Project		I							101
roject	Sydenham Metro upgrade								LAING O'ROURKE
PL License No.	21147								HOLLAN
PL Weblink	https://apps.epa.nsw.gov.au/prpod	eoapp/Detail.aspx?inst	id=21147&id=21147	'&option=licence&s	earchrange=licence&r	ange=POEO%20licence&	prp=no&status=Issued		
	M2 - Requirement to monitor con	centration of pollutan	ts discharged						
pecific EPL monitoring conditions									
Manitorina Location	Number of times monitored	Eventbased	Parameter eg.	Unit eg mg/L	Minimum	Maximum			Comment
Monitoring Location	during the month	monitoring (Y/N)	TSS, pH		valuefor month	valuefor month	AllowableMaximum limit	AllowableMinimum limit	

Noise Monitorin	loise Monitoring Data - Monthly Summary										
Month and Year	July 2024										
Project	Sydenham Metro upgrade		LAING GROURKE JOHN								
EPL license No.	21147		HOLLAND								
EPL Weblink	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.a	spx?instid=21147&id=21147&option=licence&searchrange=licence⦥=POEO%20licence&prp=no&status=Issued									
Specific EPL monitoring	M7.1 - Noise monitoring										
conditions											

Reference Number	Monitoring Location (Catchment, Type & Address)	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	HEX505 North footing of OHW structure (SW5+515), Sydenham Continues Monitoring	07/07/2024	Day 07:00 to 18:00	General track related construction activities	Handheld powered and non-powered tools EWP/telehandler	Highest LAeq in work period at Monitoring Location is 71 Excluding Sydney Train activity, the construction related highest LAeq detected to be 601	70	YES	RBL: 51 Excluding Sydney Train activity, the construction related highest LAeq16min below the predictions. Excluding Sydney Train activity, the construction related highest LAeq in work period (69 dBA) is lower than the predicted level (70 dBA). Predicted noise levels (Day shift works) in this area did not trigger offers for Respite. Actual noise levels (Day shift works) in this area did not trigger offers for Respite. No additional mitigation measures required.

