

Narrabri Coal Project Community Consultative Committee Meeting #8

Environmental Monitoring Report November 2009 – January 2010

Noise Monitoring

Attended noise monitoring was undertaken on the 14th and 15th December 2009 to verify if noise levels were within compliance limits. The results from this monitoring are detailed in the tables below.

NCM Noise Monitoring Results – 15 December 2009 (Day)

Location	Time	dB(A), _{L_{eq}}	Wind speed/ direction	Identified Noise Sources
Bow Hills	8:57 am	53.3	1-2 m/s SE	Traffic (53), Plane (34), NCM inaudible
Naroo	8:35 am	42.1	1-2 m/s SE	Traffic (40), birds (37), NCM inaudible
Claremont*	8:17 am	38.6	1-2 m/s SE	Birds (37), Traffic (34), NCM (25)
Westhaven	7:42 am	36.2	1-2 m/s SE	Birds (35), Traffic (29), NCM (23)
Greylands	7:04 am	41.2	1-2 m/s SE	Traffic (38), Birds (34), Wind (32), NCM (25)

* Correction of 4-8dB to be subtracted from the *mine noise component only* measured at "Claremont" boundary to estimate levels at "Kurrajong".

NCM Noise Monitoring Results – 14 December 2009 (Evening)

Location	Time	dB(A), _{L_{eq}}	Wind speed/ direction	Identified Noise Sources
Bow Hills	9:36 pm	52.1	2-4 m/s S	Traffic (52), Wind (40), NCM inaudible
Naroo	8:12 pm	47.5	2-4 m/s S	Traffic (46), Wind (35), NCM inaudible
Claremont*	8:35 pm	37.3	2-4 m/s S	Wind (36), Pump (32), NCM inaudible
Westhaven	8:57 pm	38.4	2-4 m/s S	Wind (37), Insects (34), NCM inaudible
Greylands	9:14 pm	40.5	2-4 m/s S	Wind (40), NCM inaudible

* Correction of 4-8dB to be subtracted from the *mine noise component only* measured at "Claremont" boundary to estimate levels at "Kurrajong".

NCM Noise Monitoring Results – 15 December 2009 (Night)

Location	Time	dB(A), _{L_{eq}}	Wind speed/ direction	Identified Noise Sources
Bow Hills	5:27 am	34.4	1-2 m/s SE	Insects (30), Wind (30), NCM (22)
Naroo	4:17 am	45.9	1-2 m/s SE	Traffic (44), Wind (33), NCM inaudible
Claremont*	4:36 am	40.6	1-2 m/s SE	Car (39), Wind (32), NCM inaudible
Westhaven	4:52 am	35.5	1-2 m/s SE	Wind (35), NCM inaudible
Greylands	5:09 am	41.8	1-2 m/s SE	Birds (39), Wind (35), NCM inaudible

* Correction of 4-8dB to be subtracted from the *mine noise component only* measured at "Claremont" boundary to estimate levels at "Kurrajong".

The results indicate that noise emissions from the mine were below the criterion of 35 dB(A), $L_{eq}(15min)$ at all receivers.

Unattended noise monitoring was also undertaken in December 2009, as required under the consent. Noise logs have been provided to Narrabri Coal from the consultant as part of the background noise collation. This data does not distinguish between mine and other noise sources and as such the data is not presented in this report. It is anticipated that following the first 12 months of mining from the project site, the requirement for ongoing unattended noise monitoring will be removed.

Deposited Dust Monitoring

Month	ND1 Turrabaa	ND2 Claremont	ND3 Bow Hills	ND4 Matoppo	ND5 Claremont	ND6 Willarah	ND7 Claremont	ND8 Claremont
February 2009	1.8	1.9	0.5	9.4	2.0	13.8	1.0	0.8
March 2009	0.6	13.8	3.1	5.1	35.5	6.6	3.6	3.5
April 2009	1.4	0.6	0.3	33.5	1.4	2.0	1.0	0.1
May 2009	1.1	0.8	7.5	4.1	5.3	2.6	5.8	2.4
June 2009	0.4	0.5	4.0	3.7	4.9	1.5	3.0	2.2
July 2009	0.9	0.4	3.2	0.8	7.9	0.7	1.9	1.6
August 2009	64.4	2.2	6.2	1.5	1.6	2.3	1.5	1.4
September 2009	18.9	20.5	18.1	23.6	12.9	14.3	12.6	19.1
October 2009	8.3	4.2	4.8	2.7	2.7	0.9	2.7	4.1
November 2009	7.0	1.9	1.5	2.2	1.9	1.9	2.8	1.5
December 2009	15.4	10.3	2.3	3.1	1.9	1.9	1.7	1.8
January 2010	10.7	3.8	1.4	11.0	1.6	5.4	1.5	5.0
Annual Average	10.9	5.1	4.4	8.4	6.6	4.5	3.3	3.6

Deposited dust results have returned to more normal levels since the last CCC meeting, with the exception of ND1 (Turrabaa) and ND4 (Matoppo). These elevated results are believed to be associated with contamination issues rather than mining operations with no samples returning turbid waters but comprising contaminants such as plant matter and bird droppings. The annual average at most sites remains above the annual average criteria of 4 g/m²/month which is attributable, in part, to the dust storm events in late 2009 and other outlier results which have skewed the overall average.

High Volume Air Sampling (PM₁₀)

PM₁₀ measurements taken to date for the "Claremont" High Volume Air Sampler is returning a running annual average of 16.67 µg/m³ which is well below the annual average limit of 30 µg/m³.

