## **Monitoring Data**

## Project (To Date) As @ September 2019

EPL Licence: 20966 Project: Moorebank Precinct East – Rail Access Land Package No. 1

EPL Weblink: <a href="https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=20966&id=20966&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued">https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=20966&id=20966&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued</a>

	Noise Monitoring Data										
Date	Location	Attended	Event Based	Target dB(A)	Receiver Leq dB(A)	Wind Speed (m/s)	Comments				
18/07/2017	NCA1	Yes	Yes	52	44.9	2	Works were inaudible.				
11/08/2017	NCA3	Yes	Yes	51	59.3	1	Works were inaudible.				
20/08/2017	NCA4	Yes	Yes	54	32.6	2	Works were inaudible.				
14/10/2017	NCA3	Yes	Yes	57	53.7	3	Works were recorded at 45 dB(A) for a total of 10 seconds during the 15-minute sample.				
14/10/2017	NCA3	Yes	Yes	61	60.3	1.5	Works were recorded between 36 to 50 dB(A) for material loading and plant reverse alarms. Dominant noise sources were of background noise.				
20/08/2017	NCA3	Yes	Yes	61	46.0	2	Works were inaudible.				
14/10/2017	NCA4	Yes	Yes	64	68.6	2	Works were only recorded on a few occasions between 53 to 54 dB(A) totalling 20 seconds during the 15-minute sample.				
14/10/2017	NCA3	Yes	Yes	61	53.0	1.1	Works were inaudible.				
14/10/2017	NCA3	Yes	Yes	61	49.7	1.1	Works were recorded between 41 to 50 dB(A). Dominant and main sources were of background noise consisting of birds, traffic, train, wind, and helicopter.				
11/08/2017	NCA3	Yes	Yes	51	56.2	1	Works were inaudible.				
14/10/2017	NCA4	Yes	Yes	64	64.9	2	Works were recorded totalling 30 seconds during the 15-minute sample consisting of hammers, reverse squawkers, and steel dropped on ground. Background sources were dominant during the sample consisting of birds, traffic, trains, and freight trains.				
14/10/2017	NCA4	Yes	Yes	64	61.3	3	Works were recorded between 51 to 55 dB(A) totalling 45 seconds during the 15-minute sample. Dominant noise consisted of background sources consisting of traffic, neighbours talking, bus, emergency services sirens, kids playing, pedestrians, and motor bike.				
14/10/2017	NCA4	Yes	Yes	64	57.6	3	High rail trolley carrying cement packets was heard for 5 seconds during 15-minute sample at 50 dB(A). Dominant noise was of background sources consisting of kids playing, dog barking, birds, train, traffic, and freight train.				

14/10/2017	NCA4	Yes	Yes	64	57.7	3	Works recorded at 50dB(A) when tool dropped on ground during 15-minute sample, otherwise dominant noise was of background sources consisting of traffic and neighbourhood.		
14/10/2017	NCA4	Yes	Yes	69	62.2	3	Works were inaudible.		
14/10/2017	NCA4	Yes	Yes	64	64.5	2	Works recorded at 46 dB(A) consisting of squawkers for a total of 20 seconds during the 15-minute sample. The dominant noise was of background sources consisting of birds, traffic, trains, and bus.		
14/10/2017	NCA4	Yes	Yes	64	61.5	3	Works recorded at 47 to 53 dB(A) for a total of 20 seconds during the 15-minute sample consisting of reverse squawkers from excavator. Dominant noise was of background sources consisting of kids playing, traffic, birds, neighbours, freight train, and car horn.		
15/10/2017	NCA3	Yes	Yes	61	53.7	-	Squawker from works recorded between 45 to 50 dB(A) on 3 occasions and excavator at 60 dB(A) totalling 9 seconds during the 15-minute monitoring event. Dominant noise was of background sources consisting of traffic, motorbike, wildlife, and trains.		
14/10/2017	NCA4	Yes	Yes	64	68.7	3	Works were recorded at 50 to 54 dB(A) for a total of 15 seconds during the 15-minute sample consisting of high rail dumper and rock movement. Dominant noise was of background sources consisting of traffic, neighbours talking, train, pedestrian, and truck.		
26/10/2017	NCA4	Yes	Yes	54	38.7	6	Construction works consisted of excavator loading material into plant and grader levelling cut.		
19/11/2017	NCA3	Yes	Yes	61	48.5	-	Construction works were inaudible.		
2/12/2017	NCA3	Yes	Yes	57	53.5	-	Construction ranged from 46 - 51 dB(A) for duration of sample consisting of tampering equipment, and excavators. Non-construction sources included commuter trains at 60 dB(A) and traffic between 50 to 60 dB(A).		
7/12/2017	MCA4	Yes	Yes	54	32.8	3	Works were inaudible.		
19/11/2017	NCA4	Yes	Yes	64	52.2	-	Taken adjoining works away from sensitive receivers inside of noise wall. Construction was continuous and varied consisting of excavator loading bogeys, watercart suppressing dust on stockpile with pump running.		
2/12/2017	NCA3	Yes	Yes	57	61.3	-	Construction was continuous at 41 - 45 dB(A) for duration of sample. Background sources were dominant and consisted of traffic.		
20/03/2018	NCA1	Yes	Yes	52	32.6	-	Works were inaudible.		
29/01/2018	NCA4	Yes	Yes	54	24.6	3	Works were inaudible.		
3/02/2018	NCA4	Yes	Yes	64	62.4	3	Works were heard in the 50-54 dB range and within predictions. Loudest and main source of noise consisted of background sources.		
3/02/2018	NCA3	Yes	Yes	61	66.0	10	Works were inaudible.		
4/04/2018	NCA3	Yes	Yes	51	41.7	3	Works were inaudible.		
12/05/2018	NCA3	Yes	Yes	61	69.5	-	Works were inaudible.		
13/05/2018	NCA3	Yes	Yes	61	56.1	-	Works were inaudible.		
26/07/2018	NCA3	Yes	Yes	51	33.3	2.22	Works were inaudible.		
26/07/2018	NCA3	Yes	Yes	51	51.4	2.22	Works were inaudible.		

