

United Wambo Open Cut Coal Mine – 10th Percentile Operational Noise Level, dB(A)

Receiver ID	Period	Original PSNL	Final PSNL	Year 3				Year 7				Year 11				Year 16				Max Predicted 10 th %ile Noise Level	dB(A) Over Final PSNL
				All Seasons Day	Non-winter Evenings	Non-winter Night	Winter Night	All Seasons Day	Non-winter Evenings	Non-winter Night	Winter Night	All Seasons Day	Non-winter Evenings	Non-winter Night	Winter Night	All Seasons Day	Non-winter Evenings	Non-winter Night	Winter Night		
Area 1 - R003	Day	35	35	37.8	-	-	-	34.1	-	-	-	31.9	-	-	-	32.5	-	-	-	37.8	2.8
	Evening	35	35	-	33.1	-	-	-	28.7	-	-	-	25.7	-	-	-	28.3	-	-	33.1	-
	Night	35	35	-	-	33.1	36.2	-	-	28.6	34.1	-	-	26.7	31.9	-	-	27.4	32.5	36.2	1.2
Area 1 - R006	Day	35	35	36.6	-	-	-	32.8	-	-	-	30.4	-	-	-	31.3	-	-	-	36.6	1.6
	Evening	35	35	-	32.1	-	-	-	27.4	-	-	-	24.4	-	-	-	27.3	-	-	32.1	-
	Night	35	35	-	-	32.1	35.0	-	-	27.4	32.8	-	-	25.8	30.5	-	-	26.3	31.3	35.0	-
Area 1 - R007	Day	35	35	36.2	-	-	-	32.8	-	-	-	30.1	-	-	-	31.2	-	-	-	36.2	1.2
	Evening	35	35	-	30.3	-	-	-	26.5	-	-	-	23.3	-	-	-	26.6	-	-	30.3	-
	Night	35	35	-	-	32.0	34.7	-	-	27.7	32.9	-	-	25.0	30.1	-	-	26.4	31.3	34.7	-
Area 1 - R379	Day	35	35	36.0	-	-	-	32.7	-	-	-	30.4	-	-	-	31.1	-	-	-	36.0	1
	Evening	35	35	-	30.3	-	-	-	26.7	-	-	-	24.1	-	-	-	26.8	-	-	30.3	-
	Night	35	35	-	-	32.0	34.4	-	-	27.9	32.9	-	-	26.2	30.4	-	-	26.4	31.1	34.4	-
Area 1 - R380	Day	35	35	35.5	-	-	-	31.4	-	-	-	28.4	-	-	-	29.8	-	-	-	35.5	0.5
	Evening	35	35	-	29.9	-	-	-	25.4	-	-	-	22.4	-	-	-	25.2	-	-	< 30	-
	Night	35	35	-	-	31.4	33.8	-	-	26.3	31.4	-	-	23.0	28.4	-	-	24.5	29.8	33.8	-
Area 2 - R025	Day	35	35	38.7	-	-	-	36.0	-	-	-	33.9	-	-	-	34.4	-	-	-	38.7	3.7
	Evening	35	35	-	38.0	-	-	-	35.1	-	-	-	31.3	-	-	-	31.6	-	-	38.0	3