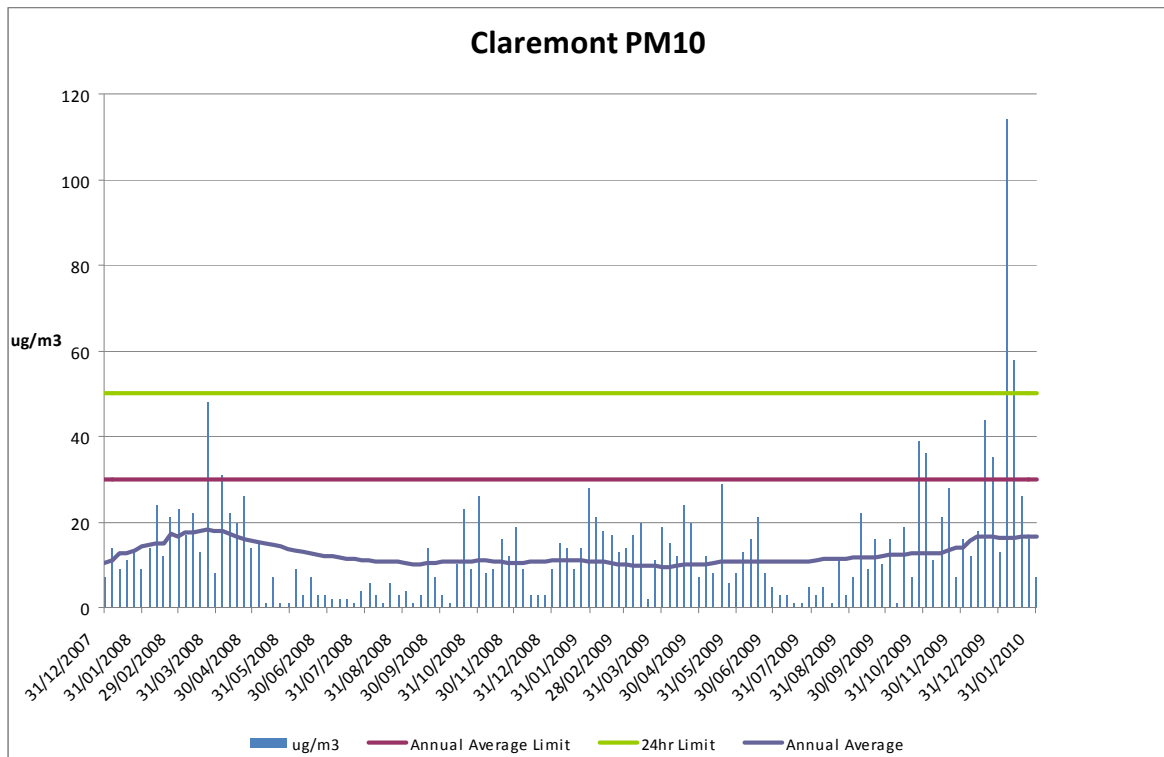
PM₁₀ measurements taken to date for the “Turrabaa” High Volume Air Sampler is returning a running annual average of 16.84 µg/m³ which is well below the annual average limit of 30 µg/m³.

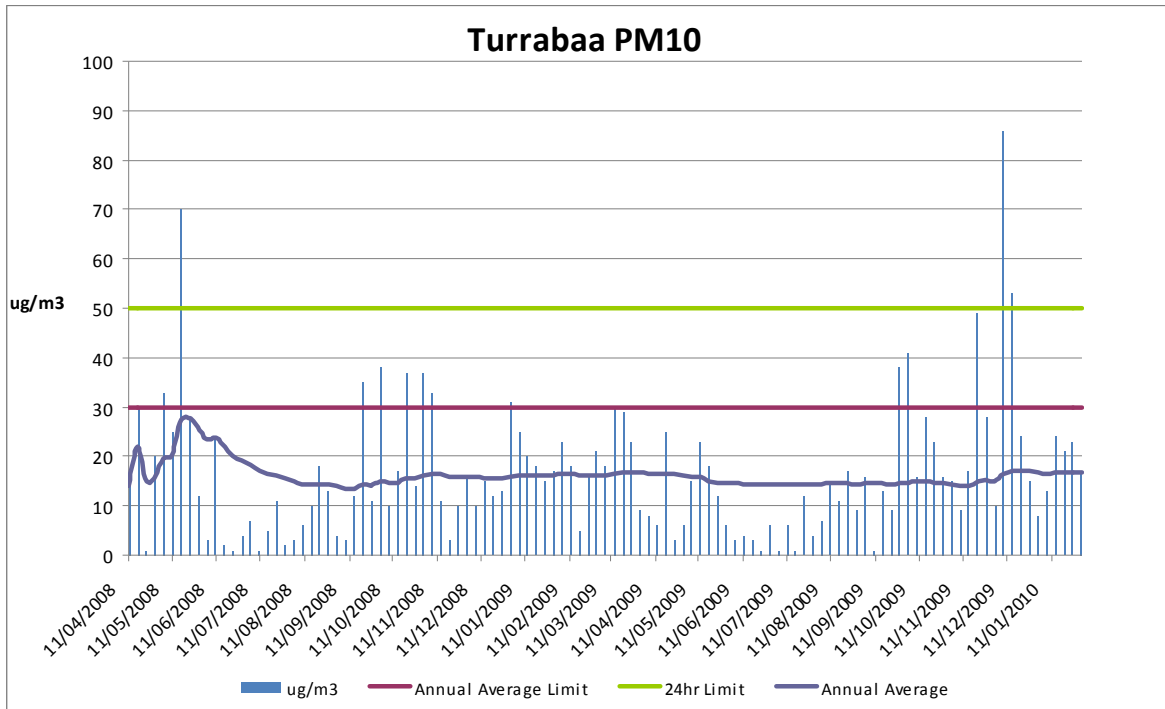
The 24hr criterion of 50 µg/m³ was breached at the both monitor locations on the 8th and 14th December, as follows:

Date	Claremont	Turrabaa
8 th December 2009	114 µg/m ³	86 µg/m ³
14 th December 2009	58 µg/m ³	53 µg/m ³

Review of other PM₁₀ units operated by Whitehaven confirmed a general spike in PM₁₀ concentrations on these days and coincided with bushfires in the region producing significant smoke haze. It is also noteworthy that the PM₁₀ unit in Tamworth operated by DECCW experienced an increase in PM₁₀ over the period 8th – 14th December with PM₁₀ levels ranging from 24 µg/m³ to 325 µg/m³, which indicates general regional conditions were responsible for the higher concentrations recorded at the “Claremont” and “Turrabaa” monitors. Advice has been issued to both DECCW and DoP pertaining to the elevated PM₁₀ levels on these dates.

