

NARRABRI CCC MONTHLY UPDATE

FEBRUARY 2016

The following is a monthly update for the Narrabri CCC regarding activities undertaken by the NSW Environment Protection Authority (EPA) relating to PEL 238 (Narrabri Gas Project). It includes both activities undertaken relating to Environment Protection Licence 20350 and the EPA functions conducted under the NSW Gas Plan.

Attachments to this month's update:

- Map of CSG Leak Detection Inspections - 15/10/14 – 03/09/15
- Map of Gas Regulation Inspections - 02/12/15 – 28/01/16

EPA ACTION ITEMS LAST NCCC

Nil

INVESTIGATIONS

Background

19 February 2013 the EPA became responsible for investigating environmental incidents that occurred during coal seam gas activities under the provisions of the Protection of the Environment Operations Act 1997 (POEO) and issued Environment Protection Licenses.

1 July 2015 the EPA commenced its new role as the lead regulator for compliance with and enforcement of conditions of approval for gas activities in NSW, including consent conditions and activity approvals issued by other agencies (excluding work health and safety). In carrying out this role the EPA will work with the relevant experts and NSW Government agencies.

Gas activities must comply with a broad range of regulatory controls, including Acts, regulations, codes of practice, titles, approvals and other controls.

The prioritization of investigations is determined using a risk assessment for investigations that considers the level of environmental impact and the likelihood of environmental harm occurring.

CURRENT

January 2016 – Sediment laden water boundary of Leewood Water Treatment Facility

On 4 January 2016 the EPA received a report alleging that sediment laden water had been discharged from the site along the southern boundary of the Leewood Water Treatment Facility. This followed heavy rain in the area. The matter was followed up with Santos and it was evident that while there had been some discharge, there had been limited off-site impacts. Santos undertook immediate works to prevent further discharge of sediment laden rainwater from the site, including installing coir mats and construction of bunding.

The EPA inspected the site and determined that no regulatory action was required. The EPA inspected the site again on 4 February 2016. The inspection confirmed that the works undertaken by Santos had been effective.

No further action required by the EPA.

January 2016 – Alleged waste dumped beside a road in the Pilliga

On 23 January 2016, the EPA received a complaint via the Environment Line advising of a “foamy, caramel coloured” material in a roadside drain near the Santos Pilliga operations. The caller was concerned that the material may be drilling additive or waste water dumped beside the road. In response to the complaint, the EPA inspected the site and collected samples. Analysis of the samples determined it was a natural event, likely due to the decomposition of organic material.

No further action required by the EPA.

<http://www.epa.nsw.gov.au/epamedia/EPAMedia16010501.htm>

RECENTLY COMPLETED

September 2015 – Piezometer in Bohena Creek – No regulatory action required.

2 September 2015 the EPA received a report regarding a surface water monitoring piezometer (TB4) located in Bohena Creek and concerns relating to cross contamination between aquifers.

3 September the EPA inspected the site. In addition, the EPA reviewed information relating to the installation, purpose and approval documents for the piezometer. The EPA has confirmed that TB4 was one of four temporary, in-channel, shallow alluvium piezometers for targeted surface water monitoring. The piezometers were installed using a hand-auger and are approximately 2.5 meters deep and had the necessary approvals from the then Crown Lands and NSW Office of Water.

Due to the shallow nature of the piezometers and the fact that they do not enter through any groundwater sources the EPA does not believe that the piezometers pose a risk of aquifer contamination. As a result, and in consideration that the necessary approvals had been granted for the activity, no regulatory action was required.

Letters confirming the above have been sent to both Santos and the complainant on 17 September 2015.

RUNNING LOG - OLD INVESTIGATIONS PEL 238 OUTCOMES

INCIDENT	OUTCOME
March 2013 <u>Biblewindi Water Treatment Facility Pond</u> Liner failure	11 February 2014 EPA issued Penalty Notice for s120 Pollution of waters A Pollution Reduction Program (PRP) was added to EPL 20350 (Environment Protection Licence) requiring the development of a Remediation and Monitoring plan and the implementation of these.