Reference Number	,	Monitoring Location (Catchment, Type & Address)	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise leve) LAeq, 15min at resident (dBA)	Compliant	Comments
1		Location a (NCA 01 - HEX569) 4m N of 17 Leofrene Avenue, Marrickville. Continuous Monitoring					58	62	YES	RBL: 33 LAeq15min below predictions. Noise monitor defect highest LAeq15min value of 58 dBA due to general construction noise between the hours 22:00 to 07:00. The Highest LAeq in work period (58 dBA) is lower than the predicted level (62 dBA) Predicted noise levels (Night shift works) in this area triggered offers for Respite.
2		Location b (NCA 02 - HEX573) 11m N of 51A Ewart Lane, Dulwich Hill Continues Continuous Monitoring					59	68	YES	RBIL: 33 LAeq15min below predictions. Noise monitor detect highest LAeq15min value of 59 dBA due to general construction noise between the hours 22:00 to 07:00. The Highest LAeq in work period (59 dBA) is lower than the predicted level (68 dBA). Predicted noise levels (Night shift works) in this area triggered offers for Respite.
3		Location c (NCA 02- HEXS91) 11m N of 81 Ewart Street, Durwich Hill Continuous Monitoring	13/07/2024	Night 22:00 To 7:00	General track related	Excavators 3T, 6 and 13T (inc jack hammer attachments) Bailoon tyre dump trucks ((Hydrema) Light vehicles Trucks Payloader Handheld powered and non-powered tools Vac Trucks	Highest LAeq in work period at Monitoring Location is 57 Due to the monitoring location being 21m from the source of the noise and sensitive receiver being 32m from the source of the noise, the calculated unexpected high noise impact event LAeq at the fragade of the sensitive receiver (Actual Noise level) was equal to 5. However, taking the following into consideration: The source of noise was from within a cutting (3m). Refer to Appendix A – Figure 3. There was no direct line of site between the source of noise and the sensitive receiver. Residential building wail served as standard attenuation. A reduction of 10dB was applied to estimate the sensitive receivers internal noise levels: 53.	60	YES	RBL: 33 dBA Estimated construction noise level LAeq15min was below the predictions. The estimated construction related highest LAeq in work period (53 dBA) is lower than the predicted level (60 dBA). Predicted noise levels (night shift works) in this area triggered offers for Respite. Actual noise levels (Night shift works) in this area triggered offers for Respite. No additional mitigation measures required.
4		Location d (NCA 03 - HEX419) 20m N of 5 Railway St, Huristone Park Continuous Monitoring	14/07/2024	(Modeled from 18:00 to 7:00)	construction activities	EWP/felehandler Front-end loader Concrete truck and line pump Portable Generators Compressors Compactor Bogle Water pumps			,	No Construction Activity
5		Location e (NCA 06 - HEX570) 14m S of 36-38 Campsie Street, Campsie Continuous Monitoring				4T Dumpy Site lights Mobile Crane	67	77	YES	RBL: 35 dBA LAeq15rnin below predictions. Noise monitor detect highest LAeq15rnin value of 67 dBA due to general construction noise between the hours 2200 to 07:00. The Highest LAeq1 in work period (67 dBA) is lower than the predicted level (77 dBA) Predicted noise levels (Night shift works) in this area triggered offers for Respite.
6		Location f (NCA 07 - HEX505) 4m E of 1 Hall St, Belmore Continuous Monitoring					66	70	YES	RBL: 35 dBA LAeq15min blow predictions. Noise monitor detect highest LAeq15min value of 66 dBA due to general construction noise between the hours 22:00 to 07:00. The Highest LAeq in work period (66 dBA) is lower than the predicted level (70 dBA) Predicted noise levels (Night shift works) in this area triggered offers for Respite.
7		Location g (NCA 08 – HEX589) 50m SE of 54 Railway Parade, Lakemba Continuous Monitoring					66	73	YES	RBL: 41 dBA LAeq15min below predictions. Noise monitor detect highest LAeq15min value of 68 dBA due to general construction noise between the hours 22:00 to 07:00. The Highest LAeq1 in work period (68 dBA) is lower than the predicted level (73 dBA) Predicted noise levels (Night shift works) in this area triggered offers for Respite.
8		Location h (NCA 12 - HEX582) 222m NW of 2 A West Terrace, Bankstown Continuous Monitoring					Highest LAeq in work period at Monitoring Due to the monitoring location is 22m from the noise source and sensitive receiver is 200m from the noise source, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 45	51	YES	RBL: 42 dBA LAeq15min below predictions. Noise monitor detect highest LAeq15min value of 64 dBA due to general construction noise between the hours 22:00 to 07:00. The Calculated LAeq in work period (45 dBA) is lower than the predicted level (51 dBA) Predicted noise levels (Night shift works) in this area did not trigger offers for Respite.