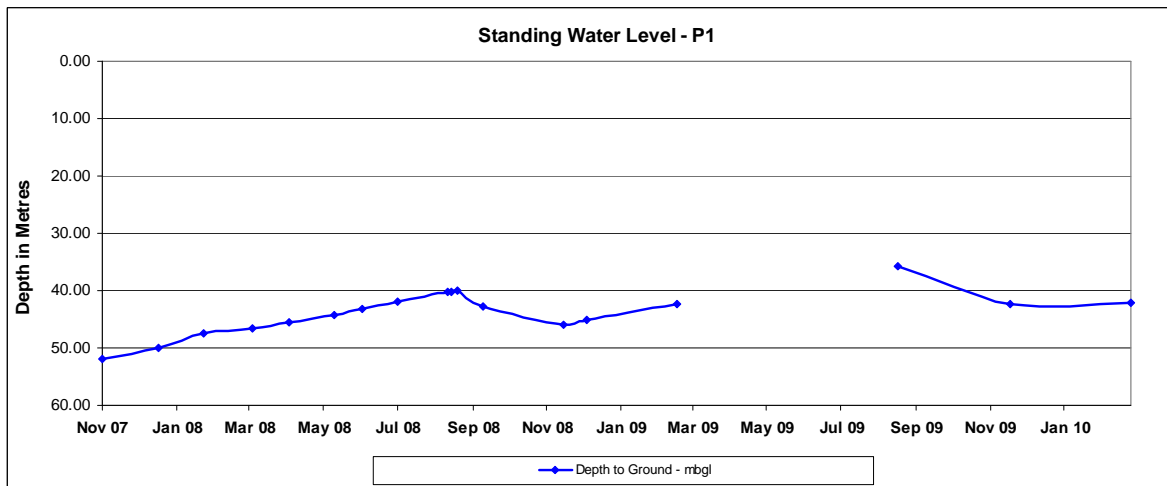
The highest reading from the “Claremont” sampler is now 114 µg/m³, as measured on 8th December 2009. The highest reading from the “Turrabaa” sampler to date also occurred on the 8th December 2009 (86 µg/m³).

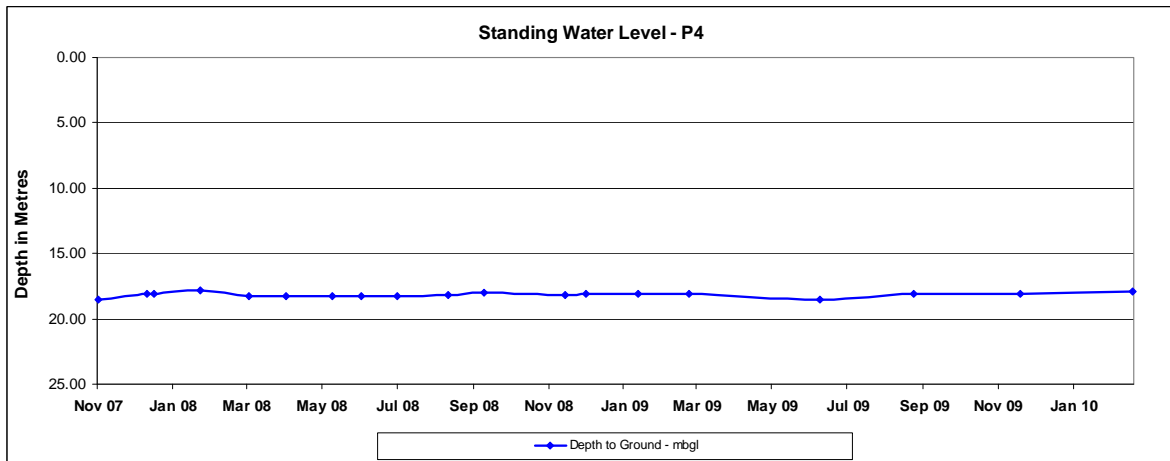
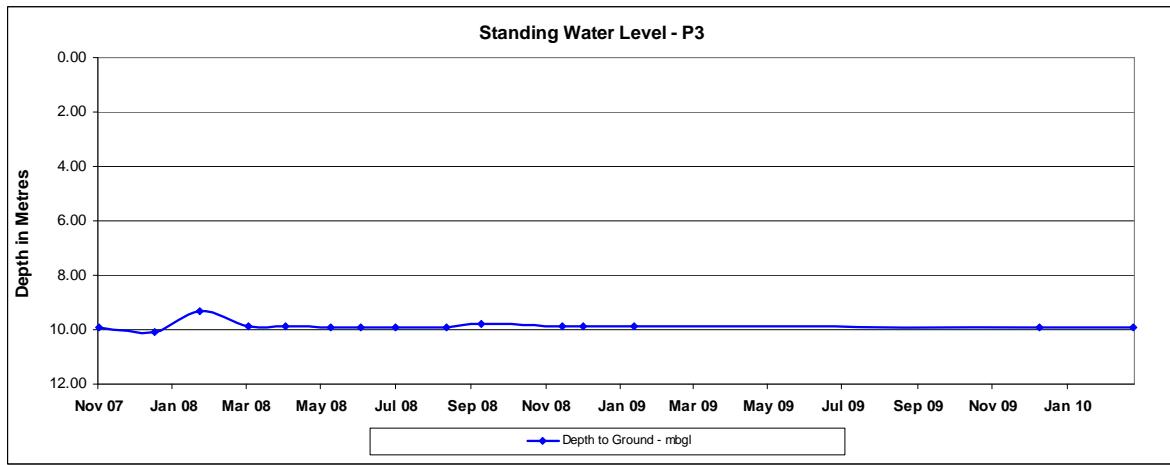
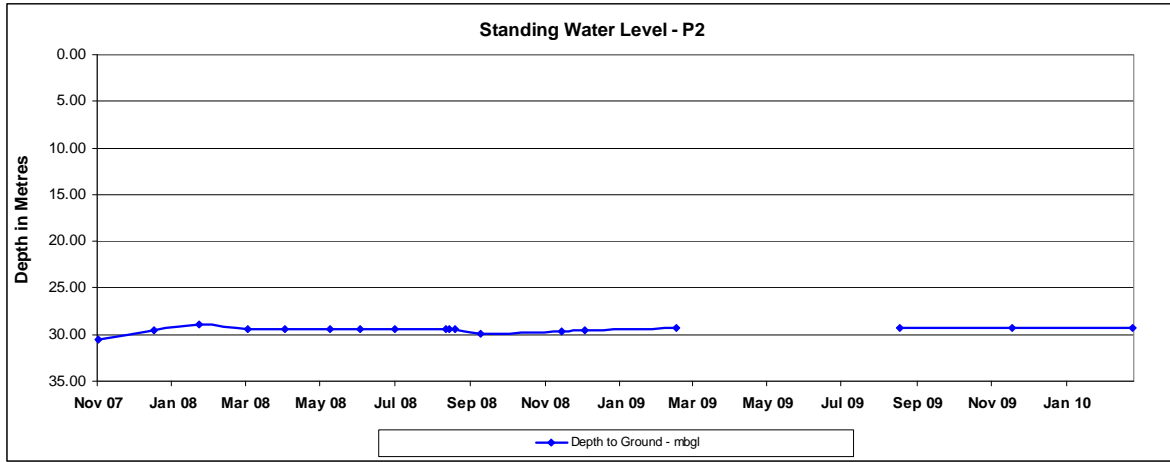