May 2013 <u>Tintsville Ponds</u> Detection elevated levels salinity and metals	Insufficient evidence to determine if the changes detected in groundwater were the result of leaks from the Tintsville ponds or were from natural factors. A PRP was added to EPL 20350. http://www.epa.nsw.gov.au/epamedia/EPAMedia15051501.htm
February 2014 <u>Namoi Waste</u> Storage of Santos drilling mud onsite	6 May 2014 EPA issued Namoi Waste Corp with a Penalty Notice for breach of s145 of the POEO Act.
January 2015 <u>Santos Dewhurst</u> Southern Water Flow Line	No breach of EPL 20350 identified. Santos varied operational practices for high point vents following negotiations with the EPA. http://www.epa.nsw.gov.au/epamedia/EPAMedia15051501.htm

EPA ACTIVITIES

The following tables present actions undertaken by the EPA

INSPECTIONS				
SITE ID	DATE INSPECTED	REASON	ACTION/OUTCOME	STATUS
Santos Narrabri Office	12/08/2015	Meet and greet, site familiarisation and training for new staff	N/A	N/A
Various legacy salinity sites and well sites	12/08/2015	Site familiarisation, inspections	N/A	Rehabilitating/Active
Santos Narrabri Office	14/08/2015	Informing Santos of EPAs new role	Improved understanding of EPAs new role	N/A
Various legacy salinity sites and well sites	13/08/2015	Site familiarisation, inspections	N/A	Rehabilitating/Active
Leewood ponds	13/08/2015	Site familiarisation, inspections	N/A	N/A
Biblewindi ponds	13/08/2015	Site familiarisation, inspections	N/A	N/A
Various	14/08/2015	Site familiarisation, inspections	N/A	N/A
Leewood ponds	20/08/2015	Observing compliance audit conducted by DRE	No non-compliances identified	Compliant
Biblewindi ponds	20/08/2015	Observing compliance audit conducted by DRE	No non-compliances identified	Compliant
Various well sites	20/08/2015	Observing compliance audit conducted by DRE	No non-compliances identified	Compliant

Santos Narrabri Office	20/08/2015	Observing compliance audit conducted by DRE - document review	No non-compliances identified	Compliant
Dewhurst 2	2/12/2015	Response to community concern	Site rehabilitation progress is being monitored	Rehabilitating
Bohena 13/ 13C	2/12/2015	Response to community concern	Site rehabilitation progress is being monitored	Rehabilitating
Dewhurst 30	2/12/2015	Visiting site regarding Santos report of protestor tampering	No environmental issue	N/A
Biblewindi legacy salinity impact area	3/12/2015	Legacy salinity impact areas inspection	Site rehabilitation progress is being monitored	Rehabilitating
Bohena 2	3/12/2015	Legacy salinity impact areas inspection	Site rehabilitation progress is being monitored	Rehabilitating
Bohena 7	3/12/2015	Legacy salinity impact areas inspection	Site rehabilitation progress is being monitored	Rehabilitating
Bohena 5	3/12/2015	Legacy salinity impact areas inspection	Site rehabilitation progress is being monitored	Rehabilitating
Bohena South 1	3/12/2015	Legacy salinity impact areas inspection	Site rehabilitation progress is being monitored	Rehabilitating
Bohena 3	3/12/2015	Legacy salinity impact areas inspection	Site rehabilitation progress is being monitored	Rehabilitating
Bohena 4	3/12/2015	Legacy salinity impact areas inspection	Site rehabilitation progress is being monitored	Rehabilitating
Biblewindi legacy salinity impact area	17/12/2015	Legacy salinity impact areas inspection	Site rehabilitation progress is being monitored	Rehabilitating
Biblewindi legacy salinity impact area	28/01/2016	Legacy salinity impact areas inspection	Site rehabilitation progress is being monitored	Rehabilitating
Bohena 13/ 13C	28/01/2016	Response to community concern		Rehabilitating
Dewhurst 19	28/01/2016	Response to community concern	Weeds need further attention	Rehabilitating
Bohena 2	28/01/2016	Response to community concern	Weeds need further attention	Rehabilitating
Leewood ponds	28/01/2016	Unannounced site visit	Sediment and erosion control is in place	Constuction

