

October 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	9/10/2020		6.65	7.17	3450
Athlone	6/11/2020		7.71	6.84	10720
BEL1	6/11/2020		5.62	6.85	3120
Belgrave		No access			
BIR2	10/11/2020		7.16	9.38	912
BRA2	10/11/2020		9.67	6.95	3580
BRO3	10/11/2020	Mud	5.76		
CAD2	10/11/2020	Rusty and old	12.21	6.66	4600
CAS1	6/11/2020	H2S odour	13.22	7.60	10460
CAS2	6/11/2020		42.51	6.73	16720
CAS3		Dry			
CAS4	6/11/2020		27.30	6.79	13030
Casey	15/10/2020		10.41	7.27	1466
COR2	10/11/2020		2.68	7.55	3000
COR3	10/11/2020		3.50	7.91	2370
DAN2	9/11/2020		6.73	6.96	2575
DAY1	10/11/2020		13.36	7.38	1203
DDH124	22/10/2020				
DDH183	6/11/2020	H2S odour	28.63	6.84	8560
DDH186a		No access			
DDH186b		No access			
DDH186c		No access			
DDH193	9/11/2020		42.04	6.85	8170
DDH212a	9/11/2020		27.60	8.05	4680
DDH212b	9/11/2020		27.49	8.22	4780
DDH212c	9/11/2020		27.40	8.13	4810
DDH242	14/10/2020	Dry	20.38		
DDH243	14/10/2020	Dry	17.22		
DDH244R	14/10/2020	Dry	21.91		
DDH245	14/10/2020	Dry	22.36		
DDH306a	19/10/2020		20.55	8.60	2207
DDH306b	19/10/2020		23.30	7.75	8370
DDH306c	19/10/2020	Slight H2S odour	24.75	7.68	16930
DDH74	9/11/2020	H2S odour	12.50	7.29	5390
DUC1		No access			
DUCN	20/10/2020		9.42	7.16	3610
DUCW		No access			
ESP2	8/10/2020	Too low to sample. Dry after rinse bail.	12.98		
FRA1	8/10/2020		10.50	7.14	875
GAR2	14/10/2020		9.16	7.27	725
GAR3	14/10/2020		10.62	7.08	1254
GAR4	14/10/2020		8.80	7.32	2431
GOO1	10/11/2020	Rusty and old	41.90	7.37	1999
GOO2	10/11/2020		17.31	7.07	4280
GWO32889		Old Windmill - Blocked			
GWO38412	6/11/2020		2.25	7.07	964
GWO38582	6/11/2020		7.22	7.46	7180
HAL1	10/11/2020		7.35	7.19	1238
JLON1	15/10/2020		13.52	7.47	3700
JOR1		No access			
JS & NM Lonergan	15/10/2020		11.59	7.06	2402
KAI1	9/10/2020		11.30	7.09	540
KAI2	14/10/2020		10.38	7.13	478
KAI3	14/10/2020		8.54	7.08	1037

Kayuga 1	6/11/2020	Tree roots	12.81	3.93	9420
OBR1	14/10/2020		9.27	7.87	804
RDH266	10/11/2020	Dry			
RDH271	22/10/2020		82.82	7.30	7100
RDH280	10/11/2020	Dry			
RDH289	22/10/2020	Dry			
RDH421	10/11/2020	Dry			
RDH505	16/10/2020		6.28	7.25	12660
RDH506		Discontinued			
RDH507		Discontinued			
RDH508	8/10/2020	Bores run over, unable to sample			
RDH508a	8/10/2020	Bores run over, unable to sample			
RDH509	8/10/2020		10.24	7.27	3790
RDH509a	8/10/2020		14.65		
RDH510	8/10/2020		10.26	7.04	10100
RDH510a	8/10/2020		10.16	7.10	10500
RDH511	9/10/2020		8.25	7.41	2182
RDH511a	9/10/2020		8.25	7.18	4050
RDH534a	16/10/2020	Blocked	1.28		
RDH534b	16/10/2020		37.62	7.15	6710
RDH534c	16/10/2020		18.89	6.66	8090
RDH535a	16/10/2020	H2S odour	61.85	6.68	13720
RDH535b	16/10/2020		45.93	6.82	16350
RDH535c	16/10/2020		17.88	6.74	18130
RDH536a	16/10/2020		18.32	6.72	7590
RDH536b	16/10/2020		18.69	6.99	8480
RDH536c	16/10/2020		22.92	7.72	14640
RDH537a	16/10/2020		17.99	7.16	11830
RDH537b	16/10/2020		10.76	7.39	4610
RDH537c	16/10/2020		35.21	7.11	15210
RDH538a	22/10/2020	H2S odour	18.19	6.84	14290
RDH538b	22/10/2020	Dry	41.24		
RDH538c	22/10/2020	H2S odour	46.89	7.10	19780
RDH539a	16/10/2020		13.82	7.02	5970
RDH539b	16/10/2020		13.74	7.13	7330
RDH539c	16/10/2020		23.54	8.00	3880
RDH564		No access			
RDH76A	9/11/2020		6.45	7.61	6910
RIV1	19/10/2020		11.22	7.67	1215
Smith	8/10/2020		10.57	7.16	3058
TEE4	10/11/2020		8.93	7.43	1627
TLON1	6/11/2020	Too low to sample	11.20		
WAL2	9/10/2020		9.72	7.05	2595
WM1a	19/10/2020		7.89	7.45	2303
WM1P		Access denied			
WM1Pa		Access denied			
WM3	10/11/2020	H2S odour	6.81	6.74	4780
WPWatt		Bore collapsed			