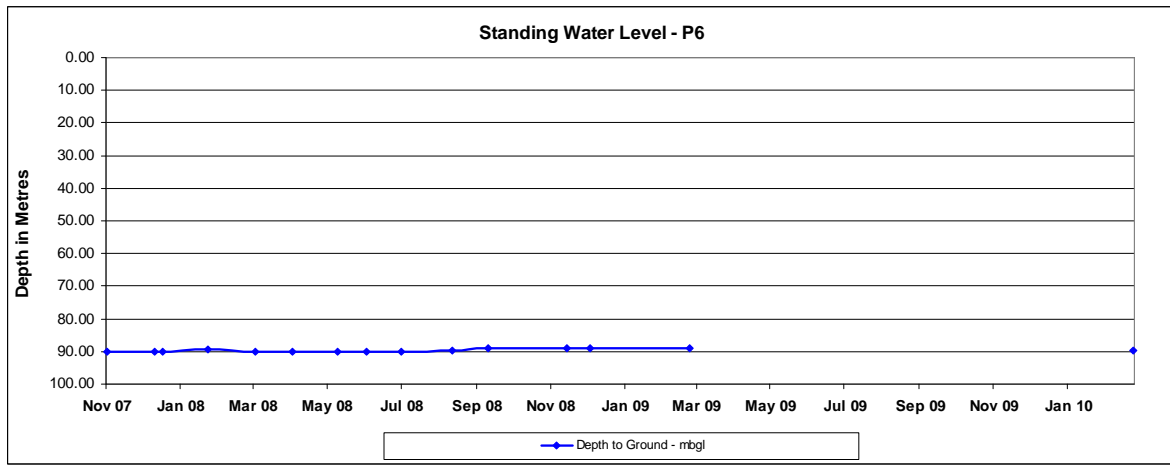
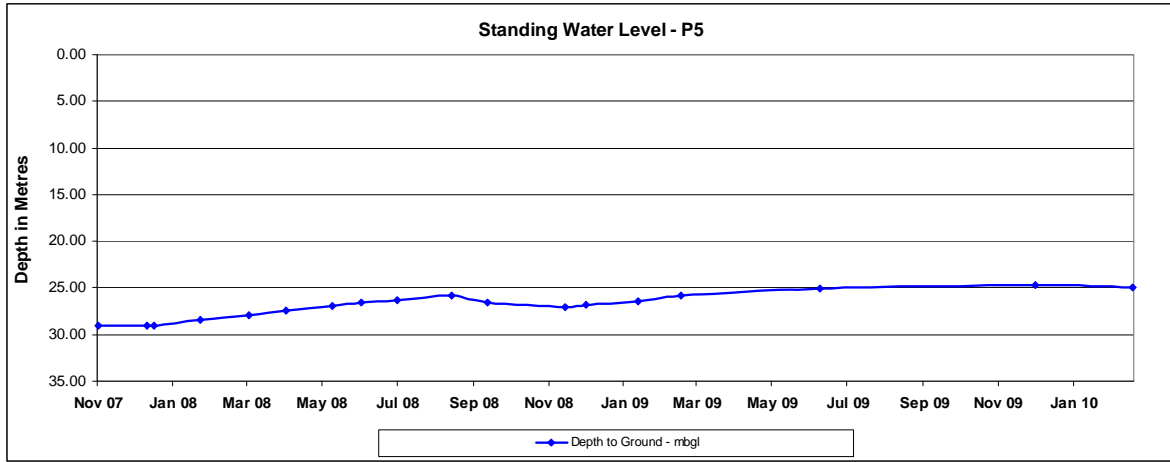


Groundwater Monitoring

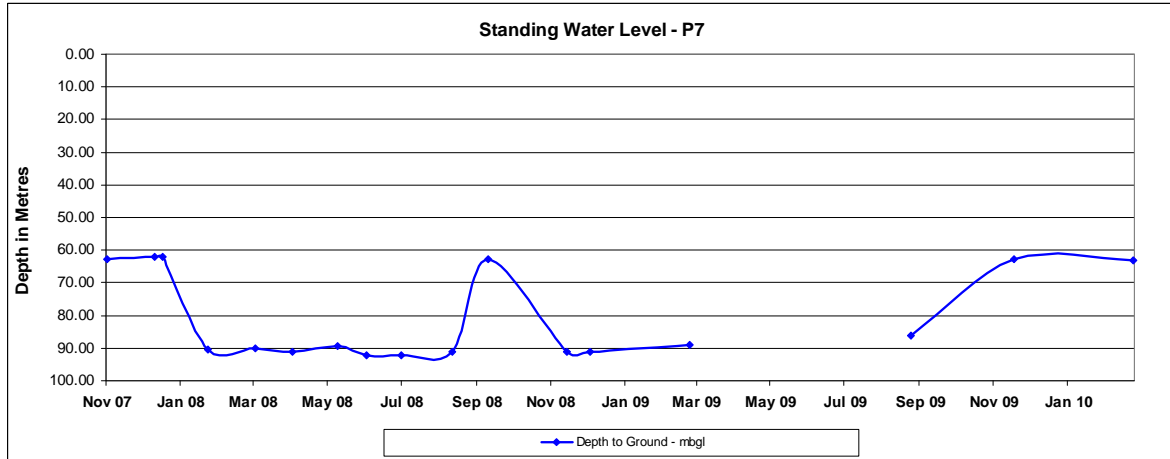
The most recent groundwater monitoring event was conducted in February 2010 (Standing Water Level only). Recorded Standing Water Levels to date are provided below.



