APPENDIX 9.2-C
Sound Power Levels of Project Construction Equipment

Table C1: Sound Power Levels of Project Construction Equipment

Equipment	Source Type	ISO Penlty	Acoustical Usage Factor [(a)] (%)	Operating Hours (hr)	Point Source Sound Power Level dBA [(b)]	Octave Band Centre Frequency [Hz]									Overall
						31.5	63	125	250	500	1000	2000	4000	8000	
1700 hp tug boat	Point Source	0	50	7.0	111.0	64.1	105.1	101.2	107.2	103.3	95.7	92.1	86.6	77.6	111.0
300 hp diesel crane	Point Source	0	16	2.2	115.6	65.8	88.8	97.7	106.1	111.7	110.9	105.6	97.7	36.6	115.6
503 hp Liebherr land crane	Point Source	0	16	2.2	116.9	81.0	88.9	107.4	110.2	110.5	110.8	107.8	105.9	36.6	116.9
Caterpillar 140M grader	Point Source	0	40	5.6	112.0	83.9	92.2	104.4	101.4	106.0	107.0	103.9	92.4	75.7	112.0
Caterpillar 980K loader	Point Source	0	40	5.6	113.6	86.1	86.1	96.2	100.7	106.1	109.3	107.5	102.3	102.3	113.6
Caterpillar CS64 packer	Point Source	5 – regular impulsive	20	2.8	117.0	88.9	97.2	109.4	106.4	111.0	112.0	108.9	97.4	80.7	117.0
John Deere 460E haul truck	Point Source	0	40	5.6	116.1	86.3	86.3	97.4	100.9	106.3	109.5	107.7	102.5	112.4	116.1
John Deere 470 G LC excavator	Point Source	0	40	5.6	116.9	89.3	89.3	100.4	103.9	109.3	112.5	110.7	105.5	105.5	116.9
John Deere 850k XLT Dozer	Point Source	0	40	5.6	112.9	70.1	89.1	94.9	103.4	106.6	108.6	105.9	100.1	36.6	112.9
Vibratory hammers (APE 200), or impact (Drop Hammer 10,000lb).	Point Source	12 – highly-impulsive	20	2.8	128.9	93.0	100.9	119.4	122.2	122.5	122.8	119.8	117.9	48.6	128.9