1/08/2018	NCA3	Yes	Yes	54	28.4	2.78	Works were inaudible.	
16/08/2018	NCA3	Yes	Yes	51	30.6	6.11	Sample void as winds were in excess of 3m/s.	
16/08/2018	NCA3	Yes	Yes	51	50.7	3.89	Works were inaudible.	
1/09/2018	NCA3	Yes	Yes	61	65.0	7.5	Works were inaudible.	
1/09/2018	NCA3	Yes	Yes	61	61.2	6.39	Sample void as winds were in excess of 3 m/s.	
2/09/2018	NCA3	Yes	Yes	61	60.0	3.05	Works were inaudible.	
25/09/2018	NCA3	Yes	Yes	51	31.8	2.5	Works were inaudible.	
25/09/2018	NCA4	Yes	Yes	54	49.8	2.5	Construction was audible in the 31-40 dBA range.	
6/11/2018	NCA3	Yes	Yes	57	40.5	4.72	Works were inaudible.	
21/11/2018	NCA4	Yes	Yes	54	42.3	6.38	Works were inaudible.	
21/11/2018	NCA3	Yes	Yes	51	55.9	5.28	Works were inaudible.	
19/12/2018	NCA4	Yes	Yes	54	37.9	2.5	Works were inaudible.	
19/12/2018	NCA4	Yes	Yes	54	50.3	4.17	Works were inaudible.	
15/12/2018	NCA3	Yes	Yes	46	61.2	3	Works were inaudible.	
18/01/2019	NCA3	Yes	Yes	51	53.3	3	Construction noise consisted of excavator bucket from an excavator loading plant.	
20/01/2019	NCA3	Yes	Yes	46	48.7	3	Works were inaudible.	
31/01/2019	NCA3	Yes	Yes	39	46.6	1.67	Super T delivery.	
							Deliveries of construction works were heard at receiver. Dominant noise was of	
31/01/2019	NCA3	Yes	Yes	39	41.0	1.67	background sources consisting of distant traffic, traffic on local roads, cicadas and	
							trains passing.	
9/02/2019	NCA3	Yes	Yes	61	61.2	8	Works were inaudible.	
26/10/2018	NCA3	Yes	Yes	51	27.8	6.11	Works were inaudible.	
26/10/2018	NCA3	Yes	Yes	51	46.2	6.11	Works were inaudible.	
30/10/2018	NCA3	Yes	Yes	42	50.3	4.72	Works were inaudible.	
10/02/2019	NCA3	Yes	Yes	61	63.2	3	Works were inaudible.	
17/02/2019	NCA3	Yes	Yes	46	49.6	3	Works were inaudible.	
23/02/2019	NCA3	Yes	Yes	46	55.3	7	Works were inaudible.	
26/02/2019	NCA3	Yes	Yes	51	36.9	1.94	Works were inaudible.	
26/02/2019	NCA3	Yes	Yes	51	50.9	3	Works were inaudible.	
23/03/2019	NCA3	Yes	Yes	46	50.2	3.05	Works were inaudible. Dominant noises were of background sources consisting of traffic, cicadas and trains passing.	
26/03/2019	NCA4	Yes	Yes	54	36.2	6.11	Works were inaudible.	
11/04/2019	NCA4	Yes	Yes	54	41.0	3.61	Works were inaudible.	
04/05/2019	NCA3	Yes	Yes	46	51.4	5.28	Works were inaudible. Non-construction sources consisted of bird, traffic and trains.	
04/05/2019	NCA1	Yes	Yes	42	36.1	2.22	Works were inaudible.	
09/05/2019	NCA4	Yes	Yes	54	44.4	3.61	Monitoring at the source. Construction noise consisted of excavators loading moxies, with dozers, LVs and water trucks driving by. Non-construction sources from a helicopter.	

