

LEGISLATIVE ASSEMBLY OF THE NORTHERN TERRITORY

WRITTEN QUESTION

Mr Guyula to the Minister for Environment; and Water Security:

Groundwater salinity records

Newly released groundwater monitoring data from the Santos Tanumbirini exploratory frack site reveals apparent sharp increases in groundwater salinity recorded by electrical conductivity (EC) sensors in September 2019.

If the EC sensor readings for this site are accurate, then the possibility of cross-contamination from a deeper, non-potable aquifer is raised and must be investigated. If the EC sensor readings are not accurate, and were the result of faulty equipment, then there are equally serious questions about: the calibre of monitoring equipment approved for use by the NT Government; about the delay in checking and replacing the sensors following the anomalous data; and about the NT Government's approach to ensuring quality control in the groundwater monitoring system.

1. Following the sharp increases in groundwater salinity recorded by electrical conductivity (EC) sensors at the Santos Tanumbirini exploratory frack site in September 2019, why were the EC loggers not checked and, if found to be faulty, replaced immediately following the anomalous results?
2. What are the applicable standards for this type of sensor in a best practice groundwater monitoring programme, and did Santos' loggers meet these standards? If so, why did they fail?
3. What steps does the NT Government take to maintain quality assurance with respect to the groundwater monitoring equipment used by gas companies to meet their reporting obligations? For example, how frequently does the NT Government independently verify the reported EC data, and/or require companies to check their sensors are functioning appropriately?
4. When was the Minister made aware of the rapid increase in the electrical conductivity (EC) sensor readings in the EC sensors in the bore RN040936, also known as the Impact Monitoring Bore at Tanumbirini?
5. When was the Minister made aware of the rapid increase in the electrical conductivity (EC) sensor readings in the bore RN040930, also known as the Control Monitoring Bore at Tanumbirini?

6. What actions has the Minister undertaken in response to this recorded change in measurements from EC sensors?
7. Has the Minister received any evidence from Santos as to the accuracy of the readings, and if so, when? If the Government considers that the readings are erroneous then why were the sensors not replaced for 12 months?
8. Who approved the monitoring regime in these bores and the use of single sensors instead of multilevel arrays as specified in Pepper recommendation 7.11, and what make and model of sensors are being used?
9. Did the Minister take this data into consideration when approving the Santos EMP in 2021?
10. Where is the data from the other monitoring bores in the region as required by recommendation 7.11?
11. Why was data from this event in August 2019 denied to the community until Jan 2022?
12. Did the EPA take this data into account when it said in correspondence to you there was no evidence of risk to stygofauna?