

Question from People for the Plains tabled at September 2018 NCCC meeting

Has the EPA read this report and does the EPA intend to recommend that changes be made to all aspects of Water Monitoring and that includes both ground and surface waters as suggested in the GISERA Report? (Report is CSG-induced groundwater impacts in the Pilliga region...)

Response

The Environment Protection Authority (EPA) has read GISERA's '*CSG-induced groundwater impacts in the Pilliga region: prediction uncertainty, data-worth and optimal monitoring strategies*' report. The EPA was also in attendance during a surface and groundwater knowledge transfer session organised by GISERA in August 2018, along with other representatives from other government departments, discussing the outcomes of the report.

The publication of the report was released online in May 2018, in between the time of state government agency submissions for the Environmental Impact Statement, and the time for review of the subsequent Response to Submissions (RtS).

In its review of Santos' EIA in June 2017, the EPA recommended

1. The proponent makes commitments when current facilities are expanded, to additional monitoring points being installed commensurate with extent and nature of the new development.
2. The proponent revises the ongoing monitoring program to include monitoring the areas of greatest impact, as identified by the submitted Gunnedah Basin Regional Model and associated uncertainty analysis as presented in the Groundwater Impact Assessment

In its review of Santos' RtS, the EPA reinforced that requests for additional water monitoring information prior to a determination of the Gas project, were needed. Findings from the GISERA report regarding data gaps in water quality monitoring for locations where predicted modelled change may occur, had already been taken into consideration during the EPA submission for the EIS, and were consistent alongside the EPA's review of the RtS.

The review of the RtS by the EPA, initiated further requests for further information that included:

1. The development of a conceptual water monitoring plan in consultation with the EPA and Department of Industry – Lands & Water (LW). This allows for the
 - i. Identification of additional monitoring bores in the gas project area commensurate with project extent,
 - ii. Increase in the number of water monitoring locations (measuring varying depths) within the gas project area to better capture trends and mitigate potential impacts
 - iii. Ongoing monitoring of groundwater quantity and quality,
 - iv. Reinforcement of impact management,
 - v. Validation of forecasted model results and reduce modelled uncertainty,

- vi. Continuation of model predictions commensurate with development progression

Similarly, the Department of Industry – Lands and Water (LW) review of the RtS nominated specific areas for an expanded water monitoring network around the gas project area to further strengthen the robustness of data collection, improve baseline data, assess and mitigate modelled predictions, and to for the allowance of updates to future models to quantify induced impact from operations.