	Night	35	35	-	-	35.2	38.0	-	-	32.0	36.8	-	-	29.4	34.7	-	-	28.6	34.8	38.0	3
Area 2 - R035a Project Owned Property	Day	35	35	37.1	-	-	-	34.7	-	-	-	32.5	-	-	-	33.1	-	-	-	37.1	2.1
	Evening	35	35	-	36.8	-	-	-	34.0	-	-	-	29.8	-	-	-	29.5	-	-	36.8	1.8
	Night	35	35	-	-	33.6	36.2	-	-	31.9	35.5	-	-	28.6	33.4	-	-	27.0	33.4	36.2	1.2
Area 3 - R019 Project Owned Property	Day	44	44	57.1	-	-	-	54.1	-	-	-	48.8	-	-	-	48.6	-	-	-	57.1	13.1
	Evening	44	44	-	51.7	-	-	-	48.7	-	-	-	44.6	-	-	-	44.7	-	-	51.7	7.7
	Night	43	43	-	-	48.4	55.6	-	-	46.1	54.1	-	-	43.9	49.3	-	-	43.5	48.9	55.6	12.6
Area 5 - R016	Day	41	41	40.1	-	-	-	38.1	-	-	-	40.8	-	-	-	41.2	-	-	-	41.2	0.2
	Evening	40	40	-	38.2	-	-	-	37.1	-	-	-	39.2	-	-	-	39.9	-	-	39.9	-
	Night	37	38	-	-	45.5	43.9	-	-	36.7	38.7	-	-	41.8	41.5	-	-	38.3	41.6	45.5	7.5
Area 5 - R017	Day	41	41	38.8	-	-	-	39.1	-	-	-	39.6	-	-	-	39.3	-	-	-	39.6	-
	Evening	40	40	-	37.1	-	-	-	37.3	-	-	-	38.3	-	-	-	38.9	-	-	38.9	-
	Night	37	38	-	-	44.2	42.5	-	-	36.9	39.6	-	-	40.5	40.3	-	-	37.0	39.9	44.2	6.2
Area 5 - R028a Project Owned Property	Day	41	41	41.1	-	-	-	38.4	-	-	-	40.8	-	-	-	40.0	-	-	-	41.1	0.1
	Evening	40	40	-	38.2	-	-	-	37.0	-	-	-	39.9	-	-	-	39.7	-	-	39.9	-
	Night	37	38	-	-	46.5	45.7	-	-	37.1	39.1	-	-	42.9	41.9	-	-	37.0	40.4	46.5	8.5
Area 5 - R028b Project Owned Property	Day	41	41	40.5	-	-	-	38.5	-	-	-	41.0	-	-	-	39.9	-	-	-	41.0	-
	Evening	40	40	-	38.2	-	-	-	37.0	-	-	-	39.9	-	-	-	39.5	-	-	39.9	-
	Night	37	38	-	-	46.2	45.6	-	-	37.1	39.2	-	-	42.8	42.1	-	-	36.9	40.3	46.2	8.2
Area 5 - R039 Project Owned Property	Day	41	41	42.1	-	-	-	41.2	-	-	-	41.9	-	-	-	44.3	-	-	-	44.3	3.3
	Evening	40	40	-	41.0	-	-	-	40.6	-	-	-	40.1	-	-	-	42.6	-	-	42.6	2.6
	Night	37	38	-	-	44.5	45.6	-	-	40.3	41.6	-	-	43.1	42.1	-	-	41.5	44.5	45.6	7.6