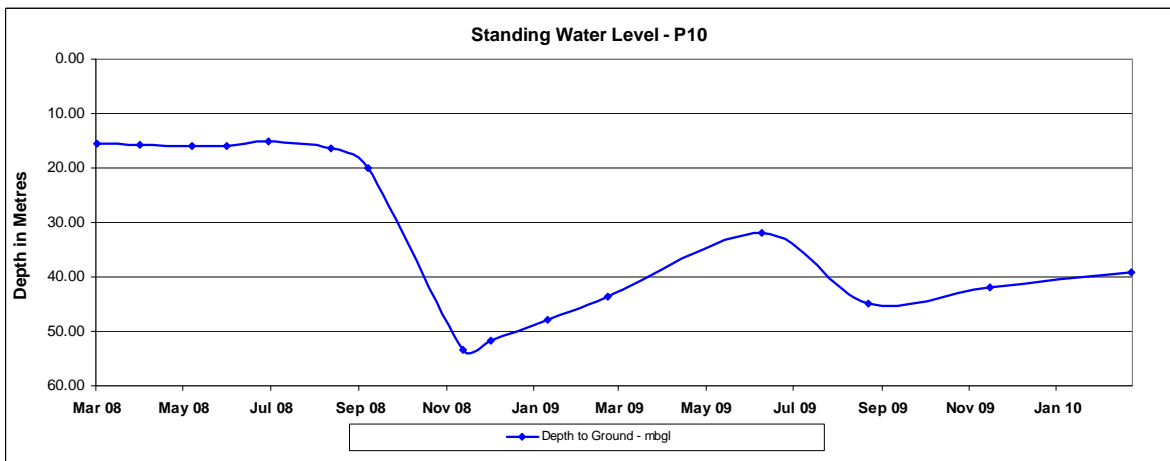
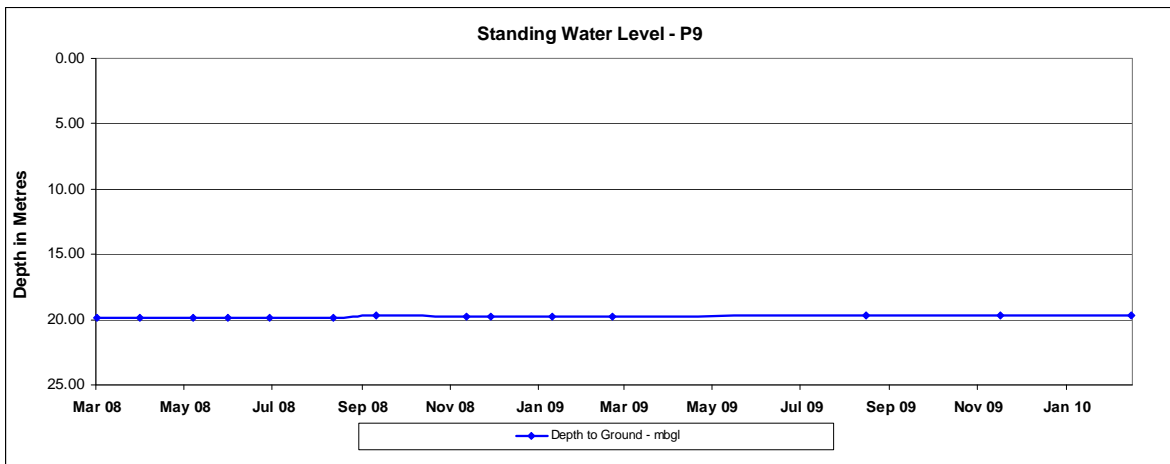
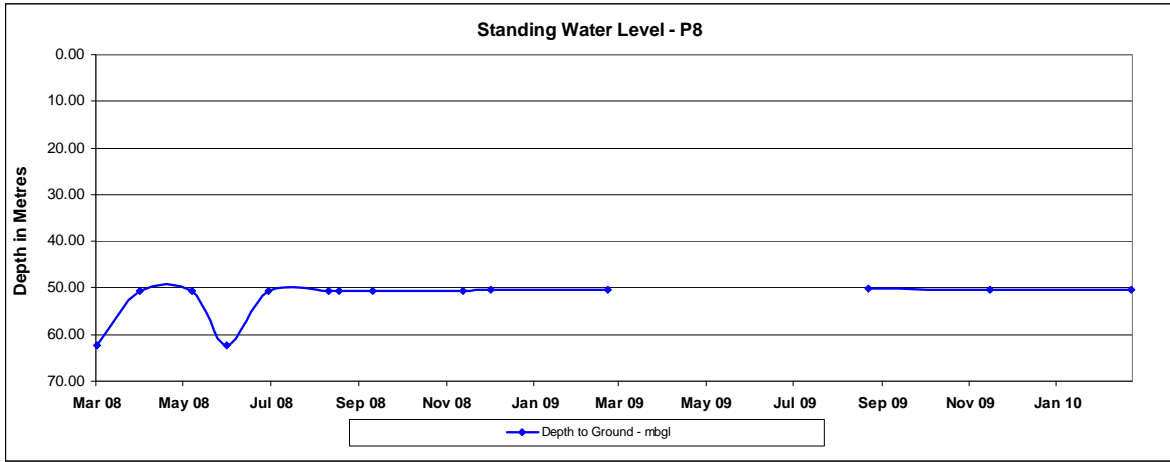


