

Dartbrook Mine Environmental Protection Licence Monitoring Data

Dartbrook Operations Pty Limited is the operator of Dartbrook Mine.

Environmental Protection Licence (EPL) 4885 outlines the 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	Dartbrook Operations Pty Ltd
Premises	Dartbrook Mine Stair Street Muswellbrook NSW 2333
Discharge / Monitoring Point	Point 5 – Effluent irrigation area Point 6 – Hunter River Salinity Trading Scheme discharge point Point 7 – Groundwater monitoring

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 until the recommencement of effluent application at the premises.

Table 2 Discharge / Monitoring Points

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
6	Hunter River Salinity Trading Scheme discharge point	During discharge	Conductivity	N/A
			pH	6.5 – 9.5
			Total suspended solids	120 mg/L
7	Groundwater monitoring	Quarterly	Depth	N/A
			pH	N/A
			Salinity	N/A

* Not required to be monitored until the recommencement of effluent application at the premises.

Under EPL 4885, no monitoring was required for the effluent irrigation area or Hunter River Salinity Trading Scheme discharge point this reporting period.

EPL 4885 identifies five air quality monitoring points, as detailed in **Table 3**. Air quality monitoring data is included in **Appendix A**.

Table 3 Air Quality Monitoring Points

Point ID	Description	Monitoring Frequency	Monitoring Parameter	Limit
21, 22, 23, 24 and 25	Air Quality Monitoring	Every 6 days	Particulate matter below 10 micrograms per cubic metre ($\mu\text{g}/\text{m}^3$)	50 $\mu\text{g}/\text{m}^3$ (24-hour Averaging Period)

EPL 4885 identifies ten noise monitoring points, as detailed in **Table 4**. Noise monitoring data is included in **Appendix B**.

Table 4 Noise Monitoring Points

Point ID	Description	Monitoring Frequency	Time Period	Monitoring Parameter	Limit
10, 11, 12, 13, 14 and 19	Noise Monitoring	Monthly	Evening	LAeq (15 minute)	40
			Night	LAeq (15 minute)	35
			Night	LAmx	52
			Day	LAeq (15 minute)	40
15, 16 and 20	Noise Monitoring	Monthly	Evening	LAeq (15 minute)	42
			Night	LAeq (15 minute)	41
			Night	LAmx	52
			Day	LAeq (15 minute)	49
17	Noise Monitoring	Monthly	Evening	LAeq (15 minute)	50
			Night	LAeq (15 minute)	41
			Night	LAmx	52
			Day	LAeq (15 minute)	50
18	Noise Monitoring	Monthly	Evening	LAeq (15 minute)	50
			Night	LAeq (15 minute)	42
			Night	LAmx	52
			Day	LAeq (15 minute)	50

APPENDIX A
AIR QUALITY
MONITORING DATA

Sample Location	EPA ID No.	Sample Date	NO SAMPLE / Comment	Averaging Period	PM ₁₀ (µg/m ³)
ESMS	21	05-Feb-25		24 hour	15.6
		11-Feb-25		24 hour	11.6
		17-Feb-25		24 hour	16.8
		23-Feb-25		24 hour	14.1
Fan Site 1	22	05-Feb-25		24 hour	32.0
		11-Feb-25		24 hour	14.8
		17-Feb-25		24 hour	31.9
		23-Feb-25		24 hour	21.4
Hulbert	23	05-Feb-25	No power (ongoing fault).	24 hour	
		11-Feb-25	No power (ongoing fault).	24 hour	
		17-Feb-25	No power (ongoing fault).	24 hour	
		23-Feb-25	No power (ongoing fault).	24 hour	
Macairstrip	24	05-Feb-25	No power	24 hour	
		11-Feb-25	No power	24 hour	
		17-Feb-25	No power	24 hour	
		23-Feb-25	No power	24 hour	
Standings	25	05-Feb-25		24 hour	26.1
		11-Feb-25		24 hour	12.3
		17-Feb-25		24 hour	20.4
		23-Feb-25		24 hour	15.5

APPENDIX B
NOISE
MONITORING DATA

Sample Location	Sample Date	Sample Time	LAeq (15 minute)		LA1 (1 minute)		Temperature (°C)	Wind Speed m/s	Wind Direction	Dartbrook Noise Sources
			Total	Dartbrook	Total	Dartbrook				
15	26/02/25	02:37	48	25	63	27	20	0	N/A	Some noise from the direction of Dartbrook Mine was noted. Identification of the source could not be reliably identified. Other audible sources included insects.
16	26/02/25	01:53	48	25	53	28	20	0	N/A	Some noise from the direction of Dartbrook Mine was noted. Identification of the source could not be reliably identified. Other audible sources included insects.
18	26/02/25	01:25	54	Inaudible	74	Inaudible	20	0	N/A	Dartbrook Mine was inaudible during the survey period. Other audible sources included vehicle traffic on the New England Highway, intermittent wind gusts and insects.
20	26/02/25	02:15	45	22	50	24	20	0	N/A	Some noise from the Direction of Dartbrook Mine was noted. Identification of the source could not be reliably identified. Other audible sources included intermittent wind gusts and vehicle traffic on the New England Highway.