INSPECTIONS – Leak Detection and Repair (LDAR) and Hydrogen Sulphide (H₂S)

SITE ID	DATE INSPECTED	REASON	ACTION/OUTCOME	STATUS
Tintfield 2, 3H, 4H & 5H Narrabri Gas Field	7/12/2014	Undertake Leak detection monitoring	No reportable leaks detected	
Dewhurst 13, 14, 15, 16H, 17H, 18, 18H, 23, 25	7/12/2014	Undertake Leak detection monitoring	No reportable leaks detected	
Wilga Park Power Station	7/12/2014	General Site inspection	No further Action	
Tintfield Ponds	7/12/2014	Site inspection to observe water levels of ponds	Tintfield Ponds 2 empty and Tintfield pond 1 currently hold water	
Dewhurst 26, 27, 28, 29	30/04/2015	Undertake Leak detection monitoring	No reportable leaks detected	

Biblewindi 22, 23,24 & 25	6/05/2015	Undertake Leak detection monitoring	No reportable leaks detected	
Leewood Water Management Facility	6/05/2015	Site inspection	observe water levels of ponds	
Tintsville Water Storage Facility	6/05/2015	Record cell water levels.	Tintsville pond water levels	
Brawboy 2	17/06/2015	Undertake Leak detection monitoring	No reportable leaks detected	
Biblewindi WTF	27/07/2015	Air sampling for H ₂ S	Air sampling undertaken at Biblewindi water storage facility	No H ₂ S detected
Leewood WTF	27/07/2015	Air sampling for H ₂ S	Air sampling undertaken at Leewood Water treatment Facility	No H ₂ S detected
Tintsville 2H, 3H and 4H	29/07/2015	Undertake Leak detection monitoring	No reportable leaks detected	
Coonarah 6L & 1B ST	29/07/2015	Undertake Leak detection monitoring	No reportable leaks detected	
Georges Island 2, 2A	3/09/2015	Undertake Leak detection monitoring	No reportable leaks detected	
Kahula 2, 3, 4 and 5	3/09/2015	Undertake Leak detection monitoring	No reportable leaks detected	
Longlea 1	3/09/2015	Undertake Leak detection monitoring	No reportable leaks detected	
Dewhurst 6, 22, 24	3/09/2015	Undertake Leak detection monitoring	No reportable leaks detected	
Leewood Water treatment Facility	3/02/2016	Site Inspection – Leewood WTF – Inspect sediment and erosion control measures	All Erosion and sediment control measures in place as per the Erosion and Sediment Control Plan – Leewood WTP. Addition measures such as coir logs and earth bund along the south boundary	

MEDIA

13 January 2016 – SMH Article – “Santos coal seam gas waste-water pond leaked briefly during commissioning”

<http://www.epa.nsw.gov.au/epamedia/EPAMedia15051501.htm>

Key Points:

- The ponds are double lined with a leak detection system.
- During the pond commissioning (or construction testing) stage of cell four there were leaks detected in the primary liner and these leaks were fixed. Importantly the secondary liner remained intact with no impact to the environment.
- As long as the secondary liner is not breached and the leak detection system and sump collection system work as intended – which is part of the EPA’s regular inspection program - there are no environmental issues and no resulting environmental harm.

- The EPA has and will continue to conduct inspections at the Leewood Water Treatment Facility. EPA inspections include the periodic review of the sump monitoring data.
- As at the end of January 2016 the EPA had no evidence that produced water or brine has discharged from the facility into the environment.

Narrabri

CSG Leak Detection Inspections - 15/10/14 – 03/09/15

Gas Regulation Inspections - 02/12/15 – 28/01/16

No Rehabilitation Inspections conducted during the above periods

