

APPENDIX D: PREDICTED OPERATION NOISE LEVELS

Site Location	Night-time Background Sound Level dB L _{A95}	Most Affected Dwellings	Predicted Sound Level Without Mitigation dB L _{Aeq}	Main Sound-generating Activities	Potential Mitigation Options	Predicted Sound Level With Mitigation dB L _{Aeq}	Effects After Mitigation
Western Springs	37	42 Sefton Ave	52	Air treatment exhaust outlets and louvres		40	No more than minor. Sound from ATF would be audible and above background level. Complies with PNC.
		6 Old Mill Road	46	Air treatment exhaust outlets and louvres	Fit acoustically rated silencers. Minimum sound reduction specification through façade elements.	35	No more than minor. Sound from ATF would be audible although generally below background level. May at times be inaudible. Complies with PNC.
		744 Great North Road	45	Air treatment exhaust outlets and louvres		34	No more than minor. Sound from ATF would be audible although below background level. May at times be inaudible. Complies with PNC.
		42 Sefton Ave	25	Drop shaft at 106m distance	-	25	Less than minor. Sound from drop shaft would generally be inaudible. Complies with PNC.
May Road	37	2/49, 2/51, 53A, 55 Marion Ave	56	Air treatment exhaust outlets and louvres	Fit acoustically rated silencers. Minimum sound reduction rating required through façade elements.	39	No more than minor. Sound from ATF would be audible and above background level. Complies with PNC.
		41, 43 & 45 Marion Ave	52	Air treatment exhaust outlets and louvres		30	No more than minor. Sound from ATF would generally be inaudible and on occasion audible.
		53A Marion Avenue	38	Drop shaft at 25m distance	-	38	No more than minor. Sound from drop shaft would be audible and above background level. Complies with PNC.
Pump Station 23	32	33A Frederick Street (first floor)	60	Air treatment exhaust outlets and louvres		37	More than minor. Sound from ATF would be audible and above background level. Complies with PNC.
		6/41 Frederick Street (first floor)	64	Air treatment exhaust outlets and louvres	Fit acoustically rated silencers. Minimum sound reduction specification through façade elements.	40	More than minor. Sound from ATF would be audible and above background level. . Complies with PNC.
		25 Frederick Street (first floor)	54	Air treatment exhaust outlets and louvres		32	No more than minor. Sound from ATF would generally be audible. May at times be inaudible. Complies with PNC.
		33 Frederick Street	39	Drop shaft at 22m distance	-	39	More than minor. Sound from drop shaft would be audible and above background level. Complies with PNC.
Pump Station 25	35	16 Pitfire Place	52	Air treatment exhaust outlets and louvres		33	No more than minor. Sound from ATF would be audible although below background level. May at times be inaudible. Complies with PNC.
		29 Temuka Gardens	53	Air treatment exhaust outlets and louvres	Fit acoustically rated silencers. Minimum sound reduction specification through façade elements.	34	No more than minor. Sound from ATF would be audible although below background level. May at times be inaudible. Complies with PNC.
		11/20 & 3/28 Taylor Close	56	Air treatment exhaust outlets and louvres		37	No more than minor. Sound from ATF would be audible and above background level. Complies with PNC.
		32A Miranda St.	55	Air treatment exhaust outlets and louvres		35	No more than minor. Sound from ATF would generally be audible. May at times be inaudible. Complies with PNC.
		29 Temuka Gardens	30	Drop shaft at 63m distance	-	30	No more than minor. Sound from drop shaft would be audible although below background level. May at times be inaudible. Complies with PNC.

Note: PNC refers to Project Noise Controls of 40 dB L_{Aeq} Night-time