

TECHNICAL APPENDIX 13.7: CONSTRUCTION ACTIVITIES

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1.1 Worst Case Construction Activities and Associated Noise Levels for Platform Works

Activity	Plant Item	Quantity	Utilisation %	Sound Power, LW (dB(A))	Sound Power corrected for quantity and utilisation, LW (dB(A))	LAeq at 10 m (dB)
Platform	C2.16 Tracked Excavator	10	90%	103	112	75
Works	C6.26 Articulated Dump Truck	10	90%	107	117	79
	C1.13 Tracked Excavator	2	80%	114	116	86
	C1.14 Tracked Crusher	2	80%	109	111	81
	C5.27 Vibratory Roller	4	80%	95	100	67
	C5.28 Vibratory Roller	5	80%	104	110	76
	C4.88 Water Pump (Diesel)	6	70%	97	103	69
	C2.34 Lorry	2	50%	108	108	80
	C8.20 Tipper Lorry	4	50%	107	110	79
	C4.55 Telescopic Handler	4	40%	99	101	71
	C2.43 Cable Percussion Drilling Rig	3	70%	102	105	74
	C6.38 Tractor (Towing Water Bowser)	2	80%	111	114	83
	C4.21 Large Lorry Concrete Mixer	2	30%	105	103	77
	C5.14 Bulldozer	4	50%	113	116	85
	C4.79 Diesel Generator	2	30%	92	90	64
	C4.86 Diesel Generator	10	50%	93	100	65
	C6.31 Grader	3	60%	115	117	87
	C9.15 Tracked Semi-Mobile Crusher	5	60%	124	129	96
Total					130	103

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1.2 Worst Case Construction Activities and Associated Noise Levels for Civil Works

Activity	Plant Item	Quantity	Utilisation %	Sound Power, LW (dB(A))	Sound Power corrected for quantity and utilisation, LW (dB(A))	L _{Aeq} at 10 m (dB)
Civil Works	C2.16 Tracked Excavator	5	70%	103	108	75
	C2.24 Tracked Excavator	2	70%	101	103	73
	C6.26 Articulated Dump Truck	5	70%	107	113	79
	C1.1 Breaker Mounted On Wheeled Backhoe	1	50%	120	117	92
	C5.27 Vibratory Roller	2	40%	95	94	67
	C5.28 Vibratory Roller	2	40%	104	103	76
	C4.88 Water Pump (Diesel)	4	20%	97	96	69
	C2.34 Lorry	30	70%	108	121	80
	C8.20 Tipper Lorry	5	60%	107	112	79
	C4.55 Telescopic Handler	4	70%	99	103	71
	C4.41 Mobile Telescopic Crane	6	90%	99	106	71
	C6.38 Tractor (Towing Water Bowser)	4	60%	111	115	83
	C4.21 Large Lorry Concrete Mixer	10	60%	105	113	77
	C4.50 Tracked Mobile Crane	1	90%	99	98	71
	C4.59 Diesel Scissor Lift	6	60%	106	112	78
	C4.86 Diesel Generator	20	40%	93	103	65
	C4.88 Water Pump (Diesel)	1	10%	97	87	69
Total					125	97



1.3 Worst Case Construction Activities and Associated Noise Levels for Transformers Installation

Activity	Plant Item	Quantity	Utilisation %	Sound Power, LW (dB(A))	Sound Power corrected for quantity and utilisation, LW (dB(A))	L _{Aeq} at 10 m (dB)
Transforme	C2.34 Lorry	4	5%	108	101	80
r Installation	C4.55 Telescopic Handler	1	5%	99	86	71
	C4.41 Mobile Telescopic Crane	1	5%	99	86	71
	C4.74 Tractor (Towing Equipment)	1	1%	108	88	80
	C4.59 Diesel Scissor Lift	2	80%	99	101	71
Total		104	76			

1.4 Worst Case Construction Activities and Associated Noise Levels for Balance of Plant Work

Activity	Plant Item	Quantity	Utilisation %	Sound Power, LW (dB(A))	Sound Power corrected for quantity and utilisation, LW (dB(A))	L _{Aeq} at 10 m (dB)
Balance of	C4.59 Diesel Scissor Lift	6	50%	108	113	80
Plant Work	C4.41 Mobile Telescopic Crane	1	20%	106	99	78
	C4.55 Telescopic Handler	2	50%	99	99	71
Total		113	85			