10/05/2019	NCA4	Yes	Yes	54	50.9	2.5	Works were inaudible. Non- construction sources from traffic on Cambridge Ave and Goodenough St. Loud peaks from helicopters and a dog barking nearby.
11/05/2019	NCA3	Yes	Yes	54	51.8	1.67	Construction noises audible however below the predicted and approved limit. Non-background sources from wind in the trees, traffic in the distance, cars driving along Leacocks Lane, a plane and several trains.
11/05/2019	NCA3	Yes	Yes	56	49.4	8.33	Construction noises audible however below the predicted and approved limit. Non-construction sources from traffic in the distance, the wind in trees, wind gusts, cars along Leacocks Lane, and a plane.
27/06/2019	NCA1	Yes	Yes	52	61.9	1.94	Monitoring at noise source during daytime. Construction noise consisted of rail grinder moving up and down the track and grinding. Also sources of noise were an excavator and dumpy working on the OCR, and a hand grinder/saw. Non-construction sources were constant traffic noise from Moorebank Avenue.
13/07/2019	NCA3	Yes	Yes	47	50.5	7.78	No construction audible. Non-construction sources from traffic on Leacocks Lane, Casula & dogs barking.
30/07/2019	NCA4	Yes	Yes	54	56.6	3.61	No construction audible. Non-construction sources from traffic on Cambridge Ave and Goodenough St. Loud peaks from birds chirping.
05/08/2019	NCA4	Yes	Yes	54	55.1	1.67 No construction audible. Non-construction sources from traffic on Cambridge A Goodenough St. Loud peaks from birds chirping.	
31/08/2019	NCA3	Yes	Yes	53	50.2	50.2 No construction audible. Non-construction sources from traffic on Leacocks Casula & dogs barking.	
26/09/2019	NCA3	Yes	Yes	51	56.6	3.06	No construction audible. Non-construction sources from traffic on Leacocks Lane, Casula & dogs barking.

Gas Methane Monitoring – Service Pits									
Month	Pit #	Gas Accumulation (volume %)	Comments						
January 19	6, 11, 12, 13, 14, 15, & 50	0	No exceedances.						
February 19	6, 11, 12, 13, 14, 15, & 50	0	No exceedances.						
March 19	6, 11, 12, 13, 14, 15, 50, 49, 10, 16, 64, 65 & 66	0	No exceedances.						
April 19	6, 11, 12, 13, 14, 15, 50, 49, 10, 16, 64, 65, 66 & 68	0	No exceedances.						
May 19	6, 11, 12, 13, 14, 15, 50, 49, 10, 16, 64, 65, 66, 68, 18 & 19	0	No exceedances.						
June 19	6, 11, 12, 13, 14, 15, 50, 49, 10, 16, 64, 65, 66, 68, 18 & 19	0	No exceedances.						
July 19	64, 65, 66, 68, 18 & 19	0	No exceedances.						
August 19	64, 65, 66, 68, 18 & 19	0	No exceedances.						
September 19	64, 65, 66, 68, 18 & 19	0	No exceedances.						

	Air Quality Monitoring Data											
Month	PM1	PM2.5	PM4	PM10	NOx (ug/m3)	Comments						
September 17	0.004	0.004	0.005	0.015	145.2	No exceedances						
October 17	-	-	=	=	150.1	No exceedances						
November 17	0.001	0.001	0.002	0.003	135.5	No exceedances						
December 17	-	-	-	0.049	-	No exceedances						
January 18	-	-	-	0.054	-	No exceedances						
February 18	-	-	-	0.049	-	No exceedances						