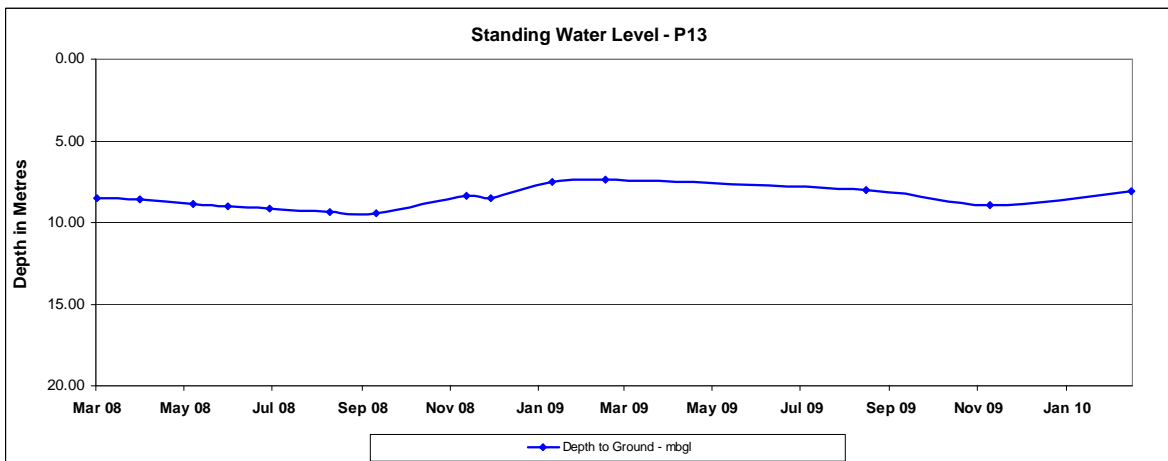
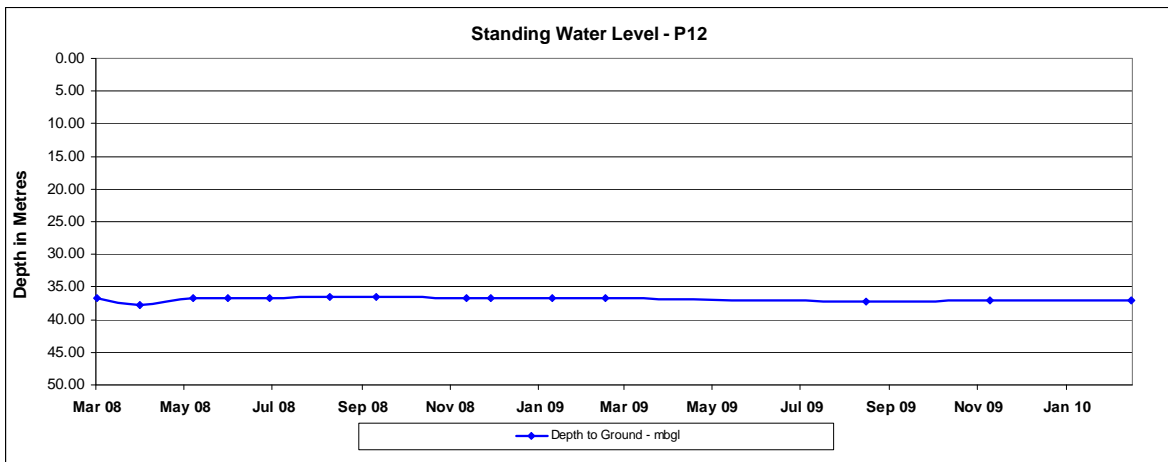
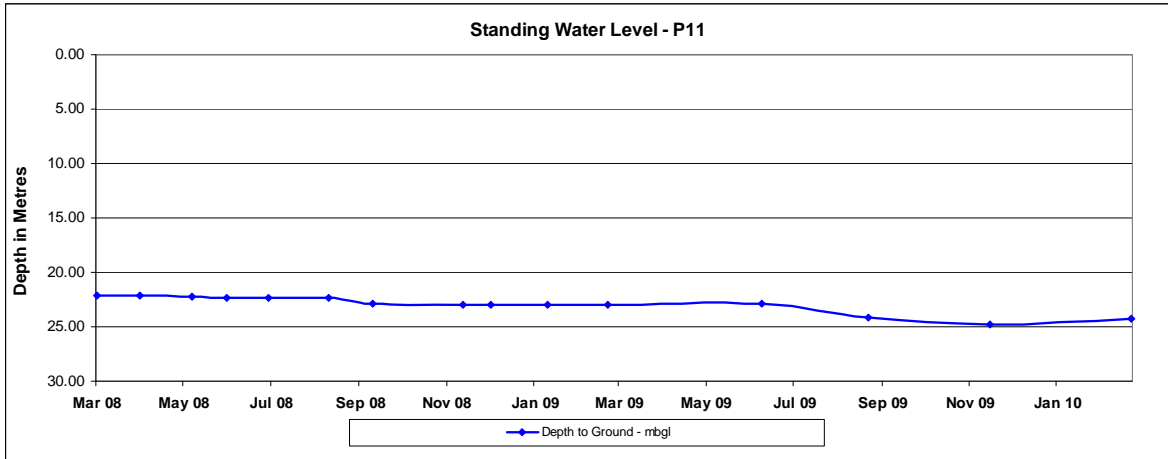


