

Appendix 8.1

Noise Predictions

TH000710004a		Noise Assessment 16th July 2004						Kilbride	
Phase	Activity	Total Effective LWA	Distance metres	Angle of View degrees	A of V Correction dB	Screening Correction dB	Soft Gnd Correction dB	Total Correction dB	Total Resultant dB LAeq,1-hr
3	Construction	113.4	920	45	-6.0	-10.0	0.0	-16.0	30.1
2	Operation	118.9	1150	45	-6.0	-10.0	0.0	-16.0	33.7
1	Pumps/Fans	84.9	1300	45	-6.0	-10.0	0.0	-16.0	-1.4
	Haul Road	121.5	920	45	-6.0	-10.0	0.0	-16.0	28.9
Noise from	Operation								33.7
Noise from	next noisiest Phase								30.1
Noise from	Haul Road								28.9
Total for these noise sources									36.2
Correction for tonal/impulsive components									5.0
Resultant with correction for tonal/impulsive components									41.2
Background LA90									38.0
Corrected Resultant minus Background									3.2

TH000710004a		Noise Assessment 16th July 2004							Kilbride							
NOISE PREDICTION DUE TOTAL DEVELOPMENT																
Worst-case predicted noise levels due to composting, vehicle movements on-site and access road																
NSR2																
Phase	Activity	Total Effective LWA	Distance metres	Angle of View degrees	A of V Correction dB	Screening Correction dB	Soft Gnd Correction dB	Total Correction dB	Total Resultant dB LAeq,1-hr							
3	Construction	113.4	880	45	-6.0	-10.0	0.0	-16.0	30.5							
2	Operation	118.9	1130	45	-6.0	-10.0	0.0	-16.0	33.8							
1	Pumps/Fans	84.9	1250	45	-6.0	-10.0	0.0	-16.0	-1.0							
	Haul Road	121.5	880	45	-6.0	-10.0	0.0	-16.0	29.1							
Noise from	Operation								33.8							
Noise from	next noisiest Phase								30.5							
Noise from	Haul Road								29.1							
Total for these noise sources									36.4							
Correction for tonal/impulsive components									5.0							
Resultant with correction for tonal/impulsive components									41.4							
Background LA90									36.0							
Corrected Resultant minus Background									5.4							

TH000710004a		Noise Assessment 16th July 2004							Kilbride							
NOISE PREDICTION DUE TOTAL DEVELOPMENT																
Worst-case predicted noise levels due to composting, vehicle movements on-site and access road																
NSR3																
Phase	Activity	Total Effective LWA	Distance metres	Angle of View degrees	A of V Correction dB	Screening Correction dB	Soft Gnd Correction dB	Total Correction dB	Total Resultant dB LAeq,1-hr							
3	Construction	113.4	510	60	-4.8	-10.0	0.0	-14.8	36.4							
2	Operation	118.9	650	60	-4.8	-10.0	0.0	-14.8	39.9							
1	Pumps/Fans	84.9	740	60	-4.8	-10.0	0.0	-14.8	4.8							
	Haul Road	121.5	650	60	-4.8	-10.0	0.0	-14.8	31.7							
Noise from	Operation								39.9							
Noise from	next noisiest Phase								36.4							
Noise from	Haul Road								31.7							
Total for these noise sources									41.9							
Correction for tonal/impulsive components									5.0							
Resultant with correction for tonal/impulsive components									46.9							
Background LA90									38.0							
Corrected Resultant minus Background									8.9							

TH000710004a

Noise Assessment
16th July 2004

Kilbride**ENNISCOFFEY PLANT****Noise from Total Mobile Plant - Base Data**

Item of plant	Number	Source of Noise Data	Sound Power dB LWA	On-time %	Resultant Effective dB LWA
Construction					
Front Loading Shovel	1	BS5228-C.3/050	104.0	70	102.5
Tracked excavator	2	BS5228-C.3/24	108.0	60	108.8
35-tonne Dumpertruck	2	BS5228-C.9/27	105.0	70	106.5
Roller	2	BS5228-C.3/63	112.0	20	108.0
Scraper	1	BS5228-C.3/87	112.0	10	102.0
Total Resultant Sound Power Level:					113.4
Operation					
Shredder	1	on-site data	116.0	80	115.0
Mixer	1	on-site data	103.0	80	102.0
Forklift truck	1	BS5228-C.3/050	104.0	50	101.0
Trommel (Screen)	2	on-site data	109.0	80	111.0
Front Loading Shovel (Grab)	4	on-site data	108.0	80	113.1
RCVs etc delivering waste	4	BS5228-C.7/122	112.0	50	115.0
Total Resultant Sound Power Level:					118.9
Invesel fan noise	1	Estimate	75.0	100	75.0
Leachate Treatment pumps	2	Estimate	83.0	70	84.5
Total Resultant Sound Power Level:					84.9
Haul Road					
Tractor & Bowser movement/hr:	1	BS5228-C11/053	112.0		112.0
RCVs etc delivering waste movement/hr:	8	BS5228-C7/122	112.0		121.0
Average vehicle speed(kph)	25				
Total Resultant Sound Power Level:					121.5