

April 2020

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

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

EPL 4885 identifies three discharge/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 Discharge/monitoring Points

Point ID	Description	Monitoring Frequency	Monitoring Parameter	Limit
3	Groundwater monitoring	Quarterly	Depth	N/A
			pH	N/A
			Salinity	N/A
4	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 $\mu\text{S/cm}$ - field
ADN1	01-Apr-20		7.23	7.18	2990
Athlone	03-Apr-20		8.43	6.80	11190
BEL1	03-Apr-20		7.12	7.21	3060
Belgrave		No access			
BIR2	01-Apr-20	Dead animal smell	7.50	9.17	737
BRA2	31-Mar-20		10.60	7.61	2950
BRO3	01-Apr-20	Dry/Moist	5.97		
CAD2	31-Mar-20	Too low to sample	13.27		
CAS1	03-Apr-20		13.31	7.31	8890
CAS2	03-Apr-20		43.02	6.77	15560
CAS3		Dry			
CAS4	03-Apr-20		27.34	6.75	12050
Casey	30-Mar-20		10.43	7.54	1335
COR2		Denied access to bore this month			
COR3		Denied access to bore this month			
DAN2	31-Mar-20		7.47	8.32	2028
DAY1	01-Apr-20		7.95	7.87	954
DDH124	01-Apr-20	Very low. 2nd test only just - TLTS	14.59	7.41	609
DDH183	03-Apr-20		29.50	6.85	8220
DDH186a		No access			
DDH186b		No access			
DDH186c		No access			
DDH193	08-Apr-20		42.29	6.88	8070
DDH212a	08-Apr-20		27.57	8.09	4720
DDH212b	08-Apr-20		27.48	8.24	4680
DDH212c	08-Apr-20	Blocked, smell of something dead			
DDH242	08-Apr-20	Dry/Moist	20.38		
DDH243	08-Apr-20	Dry/Moist	17.24		
DDH244R	08-Apr-20	Dry/Moist	21.90		
DDH245	08-Apr-20	Dry/Moist	22.35		
DDH306a	30-Mar-20		20.32	8.90	1731
DDH306b	30-Mar-20		24.57	8.73	1731
DDH306c	30-Mar-20		25.21	7.70	13830
DDH74	31-Mar-20		13.09	7.54	4780
DUC1					
DUCN	03-Apr-20	Unkown odour	11.36	7.07	3560
DUCW					
ESP2	31-Mar-20	Too low to sample	13.18		
FRA1	31-Mar-20		10.60	7.33	496
GAR2	31-Mar-20		9.22	7.06	656
GAR3	31-Mar-20		10.47	6.96	1139
GAR4	31-Mar-20		8.89	7.18	1980
GOO1	30-Mar-20	Dipper got stuck - Checked twice	35.71	7.40	505
GOO2	01-Apr-20		17.33	6.53	3950
GWO32889		Old windmill - Blocked			
GWO38412	30-Mar-20		3.06	6.90	1345
GWO38582	03-Apr-20		8.30	8.25	6960
HAL1	31-Mar-20		8.89	8.08	1072
JLON1	03-Apr-20	Dark yellow - Unknown odour	13.26	9.13	1919
JOR1	30-Mar-20	No access			
JS & NM Lonergan	30-Mar-20		11.65	7.45	2085
KAI1	31-Mar-20		11.30	7.21	446
KAI2	31-Mar-20		10.40	7.08	449

KAI3	31-Mar-20		8.65	7.23	735
Kayuga 1	08-Apr-20		13.53	6.92	8900
OBR1	31-Mar-20		9.39	7.64	576
RDH266	03-Apr-20	Dry	33.63		
RDH271	01-Apr-20		82.82	7.60	5970
RDH280	01-Apr-20	Dry	70.51		
RDH289	03-Apr-20	Dry	42.69		
RDH421	03-Apr-20	Blocked/Dry	134.41		
RDH505	30-Mar-20		7.04	7.27	11270
RDH506		Discontinued			
RDH507		Discontinued			
RDH508	30-Mar-20		10.81	6.97	8680
RDH508a	30-Mar-20		18.07	6.98	8300
RDH509	30-Mar-20		10.39	7.34	1710
RDH509a	30-Mar-20	Too low to sample	14.78		
RDH510	31-Mar-20		10.89	6.99	9780
RDH510a	31-Mar-20		10.80	6.95	10200
RDH511	08-Apr-20	Couldn't locate bore due to long grass			
RDH511a	08-Apr-20	Couldn't locate bore due to long grass			
RDH534a	01-Apr-20	Blocked	2.30		
RDH534b	01-Apr-20		37.98	7.23	5890
RDH534c	01-Apr-20		18.07	6.65	7050
RDH535a	31-Mar-20		61.06	6.91	11700
RDH535b	31-Mar-20		45.29	6.94	14080
RDH535c	31-Mar-20		18.34	6.84	14850
RDH536a	01-Apr-20		18.45	7.07	6570
RDH536b	01-Apr-20	Earthy smell	18.69	7.13	6990
RDH536c	01-Apr-20		22.97	7.51	12370
RDH537a	31-Mar-20		17.90	7.33	10350
RDH537b	31-Mar-20		11.33	7.44	4110
RDH537c	31-Mar-20		34.96	7.23	12490
RDH538a	31-Mar-20		18.30	7.12	11540
RDH538b	31-Mar-20	Dry	41.26		
RDH538c	31-Mar-20		47.04	7.31	16360
RDH539a	31-Mar-20		13.80	6.82	4670
RDH539b	31-Mar-20	Milky - Low	12.41	7.00	5870
RDH539c	31-Mar-20		23.66	8.02	3210
RDH564		No access			
RDH76A	03-Apr-20		5	7.75	6170
RIV1	31-Mar-20		11.36	7.28	966
Smith	30-Mar-20		10.69	7.22	2790
TEE4	01-Apr-20		10.02	7.17	1658
TLON1	30-Mar-20	Too low to sample - Bailer gets stuck	11.77		
WAL2	01-Apr-20		9.78	7.14	2176
WM1a	01-Apr-20		8.40	7.12	1828
WM1P		Access denied			
WM1Pa		Access denied			
WM3	30-Mar-20		7.63	6.72	6890
WPWatt		Bore collapsed			