Receiver ID	Period	Original PSNL	Final PSNL	Year 3				Year 7				Year 11				Year 16				Max Predicted 10 th %ile Noise Level	dB(A) Over Final PSNL
				All Seasons Day	Non-winter Evenings	Non-winter Night	Winter Night	All Seasons Day	Non-winter Evenings	Non-winter Night	Winter Night	All Seasons Day	Non-winter Evenings	Non-winter Night	Winter Night	All Seasons Day	Non-winter Evenings	Non-winter Night	Winter Night		
Area 5 - R040	Day	41	41	42.6	-	-	-	40.5	-	-	-	42.1	-	-	-	41.8	-	-	-	42.6	1.6
	Evening	40	40	-	40.6	-	-	-	39.9	-	-	-	40.8	-	-	-	41.3	-	-	41.3	1.3
	Night	37	38	-	-	44.8	46.3	-	-	40.1	40.9	-	-	43.5	42.5	-	-	39.0	42.1	46.3	8.3
Area 5 - R043	Day	41	41	38.6	-	-	-	38.4	-	-	-	38.5	-	-	-	38.9	-	-	-	38.9	-
	Evening	40	40	-	37.8	-	-	-	37.7	-	-	-	37.2	-	-	-	38.6	-	-	38.6	-
	Night	37	38	-	-	43.3	42.8	-	-	37.4	39.4	-	-	39.8	39.4	-	-	37.2	39.9	43.3	5.3
Area 5 - R044	Day	41	41	36.3	-	-	-	37.2	-	-	-	35.3	-	-	-	37.8	-	-	-	37.8	-
	Evening	40	40	-	35.7	-	-	-	36.6	-	-	-	33.6	-	-	-	37.4	-	-	37.4	-
	Night	37	38	-	-	39.5	38.8	-	-	36.9	37.6	-	-	36.3	35.9	-	-	36.8	38.8	39.5	1.5
Area 5 - R050a	Day	41	41	36.6	-	-	-	38.1	-	-	-	36.5	-	-	-	39.1	-	-	-	39.1	-
	Evening	40	40	-	35.6	-	-	-	37.4	-	-	-	35.0	-	-	-	38.2	-	-	38.2	-
	Night	37	38	-	-	40.5	39.6	-	-	36.0	38.6	-	-	37.7	37.3	-	-	38.0	39.9	40.5	2.5
Area 5 - R050b	Day	41	41	37.3	-	-	-	38.1	-	-	-	36.5	-	-	-	38.5	-	-	-	38.5	-
	Evening	40	40	-	36.7	-	-	-	37.5	-	-	-	34.9	-	-	-	38.3	-	-	38.3	-
	Night	37	38	-	-	40.5	40.2	-	-	37.2	38.7	-	-	37.6	37.2	-	-	37.5	39.8	40.5	2.5
Area 5 - R050c	Day	41	41	37.7	-	-	-	38.4	-	-	-	36.9	-	-	-	39.1	-	-	-	39.1	-
	Evening	40	40	-	37.0	-	-	-	38.0	-	-	-	35.3	-	-	-	38.7	-	-	38.7	-