Reference Number	Monitoring Location (Catchment, Type & Address)	Date	Period	Construction Activities	Ma	ain source of noise	Highest LAeq in work period at Monitoring Location	Predicted noise level LAeq, 15min at resident	Compliant	Comments	
1	Location a (NCA 01 - HEX569) 4m N of 17 Leofrene Avenue, Marrickville. Continuous Monitoring						65	66	YES	RBL: 38 dBA LAeq15min below predictors. Noise monitor detect highest LAeq15min value of 65 dBA due to general construction noise between the hours 07:00 to 22:00. The highest LAeq in work period (65 dBA) is lower than the predicted level (66 dBA). Predicted noise levels (Day shift works) in this area did not trigger offers for Respite.	
2	Location b (NCA 02 - HEX573) 11m N of 51A Ewart Lane, Dulwich Hill Continuous Monitoring							63	67	YES	RBL: 38 dBA LAeq15min below predictions. Noise monitor detect highest LAeq15min value of 63 dBA due to general construction noise between the hours 07:00 to 22:00. The Highest LAeq in work period (63 dBA) is lower than the predicted level (67 dBA) Predicted noise levels (Day shift works) in this area did not trigger offers for Respite.
3	Location c (NCA 02 - HEX591) 11m N of 81 Ewart Street, Dulwich Hill Continuous Monitoring				a h a	Excavators 3T, 6 and 13T (inc jack hammer attachments) Balloon tyre dump	68	74	YES	RBL: 38 dBA LAeq15min below predictions. Noise monitor detect highest LAeq15min value of 68 dBA due to general construction noise between the hours 07:00 to 22:00. The Highest LAeq in work period (68 dBA) is lower than the predicted level (74 dBA) Predicted noise levels (Day shirt works) in this area trigger offers for Respite.	
4	Location d (NCA 03 - HEX419) 20m N of 5 Railway St, Huristone Park Continuous Monitoring	14/07/2024	Day to Evening	related	: L	trucks (Hydrema) Light vehicles Trucks Payloader Handheld powered and non-powered tools Vao Trucks EWPitelehandler Front-end loader Concrete truck and line pump Portable Generators Compressors Compactor Bogle Water pumps Water pumps Mobile Crane	Light vehicles Trucks Payloader Handheld powered and non-powered tools Vao Trucks EWP/helehandler Front-end loader Connete truck and line pump Portable Generators Compressors	61	53	YES	RBL: 38 dBA LAeq15min above predictions. Noise monitor detect highest LAeq15min value of 61 dBA due to general construction noise between the hours 07:00 to 22:00. The Highest LAeq in work period (61 dBA) is higher than the predicted level (53 dBA) Predicted noise levels (Day shift works) in this area trigger offers for Respite. Actual noise levels (Day shift works) in this area did not trigger offers above the Respite limit. No additional mitigation measures required.
5	Location e (NCA 06 - HEXS70) 14m S of 36-38 Campsie Street, Campsie Continuous Monitoring		7:00 to 15:00	construction activities	uttes			Front-end loader Concrete truck and line pump Portable Generators Compressors	66	77	YES
6	Location f (NCA 07 - HEX505) 4m E of 1 Hail St, Belmore Continuous Monitoring				: 4		65	70	YES	RBL: 41 dBA LAeq15min below predictions. Noise monitor detect highest LAeq15min value of 65 dBA due to general construction noise between the hours 07:00 to 22:00. The Highest LAeq in work period (65 dBA) is lower than the predicted level (70 dBA) Predicted noise levels (Day shift works) in this area did not trigger offers for Respite.	
7	Location g (NCA 08 – HEX589) 50m SE of 54 Railway Parade, Lakemba Continuous Monitoring							71	72	YES	RBL: 47 dBA LAeq15min below predictions. Noise monitor detect highest LAeq15min value of 71 dBA due to general construction noise between the hours 07:00 to 22:00. The Highest LAeq in work period (71 dBA) is lower than the predicted level (72 dBA) Predicted noise levels (Day shift works) in this area did not trigger offers for Respite.
8	Location h (NCA 12 - HEX582) 222m NW of 2 A West Terrace, Bankstown Continuous Monitoring						Highest LAeq in work period at Monitoring Location is 79 Due to the monitoring location is 22m from the noise source and sensitive receiver is 200m from the noise source, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 60	66	YES	RBL: 54 dBA LAeq15mlh below predictions. Noise monitor detect highest LAeq15mln value of 60 dBA due to general construction noise between the hours 07:00 to 22:00. The Highest LAeq1n work period (60 dBA) is higher than the predicted level (66 dBA) Predicted noise levels (Day shift works) in this area did not trigger offers for Respits. Actual noise levels (Day shift works) in this area did not trigger offers for Respits. No additional mitigation measures required.	

Vibration Monitoring I	Data - Monthly Sui	nmary								
Month and Year	July 2024								JOHN	
Project	Sydenham Metro upgrade								LAING GROURKE HOLLAND	
EPL license No.	21147								HOLLAND	
EPL Weblink	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21147&id=21147&option=licence&searchrange=licence⦥=POEO%20licence&prp=no&status=Issued									
Specific EPL monitoring conditions	M7.2 - Vibration monitoring									
Monitoring Location	Number of times monitoredduring the month	Attended or continuous monitoring	Eventbased monitoring (Y/N)	Parameter eg.PPV	Unit	Minimum valuefor month	Maximum valuefor month	Goals/Targets	Comment	
South West Metro Corridor									No activities requiring vibration monitoring	