEC guidelines are not limits and are designed to trigger an environmental management response, such as further investigation.

"Origin has undertaken detailed aquatic ecology surveys, conducted by qualified third party aquatic ecologists, along the Condamine River. The most recent aquatic survey was undertaken in August this year and showed no evidence that releases of treated water were impacting the receiving aquatic environment."

Background

ABC online reports imply that Origin is releasing, or is able to release up to 17 chemicals and heavy metals into the Condamine River at levels that are toxic to animals, plants and micro-organisms that live in freshwater ecosystems which is incorrect.

The supporting analysis was based on incorrectly applying publicly available water monitoring data that relates to Australian Drinking Water Guideline (ADWG) parameters and taken at a monitoring point prior to actual release, against ANZECC guidelines.





ANZECC Guidelines are intended to be applied to water monitoring data in the receiving environment, in this case when the releases mix with the Condamine River.

Further to this stringent monitoring and reporting* shows 8 of the 17 chemicals and heavy metals, including **Silver** and **Chlorine**, have never been found in any releases of treated water into the Condamine River from Origin's Talinga facility.

The remaining nine, including **Cadmium** and **Boron**, have never been recorded at levels that exceed either ADWG or ANZECC guidelines, when the applicable method of water quality monitoring is applied against the applicable water standard or guideline.

Recent monitoring undertaken at a location recognised by third party ecological specialists and the regulator as an appropriate monitoring point for the downstream receiving environment, show Boron $(34\mu g/L)$ well below ANZECC guidelines $(370\mu g/L)$ and Cadmium below detection levels (ANZECC guideline is 0.2 $\mu g/L$).

The Talinga water treatment plant uses reverse osmosis technology to treat water produced as part of gas production. Used throughout the world, reverse osmosis produces water of a high level of purity.

End notes

"The Guidelines have not been designed for direct application in activities such as discharge consents, recycled water quality or stormwater quality, nor should they be used in this way." ANZEEC Guidelines, Chapter 2, Section 2.2.1.9 (page 2-17)

* "Trigger values are concentrations that, if exceeded, would indicate a potential environmental problem, and so 'trigger' a management response, e.g. further investigation and subsequent refinement of the guidelines according to local conditions. Thus these Guidelines have moved away from promoting single-number guidelines that are applied universally, towards guidelines that can be determined individually according to local environmental conditions." ANZEEC Guidelines, Chapter 2, Section 2.1.4 (page 2-10)

"Exceedance of the guidelines indicates that there is potential for an impact to occur (or to have occurred), but does not provide any certainty that an impact will occur (or has occurred)." ANZEEC Guidelines, Chapter 2, Section 2.1.4 (page 2-9)

** refers to over 80 individual sampling activities undertaken up to and since releases commenced in September 2010

 $\mu g/L$ = micrograms per litre, or alternatively referred to as 'parts per billion'

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About Australia Pacific LNG

Australia Pacific LNG is a joint venture between Origin Energy (42.5%), ConocoPhillips (42.5%) and Sinopec (15%), based on Australia's largest CSG reserves. The coal seam gas (CSG) to liquefied natural gas (LNG) project combines Origin's 15 and ConocoPhillips' 25 years of CSG production experience, ConocoPhillips' 40 years experience in operating and developing LNG facilities, and Sinopec's experience in natural gas production, transportation and trade. The Project includes the development of Australia Pacific LNG's coal seam gas resources in the Surat and Bowen basins in central south west Queensland for up to 30 years, a 530km transmission pipeline, and a multi-train LNG facility on Curtis Island, near Gladstone. The Australia Pacific LNG Project will become a supplier of low emissions fuel to growing international energy markets as well as continuing to contribute cleaner energy through its domestic gas production equivalent to more than 40 per cent of Queensland's current gas requirements. Origin is responsible for construction and operation of the gas fields and pipeline. ConocoPhillips is responsible for construction and operation of the LNG facility. Website: www.aplng.com.au

About Origin Energy

Origin Energy is Australia's leading integrated energy company focused on gas and oil exploration and production, power generation and energy retailing. Listed in the ASX top 20 the company has more than 5,200 employees and is a leading producer of gas in eastern Australia. Origin is Australia's largest energy retailer servicing 4.5 million electricity, natural gas and LPG customer accounts and has one of the country's largest and most flexible generation portfolios with more than 5,310 MW of capacity, through either owned generation or contracted rights. Origin's strategic positioning and portfolio of assets provide flexibility, stability and significant opportunities for growth across the energy industry. Through Australia Pacific LNG, its incorporated joint venture with ConocoPhillips and Sinopec, Origin is developing one of Australia's largest CSG to LNG projects based on Australia's largest 2P CSG reserves base.

In New Zealand, Origin is the major shareholder in Contact Energy, the country's leading integrated energy company, operating geothermal, thermal and hydro generation facilities and servicing electricity, gas and LPG customers across both the North and South islands. Origin also operates several oil and gas projects in New Zealand and is one of the largest holders of petroleum exploration acreage in the country.

Origin has a strong focus on ensuring the sustainability of its operations, is the largest green energy retailer in Australia and has significant investments in renewable energy technologies.

For more information go to www.originenergy.com.au