MEDIA RELEASE

QFF joins a growing chorus of industry and community voices calling on a carbon and capture storage project proposed for the Great Artesian Basin to be abandoned

A proposed carbon capture and storage (CCS) project that would see liquified carbon dioxide injected into a water producing aquifer (the Precipice Sandstone) within the Great Artesian Basin (GAB) has industry and community alarm bells ringing, not only in Queensland, but across the nation.

Carbon Transport and Storage Corporation Pty Ltd (CTSCo), a subsidiary company of Glencore, proposes to inject liquified carbon dioxide (CO2) into a usable GAB aquifer representing a significant threat to one of Australia's greatest natural resources and subsequently the businesses, communities and bioregions reliant upon it.

The GAB is one of the largest underground freshwater resources in the world. It generates approximately $13 billion in value to the national economy every year and is a vital resource for 180,000 people, 7,600 businesses and 120 towns. This natural resource is not only heavily relied upon by agriculture but is also the lifeblood of multiple industries and rural communities. The biodiversity supported by the GAB is incredible and the environmental value of this natural asset immeasurable.

Whilst CCS processes are emerging globally as a potential tool in contributing to reduced emission targets, research shows that the application of CCS within a usable water resource is unprecedented globally. Other examples globally show CCS being used in conjunction with poor quality, heavily saline formations and depleted oil and gas reservoirs.

In the project environmental impact statement (EIS), it was noted that once injected the corrosive fluid will quickly cause a 10,000 fold increase in groundwater acidity which will dissolve the aquifer rock and result in the mobilisation of heavy metals such as arsenic and lead into the aquifer, with the potential to move towards other existing water users.

Despite public concerns submitted, the revised EIS does not include an options analysis for alternative CCS geological targets outside the GAB. It also does not include robust and transparent discussion on other CCS projects and acknowledgement that the proposed project is fundamentally different given the water resource aquifer target formation.

“This proposed trial is the first of its kind involving the GAB and there are genuine concerns regarding the lack of scientific evidence underpinning the project that would be needed to give any level of confidence that this water producing aquifer and the GAB will be protected in a process such as this,” Queensland Farmers’ Federation (QFF) CEO Jo Sheppard said.

“The idea of injecting what is essentially industrial waste into a usable water resource as valuable as the GAB is extremely alarming and surely must evoke the precautionary principle as outlined in environmental law and requirements to protect future water contained within the Water Act 2000.”

Specifically, under the Environmental Protection Regulation 2019, section 41, an activity involving direct release of waste into groundwater must be refused if the authority considers under S41(2) part (c) the waste is likely to result in a deterioration in the environmental values of the receiving groundwater.

“The geological formation of the Precipice Sandstone is regionally significant and described by experts as a high-quality GAB aquifer. It is also the source aquifer for springs and supports numerous groundwater dependant ecosystems and the proponents themselves have identified the significant environmental values of the groundwater,” Ms Sheppard said.

“This project is identified as a trial and QFF understands that significant expansion plans will likely be proposed following the trial with further GAB sites to be subsequently considered for similar projects. The longer-term upscale potential and associated future culminative impacts on the GAB is of significant concern.”

QFF joins collective community and industry voices in calling on the Queensland government to reject the proposal. Furthermore, QFF calls for urgent policy parameters to be put in place to strongly guide and underpin where it is appropriate to explore CCS projects and where it is not, safeguarding the future of environmental assets such as the GAB, and protecting it for generations to come.

“It is critical that proposed trials of this nature are treated with extreme caution and are subjected to the highest forms of scrutiny due to the potential risks they pose to the GAB and the possible precedent approvals they may then set for future projects,” Ms Sheppard said.

“The lack of community consultation around this project has been disappointing and QFF are concerned regarding a number of contradictory and misleading statements from proponents

during the EIS process.”

Increasing pressure from the global goals to abate CO2 is driving the development of new and innovative methods of doing so. Innovation, technology, and best practice that is underpinned by sound, robust, scientific data has an important role to play in CO2 abatement targets being achieved in the future.

In this case, however, the revised EIS has not addressed serious concerns raised by independent experts regarding inadequate impact assessment modelling and the lack of Precipice Sandstone aquifer testing required to provide reliable modelling of potential outcomes.

The revised EIS did not include any pump testing of the Precipice Sandstone aquifer hydraulic properties which are fundamental inputs required for accurate modelling. No further water quality testing of the CTSCo injection well have been undertaken to replace the previous water quality samples relied upon despite clear evidence of drilling mud contamination in the water samples.

Regardless of this, industry and community stakeholders are also questioning the appropriateness or the need to use the GAB as a potential CCS site. In one of the world’s driest continents, the protection of the nation’s largest water producing assets should be the highest of priorities.

“As community leaders, it is our collective responsibility to future generations to ensure that CCS does not occur in parts of the state where the risk to valuable natural assets is too great and that CCS is used for the right purposes to achieve meaningful environmental outcomes and not to simply serve the offset requirements of individual big businesses,“ Ms Sheppard said.

It is anticipated that a decision will be made in relation to the EIS relating to the proposed project in February 2024, depending on the assessor’s satisfaction on the information that has been provided during the process.

“Given the importance of the GAB, the agricultural and community uses of the Precipice aquifer, it is difficult to understand why a trial of a waste disposal project would even be contemplated in this site. We understand that carbon injection is usually done into hyper saline groundwater or former gas reservoirs which are not used by other parties as a water source. The injection of CO2 into a water supply aquifer is unprecedented,” Ms Sheppard said.

“Additionally, the trial implies that further GAB sites may subsequently be considered for similar projects. This longer-term intent for CCS expansion in the GAB is of significant concern.

“This decision is critical for industry, for communities, and for future generations to come and

QFF calls on the Queensland Government to hear our collective concerns, exercise the precautionary principle and reject this project.”

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