

October 2018

## Dartbrook Mine Environmental Protection Licence Monitoring Data

AQC Dartbrook Management Pty Limited (AQC) is the owner of the Dartbrook Mine, located in the Upper Hunter Valley of New South Wales. AQC is a wholly owned subsidiary of Australian Pacific Coal Limited.

AQC is the holder of Environmental Protection Licence (EPL) 4885, which outlines environmental management and monitoring requirements for Dartbrook Mine. The key licence details for EPL 4885 are presented in **Table 1**. Further information regarding EPL 4885 can be obtained from the public register for the *Protection of the Environment Operations Act 1997*:

<https://app.epa.nsw.gov.au/prpoeoapp/>

**Table 1 Licence Details**

<b>Licence Number</b>	EPL 4885
<b>Licence Holder</b>	AQC Dartbrook Management Pty Ltd
<b>Premises</b>	Dartbrook Mine Stair Street Muswellbrook NSW 2333
<b>Discharge/monitoring point</b>	Point 2 – Hunter River Salinity Trading Scheme (HRSTS) discharge point Point 3 – Groundwater monitoring Point 4 – HRSTS discharge monitoring point Point 5 – Effluent irrigation area

EPL 4885 identifies three monitoring points, as detailed in **Table 2**. Monitoring of soil quality at the effluent irrigation area (EPL Point 5) is not required during care and maintenance.

**Table 2 Monitoring Points**

Point ID	Description	Monitoring Frequency	Monitoring Parameter	Limit
3	Groundwater monitoring	Quarterly	Depth	N/A
			pH	N/A
			Salinity	N/A
4	Hunter River Salinity Trading Scheme (HRSTS) discharge point	During discharge	Conductivity	N/A
			pH	6.5 – 9.5
			Total suspended solids	120 mg/L

Point ID	Description	Monitoring Frequency	Monitoring Parameter	Limit
5*	Effluent irrigation area	Yearly	Available phosphorus	N/A
			Total phosphorus	N/A
			Conductivity	N/A
			Exchangeable sodium	N/A
			Nitrate	N/A
			Total Nitrogen	N/A
			pH	N/A

*\* Not required to be monitored during care and maintenance.*

**Appendix A** presents the monitoring data collected in accordance with EPL 4885. There were no water discharges during the reporting period and as such, no monitoring was required at EPL Point 4.

***Appendix A***  
***Monitoring Data***

Sample Location	Sample Date	NO SAMPLE / Comment	Depth to Water - metres	pH - field	Electrical Conductivity µS/cm - field
ADN1	19-Oct-18		7.4	7.02	2780
Athlone	25-Oct-18		7.92	6.96	11020
BEL1	25-Oct-18		4.62	7.86	9650
Belgrave	25-Oct-18	Locked Gate			
BIR2	02-Nov-18		6.91	8.28	943
BRA2	02-Nov-18		10.36	6.85	2690
BRO3	02-Nov-18	Too low to sample	5.5		
CAD2	01-Nov-18		12.84	6.1	5900
CAS1	25-Oct-18		12.64	7.63	9080
CAS2	01-Nov-18		42.43	6.93	12920
CAS3		Dry			
CAS4	01-Nov-18		28.33	6.92	10540
Casey	25-Oct-18		10.32	7.27	1263
COR2	01-Nov-18		5.46	7.19	1395
COR3	01-Nov-18		7.11	8.13	1830
DAN2	02-Nov-18		7.03	7	1787
DAY1	02-Nov-18	Orange plume	9.95	7.51	1390
DDH124	24-Oct-18	Too low to sample	14.7		
DDH183	25-Oct-18		28.88	7.01	7180
DDH186a	25-Oct-18	Locked Gate			
DDH186b	25-Oct-18	Locked Gate			
DDH186c	25-Oct-18	Locked Gate			
DDH193	01-Nov-18		42.25	6.82	6430
DDH212a	01-Nov-18		27.53	8.07	3630
DDH212b	01-Nov-18		27.44	8.17	3610
DDH212c	01-Nov-18		27.34	8.2	3700
DDH242	03-Oct-18	Too low to sample	20.34		
DDH243	03-Oct-18	Too low to sample - Mud	17.26		
DDH244R	03-Oct-18	Too low to sample - Mud	21.95		
DDH245	03-Oct-18	Too low to sample - Mud	22.31		
DDH306a	02-Nov-18		19.01	8.25	1508
DDH306b	02-Nov-18	Eggy odour	24.78	7.8	13000
DDH306c	02-Nov-18		22.11	7.46	6570
DDH74	02-Nov-18		12.38	7.81	5270
DUC1	25-Oct-18	No access			
DUCN	24-Oct-18	Slight odour	12.32	7.04	3650
DUCW	25-Oct-18	No access			
ESP2	09-Oct-18	Too low to sample	13.14		
FRA1	09-Oct-18		12.37	7.29	4760
GAR2	03-Oct-18		9.6	7.06	648
GAR3	03-Oct-18		10.59	7.18	1061
GAR4	09-Oct-18		9.02	7.21	2004
GOO1	01-Nov-18		41.06	7.24	1476
GOO2	01-Nov-18	Not pinned	16.72	6.95	3540
GWO32889		Old windmill - blocked			
GWO38412	01-Nov-18		5.9	6.82	3600
GWO38582	25-Oct-18		7.4	7.63	6310
HAL1	02-Nov-18		9.41	7.37	735
JLON1	25-Oct-18		12.6	9.2	2021
JOR1	19-Oct-18		11.06	7.28	2077
JS & NM Lonergan	25-Oct-18		11.53	7.22	2058
KAI1	10-Oct-18		11.41	7.21	477
KAI2	03-Oct-18		10.63	7.26	459
KAI3	09-Oct-18		8.93	7.29	590