	Night	37	38	-	-	41.5	40.7	-	-	37.1	39.1	-	-	38.0	37.5	-	-	38.1	40.2	41.5	3.5
Area 5 - R133	Day	41	41	36.2	-	-	-	37.2	-	-	-	35.4	-	-	-	37.6	-	-	-	37.6	-
	Evening	40	40	-	35.6	-	-	-	36.7	-	-	-	33.9	-	-	-	37.6	-	-	37.6	-
	Night	37	38	-	-	39.5	39.2	-	-	36.6	37.7	-	-	36.6	36.2	-	-	36.7	38.9	39.5	1.5
Area 6 - R029	Day	35	35	38.7	-	-	-	34.8	-	-	-	36.4	-	-	-	37.4	-	-	-	38.7	3.7
	Evening	35	35	-	39.8	-	-	-	35.1	-	-	-	36.0	-	-	-	38.1	-	-	39.8	4.8
	Night	35	35	-	-	31.4	37.3	-	-	30.5	34.5	-	-	31.9	35.7	-	-	32.2	36.8	37.3	2.3
Area 6 - R030	Day	35	35	36.6	-	-	-	36.1	-	-	-	38.3	-	-	-	38.5	-	-	-	38.5	3.5
	Evening	35	35	-	36.1	-	-	-	38.0	-	-	-	36.4	-	-	-	39.2	-	-	39.2	4.2
	Night	35	35	-	-	35.6	34.6	-	-	33.5	35.2	-	-	38.2	38.0	-	-	34.7	37.5	38.2	3.2
Area 6 - R033	Day	35	35	36.9	-	-	-	39.3	-	-	-	40.3	-	-	-	39.4	-	-	-	40.3	5.3
	Evening	35	35	-	37.2	-	-	-	39.8	-	-	-	38.1	-	-	-	38.9	-	-	39.8	4.8
	Night	35	35	-	-	36.2	32.9	-	-	32.7	38.9	-	-	38.1	39.4	-	-	36.8	38.9	39.4	4.4
Area 6 - R041a	Day	35	35	35.0	-	-	-	33.6	-	-	-	34.4	-	-	-	34.2	-	-	-	35.0	-
	Evening	35	35	-	34.6	-	-	-	33.8	-	-	-	32.7	-	-	-	34.6	-	-	34.6	-
	Night	35	35	-	-	36.5	37.1	-	-	33.2	33.8	-	-	35.3	34.6	-	-	32.3	34.6	37.1	2.1
Area 6 - R041b	Day	35	35	35.1	-	-	-	33.6	-	-	-	35.5	-	-	-	34.3	-	-	-	35.5	0.5
	Evening	35	35	-	34.5	-	-	-	33.6	-	-	-	34.0	-	-	-	34.6	-	-	34.6	-
	Night	35	35	-	-	37.0	38.0	-	-	32.9	33.7	-	-	36.4	35.7	-	-	32.6	34.4	38.0	3
Area 6 - R042	Day	35	35	35.7	-	-	-	37.0	-	-	-	37.2	-	-	-	39.1	-	-	-	39.1	4.1
	Evening	35	35	-	37.5	-	-	-	37.8	-	-	-	36.2	-	-	-	40.2	-	-	40.2	5.2
	Night	35	35	-	-	33.7	32.4	-	-	33.8	36.3	-	-	36.7	37.0	-	-	34.1	38.0	38.0	3

