

January 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 µS/cm - field
ADN1	09-Jan-20		6.79	6.39	3010
Athlone	04-Feb-20		8.62	7.28	10500
BEL1	04-Feb-20	H2S odour present	7.12	7.73	6370
Belgrave		No access			
BIR2	04-Feb-20		7.55	8.94	621
BRA2	05-Feb-20		10.99	6.87	3060
BRO3	31-Jan-20	Dry @ 5.95			
CAD2	09-Jan-20	Too low to sample	13.22		
CAS1	04-Feb-20		13.32	7.84	9090
CAS2	14-Jan-20		43.09	6.86	13850
CAS3		Dry			
CAS4	04-Feb-20	Black in colour	27.42	7.26	11100
Casey	15-Jan-20		10.37	7.38	1209
COR2	09-Jan-20		5.27	7.55	1606
COR3	09-Jan-20		6.84	7.72	2172
DAN2	05-Feb-20		7.62	7.17	1895
DAY1	04-Feb-20		11.09	8.04	1486
DDH124	05-Feb-20	Too low to sample	14.58		
DDH183	04-Feb-20		29.47	7.37	7410
DDH186a		No access			
DDH186b		No access			
DDH186c		No access			
DDH193	13-Jan-20		42.42	6.8	7170
DDH212a	16-Jan-20		27.56	8.18	4500
DDH212b	16-Jan-20		27.47	8.1	4330
DDH212c	16-Jan-20		27.38	8.12	4360
DDH242	31-Jan-20	Dry @ 20.43 - Moist	20.43		
DDH243	31-Jan-20	Dry @ 17.20 - Moist	17.2		
DDH244R	31-Jan-20	Dry @ 21.94 - Moist	21.94		
DDH245	31-Jan-20	Dry @ 22.34	22.34		
DDH306a	31-Jan-20		20.16	8.31	1715
DDH306b	31-Jan-20		24.41	7.63	7260
DDH306c	31-Jan-20		25.17	7.79	1440
DDH74	04-Feb-20		13.19	7.68	5010
DUC1		No access			
DUCN	14-Jan-20		11.69	7.46	3350
DUCW		No access			
ESP2	31-Jan-20	Dry @ 13.25 - Moist	13.25		
FRA1	07-Jan-20		10.55	7.64	526
GAR2	07-Jan-20		9.21	7.7	672
GAR3	07-Jan-20		10.41	7.48	1101
GAR4	07-Jan-20		8.84	7.46	2389
GOO1	09-Jan-20		41.38	7.48	1725
GOO2	09-Jan-20		17.29	7.42	4190
GWO32889		Old windmill- Blocked			
GWO38412	14-Jan-20		5.99	6.47	2764
GWO38582	04-Feb-20	H2S odour present	8.53	8.6	6500
HAL1	04-Feb-20		9.08	7.76	813.5
JLON1	05-Feb-20	H2S odour present	13.32	8.29	4110

JOR1	05-Feb-20	No access - No entry sign posted			
JS & NM Lonergan	15-Jan-20		11.56	7.39	1980
KAI1	15-Jan-20		11.28	6.46	419
KAI2	07-Jan-20		10.4	7.94	473
KAI3	09-Jan-20		8.64	7.67	808
Kayuga 1	04-Feb-20	Tree roots	13.53	7.13	8000
OBR1	07-Jan-20		9.35	7.98	522
RDH266	31-Jan-20	Dry @ 33.62	33.62		
RDH271	04-Feb-20	Lab to filter	82.78	7.89	6000
RDH280	31-Jan-20	Dry @ 70.38	70.38		
RDH289	05-Feb-20	Blocked @ 42.67	42.67		
RDH421	31-Jan-20	Blocked @ 134.35	134.35		
RDH505	15-Jan-20		7.21	7.43	10100
RDH506		Discontinued			
RDH507		Discontinued			
RDH508	08-Jan-20		10.82	7.07	9660
RDH508a	08-Jan-20		18.1	7.12	9230
RDH509	08-Jan-20		10.48	7.52	4860
RDH509a	08-Jan-20	Too low to sample	14.85		
RDH510	08-Jan-20		11.01	7.29	1089
RDH510a	08-Jan-20		10.92	7.31	11080
RDH511	08-Jan-20		8.39	7.78	2062
RDH511a	08-Jan-20		8.37	7.64	2396
RDH534a	15-Jan-20	Blocked			
RDH534b	15-Jan-20		37.97	7.33	5890
RDH534c	15-Jan-20	H2S odour present	17.6	7.1	5970
RDH535a	09-Jan-20		61.04	6.74	12570
RDH535b	09-Jan-20		45.09	6.82	15140
RDH535c	09-Jan-20		18.09	6.84	16000
RDH536a	04-Feb-20		18.34	7.25	6750
RDH536b	04-Feb-20	H2S odour present	18.64	7.62	6750
RDH536c	04-Feb-20		21.74	8.25	12000
RDH537a	09-Jan-20	Lab to filter	17.38	7.27	11060
RDH537b	09-Jan-20	Lab to filter	11.33	7.4	4400
RDH537c	09-Jan-20		34.32	7.29	13070
RDH538a	09-Jan-20		18.29	7.12	13280
RDH538b	09-Jan-20	Dry (Too low to sample)			
RDH538c	09-Jan-20	Bubble in purple bottle	47.05	7.15	17480
RDH539a	31-Jan-20		13.82	7.26	3840
RDH539b	31-Jan-20	Too low to sample	14.68		
RDH539c	31-Jan-20		20.55	8.54	3160
RDH564		No access			
RDH76A	14-Jan-20		4.58	7.7	6230
RIV1	31-Jan-20		11.22	7.42	1057
Smith	04-Feb-20		9.48	7.2	2690
TEE4	04-Feb-20	Lab to filter	10.11	7.31	1482
TLON1	14-Jan-20	Too low to sample	11.45		
WAL2	15-Jan-20		9.72	7.39	1956
WM1a	31-Jan-20		8.5	7.41	2170
WM1P		Access denied			
WM1Pa		Access denied			
WM3	09-Jan-20	Ran out of water	8.22	7.08	4840
WPWatt		Bore collapsed			