Kayuga 1	25-Oct-18		13.15	7	7630
OBR1	09-Oct-18		9.66	7.56	554
RDH266	24-Oct-18	Dry	34		
RDH271	24-Oct-18		82.7	7.56	5450
RDH208	02-Nov-18	Did not find			
RDH289	24-Oct-18	Bailer not going down more than 10m	42.62		
RDH421	01-Nov-18	Unable to bail - may be blocked	134.3		
RDH505	19-Oct-18		6.54	7.4	10040
RDH506		Discontinued			
RDH507		Discontinued			
RDH508	19-Oct-18		10.71	7.29	7980
RDH508a	19-Oct-18		18.08	7.05	7780
RDH509	03-Oct-18		10.73	7.19	5910
RDH509a	03-Oct-18	Too low to sample	15.08		
RDH510	03-Oct-18		11.19	7.04	8950
RDH510a	03-Oct-18		11.09	7.14	9600
RDH511	03-Oct-18		8.47	7.99	5500
RDH511a	03-Oct-18		8.48	7.4	6910
RDH534a	24-Oct-18	Too low to sample - Mud	2.2		
RDH534b	24-Oct-18	Slight odour	38.04	7.46	5610
RDH534c	24-Oct-18	Slight eggy odour	14.41	7.07	5630
RDH535a	19-Oct-18		61.04	6.71	10860
RDH535b	19-Oct-18		45.86	6.93	13130
RDH535c	19-Oct-18		17.78	6.84	13610
RDH536a	02-Nov-18	Pinned incorrectly	17.58	6.72	6290
RDH536b	02-Nov-18	Eggy odour	17.82	7.11	6010
RDH536c	02-Nov-18		22.86	7.78	10520
RDH537a	19-Oct-18		14.91	7.32	9570
RDH537b	19-Oct-18	Eggy odour	11.15	7.5	3760
RDH537c	19-Oct-18	Eggy odour	31.62	7.16	11460
RDH538a	19-Oct-18	Slight odour	18.36	6.81	10470
RDH538b	19-Oct-18	Dry	41.24		
RDH538c	19-Oct-18	Slight odour	47.1	7.18	15610
RDH539a	19-Oct-18	Eggy odour	13.91	7.41	2455
RDH539b	19-Oct-18	Eggy odour	13.79	7.31	4810
RDH539c	19-Oct-18	Eggy odour	13.93	7.93	2950
RDH564		No access			
RDH76A	01-Nov-18		1.5	8.06	5600
RIV1	10-Oct-18		11.11	7.63	954
Smith		To be completed			
TEE4	02-Nov-18		9.23	7.21	1378
TLON1	01-Nov-18		11.52	7.12	4240
WAL2	10-Oct-18		9.92	7.18	1936
WM1a		To be completed			
WM1P		Access denied			
WM1Pa		Access denied			
WM3	01-Nov-18	Tree roots	7.98	6.77	2520
WPWatt	25-Oct-18	Bore Collapsed			