

January 2021

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	06-Jan-21		6.23	6.96	3360
Athlone	22-Jan-21		7.72	6.86	10460
BEL1	22-Jan-21		5.54	6.83	3440
Belgrave	22-Jan-21	No access			
BIR2	21-Jan-21		7.11	8.6	1248
BRA2	21-Jan-21		9.09	7.03	4110
BRO3	21-Jan-21	Mud @ 5.76m			
CAD2	15-Jan-21		12.07	6.52	4500
CAS1	22-Jan-21		13.18	7.1	9370
CAS2	22-Jan-21		41.56	6.58	16170
CAS3		Dry			
CAS4	27-Jan-21		27.28	6.61	12440
Casey	14-Jan-21		10.31	7.11	1432
COR2	15-Jan-21	No access - key wouldn't open lock			
COR3	15-Jan-21	No access - key wouldn't open lock			
DAN2	21-Jan-21		6.32	7.01	2905
DAY1	15-Jan-21		6.85	7.14	1334
DDH124	27-Jan-21	Too low to sample	14.39		
DDH183	22-Jan-21		28.26	6.74	8050
DDH186a	22-Jan-21	No access			
DDH186b	22-Jan-21	No access			
DDH186c	22-Jan-21	No access			
DDH193	27-Jan-21	No access - locked gates			
DDH212a	27-Jan-21	No access - locked gates			
DDH212b	27-Jan-21	No access - locked gates			
DDH212c	27-Jan-21	No access - locked gates			
DDH242	14-Jan-21	Dry @ 20.38m			
DDH243	14-Jan-21	Dry @ 17.25m			
DDH244R	14-Jan-21	Dry @ 21.9m			
DDH245	14-Jan-21	Dry @ 22.35m			
DDH306a	27-Jan-21		20.63	8.05	1948
DDH306b	27-Jan-21	Frothy in purple and red containers	22.65	7.61	7680
DDH306c	27-Jan-21	Frothy in purple and red containers	84.4	7.45	15050
DDH74	21-Jan-21		12.38	7.55	5350
DUC1		No access			
DUCN	14-Jan-21		9.84	7.3	3440
DUCW		No access			
ESP2	27-Jan-21	Dry			
FRA1	28-Jan-21		10.43	6.88	1002
GAR2	28-Jan-21		9.17	6.94	636
GAR3	28-Jan-21		10.33	6.87	1211
GAR4	29-Jan-21		8.7	7.05	2304
GOO1	15-Jan-21		27.67	7.15	1926
GOO2	15-Jan-21		17.24	7.13	4330
GWO38412	27-Jan-21		2.94	6.78	1058
GWO38582	22-Jan-21	Frothy in red container	7.28	7.84	6150
HAL1	21-Jan-21		6.29	7.21	1111
JLON1	22-Jan-21		13.61	8.42	1979
JOR1	22-Jan-21	No access			
JS & NM Lonergan	14-Jan-21		11.51	7.22	2159
KAI1	28-Jan-21		11.18	7.05	556
KAI2	28-Jan-21		10.3	6.95	508
KAI3	29-Jan-21		8.5	6.96	991

Kayuga 1	22-Jan-21		12.99	6.74	9250
OBR1	29-Jan-21		9.23	7.31	799
RDH266	27-Jan-21	Dry			
RDH271	27-Jan-21	Frothy in purple and red containers	82.78	7.28	6010
RDH280	27-Jan-21	Dry			
RDH289	27-Jan-21	Dry			
RDH421	27-Jan-21	Dry			
RDH505	14-Jan-21	Lots of ants	5.83	7.28	12220
RDH506		Discontinued			
RDH507		Discontinued			
RDH508	27-Jan-21	Bores run over - unable to sample			
RDH508a	27-Jan-21	Bores run over - unable to sample			
RDH509	03-Feb-21		10.26	7.42	1642
RDH509a	03-Feb-21	Dry @15.23m			
RDH510	29-Jan-21		10.21	6.74	9660
RDH510a	29-Jan-21		10.1	6.94	10250
RDH511	25-Jan-21	Could not find - grass too long			
RDH511a	25-Jan-21	Could not find - grass too long			
RDH534a	27-Jan-21	Bore blocked	1.28		
RDH534b	27-Jan-21		37.55	7.1	5450
RDH534c	27-Jan-21		19.49	6.86	6190
RDH535a	03-Feb-21		60.98	6.92	13100
RDH535b	03-Feb-21		45.67	7.12	15900
RDH535c	03-Feb-21		18.06	7.07	18100
RDH536a	21-Jan-21	Slight odour	18.14	6.82	7750
RDH536b	21-Jan-21		18.52	7.2	8540
RDH536c	21-Jan-21	Frothy in purple and red containers	22.94	7.1	14520
RDH537a	03-Feb-21		17.36	7.41	11800
RDH537b	03-Feb-21		10.49	7.61	8450
RDH537c	03-Feb-21		34.62	7.32	14100
RDH538a	03-Feb-21		18.18	7.22	14100
RDH538b	03-Feb-21	Dry @ 41.24m			
RDH538c	03-Feb-21	Dipper gets stuck in bore - cannot get depth/sample			
RDH539a	28-Jan-21		13.59	7.04	5800
RDH539b	28-Jan-21		13.62	7.05	7110
RDH539c	28-Jan-21		23.37	7.81	3780
RDH564		No access			
RDH76A	22-Jan-21		6.76	7.46	6220
RIV1	28-Jan-21		11.06	7.18	1181
Smith	25-Jan-21		10.11	6.94	2211
TEE4	21-Jan-21		7.95	7.18	1768
TLON1	27-Jan-21	Too low to sample	11.2		
WAL2	28-Jan-21		9.53	7.06	2467
WM1a	27-Jan-21		7.43	7.07	2448
WM3	15-Jan-21		6.84	6.81	3780