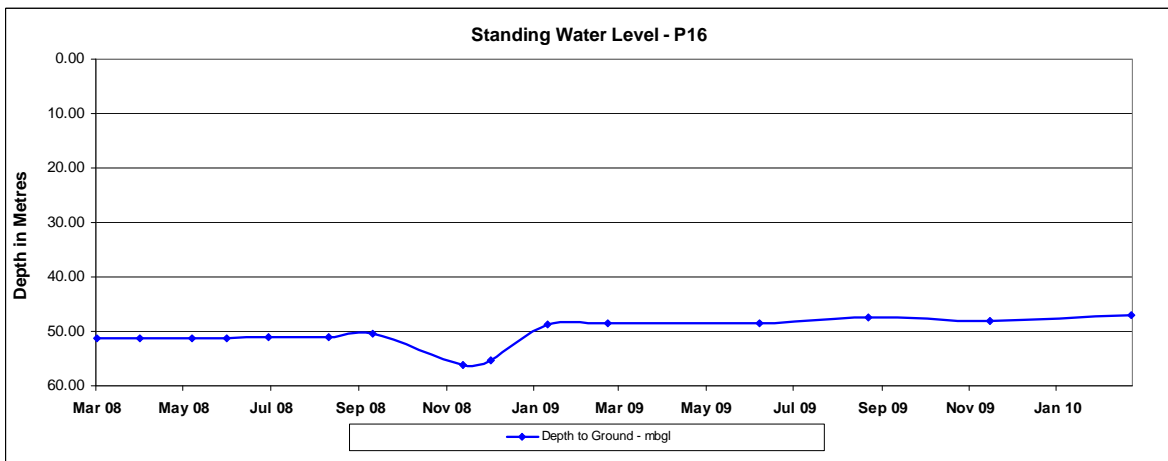
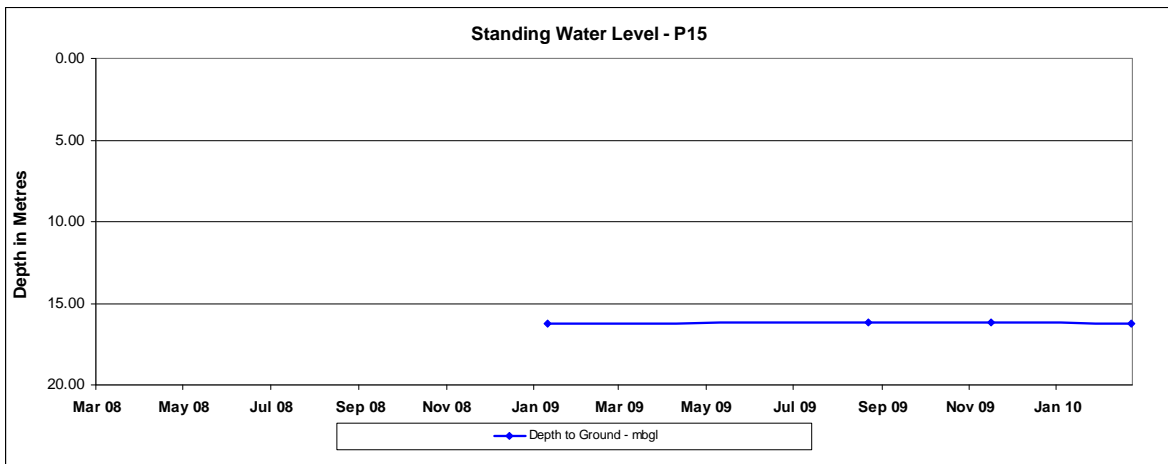
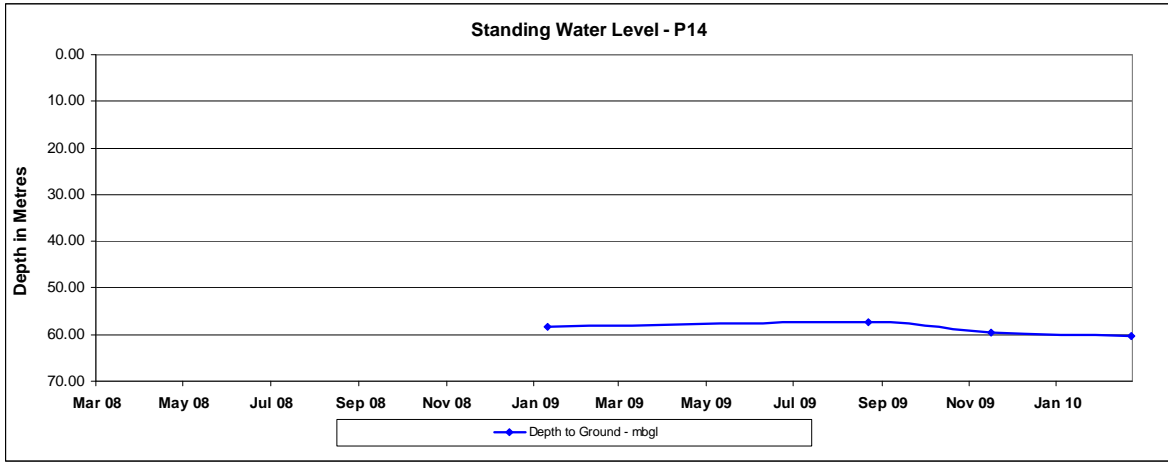
* P6 dry – Aug 09 and Nov 09

