



Tintsville Ponds, Narrabri

The Tintsville Ponds facility is part of the Santos Coal Seam Gas Exploration and Appraisal Project. The ponds are located near the township of Narrabri on the NSW north-west slopes.

The facility consists of two holding ponds with capacities of 23 megalitres (Pond 1) and 92 ML (Pond 2). The ponds were installed by Eastern Star Gas (ESG) in 2010, a company acquired by Santos in 2011 which is responsible for managing the site, including the ponds.

The ponds are used to store produced water and brine resulting from the Santos operation.

During a site inspection by the Office of Coal Seam Gas (OCSG) and NSW Environment Protection Authority (EPA) in May 2013, Santos notified the NSW Government that groundwater monitoring had detected slightly elevated saline water in shallow and discrete groundwater beneath the Tintsville holding ponds.

At that time Santos could not identify the exact source of the slightly elevated saline water, although a leak from the ponds was suspected. Slightly elevated concentrations of metals, including uranium, were also detected. The source of most of the elevated metals (including uranium) is from naturally occurring soils on site.

Action taken

Based on the data and information available at the time, it was considered that the ponds posed no threat to human health or the environment.

Further, OCSG approved a series of operational actions for Santos to take, including:

- cease adding produced water to the ponds
- remove water from Pond 1 and verify the integrity of the existing pond liner
- recommission Pond 1 for water storage.

Santos is constructing a new, leading technology water treatment and storage facility known as 'Leewood'. The new facility will have double membrane-lined ponds with leakage detection and collection systems. Santos has now completed construction of one pond and is currently finalising the installation of the lining for the second pond.

Clean-up Notice

The EPA issued a Clean-up Notice to Santos on 29 July 2014 requiring the company to remove all water contained in Tintsville Pond 2 by 14 September 2014.

The notice was issued after the NSW Planning Assessment Commission approved the company's application to use existing infrastructure to transfer the water.

The water is being transferred to the new Leewood water treatment and storage facility via the Bibblewindi water treatment facility. The infrastructure is not currently

in place to pipe the water directly to the Leewood facility and transferring the water to Bibblewindi first is a sound option. The Bibblewindi facility has environmental protections in place, including a monitoring program required by the EPA. Santos has commenced pumping the water from the Bibblewindi facility to the Leeward facility.

EPA investigation

Following Santos' notification of the groundwater monitoring results, the EPA commenced an investigation into the management of produced water at the site.

Current information from the EPA's investigation indicates that any impacts on groundwater are localised and confined within the immediate vicinity of the ponds.

The EPA investigation to date has not identified any factors to indicate an increased risk to private bores. Further, the EPA has assessed any risks arising from the situation as low.

The EPA has undertaken sampling at the nearest stock and domestic bores as part of its investigation. The results of this monitoring support the EPA's assessment that any impacts on groundwater are localised and confined within the immediate vicinity of the ponds.

EPA licence

The EPA has issued an environment protection licence to Santos. The licence includes a comprehensive monitoring program, including ongoing sampling adjacent to the ponds.

Further regulatory action may be required by the EPA once its investigation is complete or as a result of more monitoring.

Who to contact with any queries or concerns

EPA Environment Line: phone 131 555 or email: info@environment.nsw.gov.au

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Every effort has been made to ensure that this information is accurate at the time of publication. However, as appropriate, readers should obtain independent advice before making any decision based on this information.

Published by:

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EPA 2014/0634

August 2014