Receiver ID	Period	Original PSNL	Final PSNL	Year 3				Year 7				Year 11				Year 16				Max Predicted 10 th %ile Noise Level	dB(A) Over Final PSNL
				All Seasons Day	Non-winter Evenings	Non-winter Night	Winter Night	All Seasons Day	Non-winter Evenings	Non-winter Night	Winter Night	All Seasons Day	Non-winter Evenings	Non-winter Night	Winter Night	All Seasons Day	Non-winter Evenings	Non-winter Night	Winter Night		
Area 6 - R046	Day	35	35	35.3	-	-	-	34.8	-	-	-	35.2	-	-	-	36.8	-	-	-	36.8	1.8
	Evening	35	35	-	35.4	-	-	-	36.0	-	-	-	33.6	-	-	-	37.2	-	-	37.2	2.2
	Night	35	35	-	-	36.2	35.3	-	-	33.6	34.8	-	-	35.9	35.3	-	-	34.0	36.8	36.8	1.8
Area 6 - R048	Day	35	35	36.5	-	-	-	36.4	-	-	-	39.4	-	-	-	39.3	-	-	-	39.4	4.4
	Evening	35	35	-	36.4	-	-	-	35.9	-	-	-	37.3	-	-	-	38.8	-	-	38.8	3.8
	Night	35	35	-	-	35.6	34.5	-	-	32.4	35.9	-	-	39.0	38.9	-	-	36.0	38.4	39.0	4
Area 6 - R049	Day	35	35	36.1	-	-	-	35.6	-	-	-	38.1	-	-	-	38.8	-	-	-	38.8	3.8
	Evening	35	35	-	36.2	-	-	-	37.3	-	-	-	36.2	-	-	-	39.2	-	-	39.2	4.2
	Night	35	35	-	-	37.3	33.8	-	-	33.9	34.9	-	-	37.7	37.5	-	-	35.0	37.5	37.7	2.7
Area 6 - R075	Day	35	35	36.0	-	-	-	36.3	-	-	-	37.4	-	-	-	37.9	-	-	-	37.9	2.9
	Evening	35	35	-	36.8	-	-	-	37.3	-	-	-	35.7	-	-	-	39.0	-	-	39.0	4
	Night	35	35	-	-	37.1	33.0	-	-	35.2	35.9	-	-	36.6	36.6	-	-	34.7	37.3	37.3	2.3
Area 6 - R163	Day	35	35	35.8	-	-	-	35.8	-	-	-	36.9	-	-	-	38.3	-	-	-	38.3	3.3
	Evening	35	35	-	37.2	-	-	-	37.3	-	-	-	35.0	-	-	-	39.1	-	-	39.1	4.1
	Night	35	35	-	-	36.0	33.3	-	-	34.9	35.6	-	-	36.6	36.4	-	-	34.7	37.9	37.9	2.9
Area 6 - R320	Day	35	35	38.1	-	-	-	36.7	-	-	-	40.2	-	-	-	39.7	-	-	-	40.2	5.2
	Evening	35	35	-	37.6	-	-	-	35.6	-	-	-	38.8	-	-	-	39.1	-	-	39.1	4.1
	Night	35	35	-	-	35.0	35.5	-	-	32.6	34.8	-	-	39.2	40.0	-	-	36.1	39.0	40.0	5
Area 6 - R343	Day	35	35	37.9	-	-	-	36.0	-	-	-	39.6	-	-	-	38.3	-	-	-	39.6	4.6
	Evening	35	35	-	38.8	-	-	-	36.0	-	-	-	39.7	-	-	-	38.9	-	-	39.7	4.7
	Night	35	35	-	-	36.2	36.7	-	-	32.2	33.5	-	-	38.9	39.5	-	-	36.1	37.7	39.5	4.5
Area 6 - R344	Day	35	35	35.8	-	-	-	37.1	-	-	-	36.9	-	-	-	38.4	-	-	-	38.4	3.4
	Evening	35	35	-	36.2	-	-	-	37.4	-	-	-	35.1	-	-	-	38.3	-	-	38.3	3.3
	Night	35	35	-	-	36.8	33.9	-	-	34.9	36.4	-	-	36.4	36.4	-	-	34.1	36.7	36.8	1.8
Area 6 - R345	Day	35	35	38.7	-	-	-	34.8	-	-	-	36.4	-	-	-	37.4	-	-	-	38.7	3.7
	Evening	35	35	-	39.8	-	-	-	35.1	-	-	-	36.0	-	-	-	38.1	-	-	39.8	4.8
	Night	35	35	-	-	31.4	37.3	-	-	30.5	34.5	-	-	31.9	35.7	-	-	32.2	36.8	37.3	2.3
Area 6 - R346	Day	35	35	35.7	-	-	-	34.6	-	-	-	36.0	-	-	-	37.3	-	-	-	37.3	2.3
	Evening	35	35	-	36.1	-	-	-	36.4	-	-	-	32.0	-	-	-	38.2	-	-	38.2	3.2
	Night	35	35	-	-	32.2	31.6	-	-	31.5	34.2	-	-	32.2	34.7	-	-	32.4	36.6	36.6	1.6
Area 6 - R348	Day	35	35	34.3	-	-	-	32.9	-	-	-	32.9	-	-	-	36.6	-	-	-	36.6	1.6
	Evening	35	35	-	35.5	-	-	-	32.8	-	-	-	34.2	-	-	-	38.1	-	-	38.1	3.1
	Night	35	35	-	-	30.4	31.8	-	-	29.6	32.4	-	-	31.0	32.4	-	-	30.1	35.9	35.9	0.9

Note 1: All predicted noise levels are as LAeq,15minute

Note 2: Properties purchased by the Project highlighted in orange

Impact Classification Levels

Residual Noise Level above PSNL	Classification of Impact	VLAMP Classification
0-2dB(A)	Negligible impact (Noise Management Zone)	-
3-5dB(A)	Moderate Impact (Active Management Zone)	Mitigation
>5dB(A)	Significant Impact (Noise Affection Zone)	Acquisition

Receiver Location Areas

Receiver Area	Receiver Location
Area 1	North Bulga
Area 2	South Wambo
Area 3	Warkworth
Area 4	Maison Dieu
Area 5	Moses Crossing
Area 6	Redmanvale