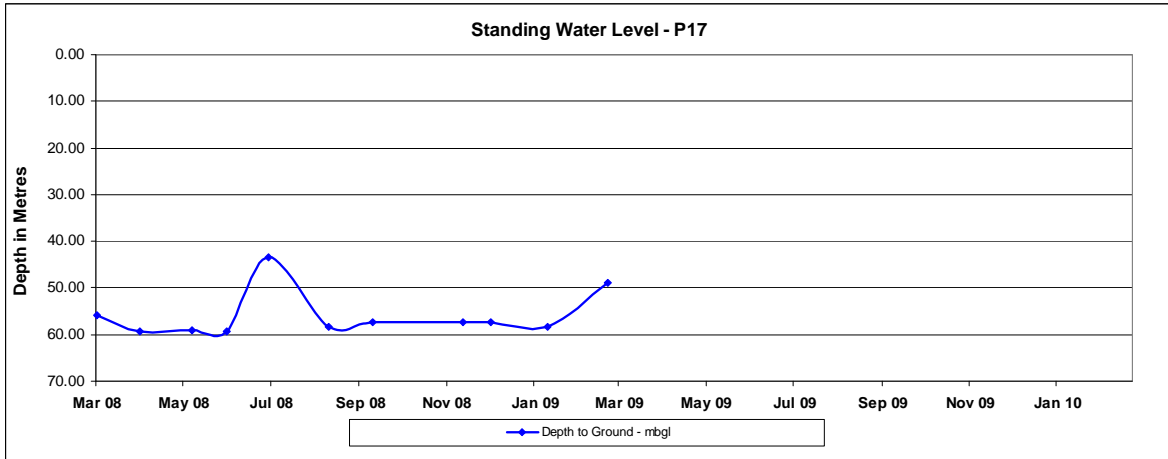


* P7 dry – June 09

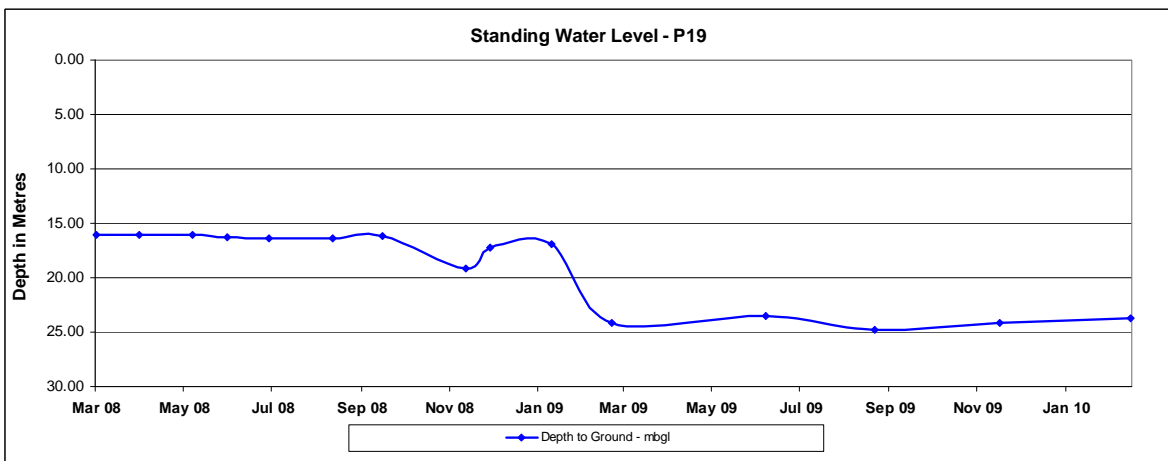
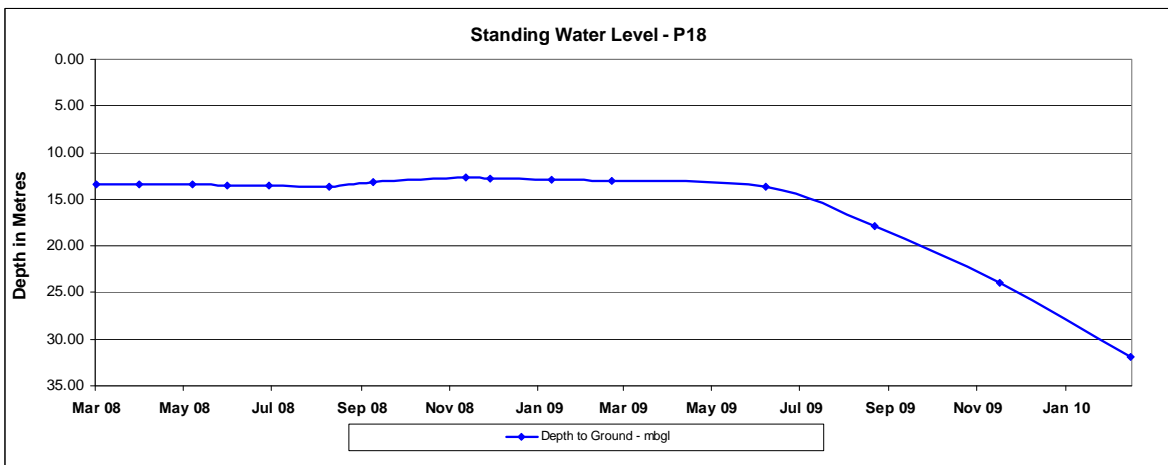


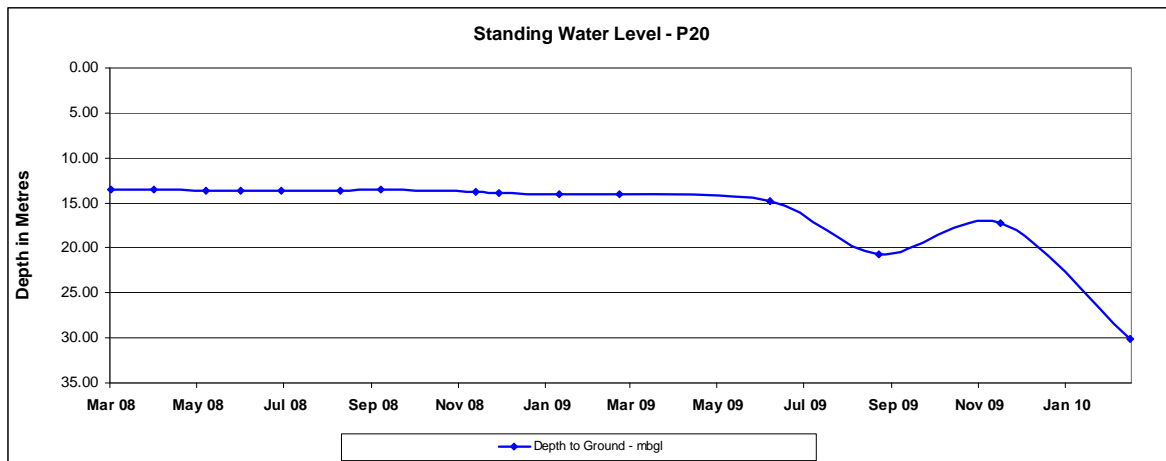






* P17 dry – June 09, Aug 09, Nov 09 and Feb 10





In general, groundwater levels have remained relatively constant since the last meeting with the exception of P18 and P20. These piezometers are located approximately 1.5km north-east of the surface facilities and the drop in SWL is likely associated with water extraction from the coal seam.

Surface Water Monitoring

One wet weather discharge occurred in January 2010 after significant rainfall. The discharge water was sampled and analysis confirmed compliance with the EPL concentration criteria.

Complaints

No complaints have been lodged on the complaints line since the previous meeting. A complaint was lodged directly with the Project Manager, Ben Bomford, who advised the Environmental Manager. Details of the complaint and follow up action are as follows:

9th February 2010

Complainant noted that a screeching noise was coming from mine site between 6am and 7am.

The complainant was advised that the matter would be investigated to identify the noise sources. Subsequent discussions between staff identified that no surface activities (including drilling) were being conducted at the time to be creating such a noise.

Rehabilitation

Additional rehabilitation works since the previous meeting have comprised planting of tubestock in and around the bund to improve the visual aspect from the southern side of the site.