

July 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	07-Jul-20		6.93	7.40	2810
Athlone	13-Jul-20		8.23	6.88	10740
BEL1	13-Jul-20	Tree roots	7.31	7.32	2506
Belgrave	13-Jul-20	No access			
BIR2	01-Jul-20		7.37	8.85	1273
BRA2	03-Jul-20	Well depth may differ	10.55	6.97	3660
BRO3	01-Jul-20		6.78		
CAD2	22-Jul-20		10.75	6.65	5210
CAS1	13-Jul-20		13.25	7.32	9940
CAS2	17-Jul-20		42.94	6.65	12010
CAS3		Dry			
CAS4	17-Jul-20		27.36	6.62	11590
Casey	13-Jul-20		10.42	7.10	1463
COR2	22-Jul-20		3.98	8.09	977
COR3	22-Jul-20		5.09	7.86	1598
DAN2	22-Jul-20		7.17	7.01	2023
DAY1	22-Jul-20		7.73	7.34	1080
DDH124	07-Jul-20	Too low to sample			
DDH183	13-Jul-20		29.40	6.96	8070
DDH186a	17-Jul-20	No access - Locked gate			
DDH186b	17-Jul-20	No access - Locked gate			
DDH186c	17-Jul-20	No access - Locked gate			
DDH193	03-Jul-20		42.18	6.82	8400
DDH212a	03-Jul-20		27.64	8.03	4580
DDH212b	03-Jul-20		27.51	8.12	454
DDH212c	03-Jul-20	Blocked	7.31		
DDH242	01-Jul-20	Moist	20.35		
DDH243	01-Jul-20	Moist	17.25		
DDH244R	01-Jul-20	Moist	21.91		
DDH245	01-Jul-20	Moist	22.35		
DDH306a	03-Jul-20		20.45	8.42	2078
DDH306b	03-Jul-20		24.15	7.52	8110
DDH306c	03-Jul-20		25.05	7.63	16680
DDH74	03-Jul-20		13.02	7.31	5600
DUC1		No access			
DUCN	07-Jul-20		9.69	7.05	3010
DUCW		No access			
ESP2	01-Jul-20	Too low to sample	13.06		
FRA1	01-Jul-20		10.50	6.89	589
GAR2	01-Jul-20		9.16	6.95	714
GAR3	01-Jul-20		10.35	6.82	1500
GAR4	01-Jul-20		8.77	7.29	2459
GOO1	22-Jul-20		41.60	7.31	1703
GOO2	22-Jul-20		17.40	7.22	3720
GWO32889					
GWO38412	13-Jul-20		2.76	7.12	1175
GWO38582	13-Jul-20		7.95	8.60	6630
HAL1	03-Jul-20		8.52	7.14	1310
JLON1	13-Jul-20		13.40	7.01	4060
JOR1	01-Jul-20	No access			
JS & NM Lonergan	13-Jul-20		11.60	7.62	2171
KAI1	01-Jul-20		11.23	7.04	511
KAI2	01-Jul-20		10.85	6.98	482

KAI3	01-Jul-20		8.54	7.04	886
Kayuga 1	13-Jul-20	Tree roots	13.39	6.68	8430
OBR1	01-Jul-20		9.28	7.94	612
RDH266	30-Jul-20	Dry @ 33.62			
RDH271	30-Jul-20		82.80	7.41	6690
RDH280	07-Jul-20	Dry			
RDH289	07-Jul-20	Blocked	42.62		
RDH421	30-Jul-20	Dry @ 134.41			
RDH505	01-Jul-20		6.64	7.14	12630
RDH506		Discontinued			
RDH507		Discontinued			
RDH508	01-Jul-20		10.64	6.91	9910
RDH508a	01-Jul-20		18.05	6.91	9750
RDH509	01-Jul-20		10.28	7.11	1840
RDH509a	01-Jul-20	Too low to sample	14.72		
RDH510	01-Jul-20		10.46	6.80	9490
RDH510a	01-Jul-20		10.56	6.96	9940
RDH511	01-Jul-20	Could not find			
RDH511a	01-Jul-20	Could not find			
RDH534a	24-Jul-20	Dry @ 2.3			
RDH534b	24-Jul-20		37.76	7.27	5520
RDH534c	24-Jul-20		18.64	6.69	6450
RDH535a	30-Jul-20	Frothy in purple plastic	61.03	6.80	13080
RDH535b	30-Jul-20		45.83	6.80	15650
RDH535c	30-Jul-20		18.28	6.73	16660
RDH536a	01-Jul-20		18.46	6.76	8130
RDH536b	01-Jul-20		15.72	7.02	8910
RDH536c	01-Jul-20		22.90	7.64	15090
RDH537a	24-Jul-20	Frothy in purple bottle	17.27	7.04	10240
RDH537b	24-Jul-20		11.00	7.28	4040
RDH537c	24-Jul-20	Frothy in purple bottle	34.42	7.40	12140
RDH538a	24-Jul-20		18.33	6.82	11970
RDH538b	24-Jul-20	Moist	41.24		
RDH538c	24-Jul-20	Frothy in purple bottle	46.99	7.29	15930
RDH539a	01-Jul-20		13.70	7.09	4830
RDH539b	01-Jul-20	Too low to get sample	13.73	7.10	7180
RDH539c	01-Jul-20		23.61	7.99	4060
RDH564		No access			
RDH76A	17-Jul-20		5.84	7.65	6350
RIV1	01-Jul-20		11.22	7.62	912
Smith	01-Jul-20		10.76	7	2611
TEE4	22-Jul-20		9.64	7.52	1431
TLON1	03-Jul-20	Grit - too low to sample - oily/diesel smell.	11.73	7.14	4960
WAL2	01-Jul-20		9.54	7.07	1969
WM1a	03-Jul-20		8.10	7.04	2484
WM1P					
WM1Pa					
WM3	22-Jul-20		7.37	6.82	4360
WPWatt		Bore collapsed			