

JHCPB Joint Venture

EPL Monthly Monitoring Report

Reporting Period: August 2020

Project	Rozelle Interchange and WHT Enabling Works – Design and Construct
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1. Introduction

WestConnex is one of the NSW Government's key infrastructure projects which aims to ease congestion, create jobs and connect communities. Together with the other components of the WestConnex Program of Works and the proposed future Sydney Gateway, the WestConnex M4M5 Link will facilitate improved connections between western Sydney, Sydney Airport and Port Botany and south and south-western Sydney, as well as better connectivity between the important economic centres along Sydney's Global Economic Corridor and local communities (refer to Figure 1). Due to its importance, the WestConnex M4-M5 Link project was declared to be critical state significant infrastructure (CSSI) by the Minister for Planning on 15 August 2017.

The WestConnex M4-M5 Link is being delivered in two stages:

- Stage 1, the Mainline Tunnels, which includes the construction and operation of the M4-M5 Link Tunnel between the New M4 at Haberfield and the New M5 at St Peters, and
- Stage 2, the Rozelle Interchange, which will connect the Stage 1 mainline tunnels to the surrounding surface road network and includes the construction and operation of (see Figure 1)
 - An interchange at Lilyfield and Rozelle, including a connection to the proposed future Western Harbour Tunnel and Beaches Link project, and
 - A tunnel connection between the Anzac Bridge and Victoria Road, east of Iron Cove Bridge.



Figure 1 Westconnex Project Overview



2. Environmental Protection Licence and Reporting Requirements

John Holland Pty Ltd obtained the Environment Protection Licence (EPL No. 21278) from the NSW Environment Protection Authority for the Rozelle Interchange Works on behalf of the John Holland CPB (JHCPB) Joint Venture. The licence is for construction works relating to Road Construction as defined under Schedule 1 of the *Protection of the Environment Operations Act*, 1997 (POEO Act).

The licence describes monitoring and reporting requirements for the M4-M5 Link Rozelle Interchange Works, and specifically provides discharge criteria for water treatment plant and sediment basin water quality. The following report details environmental monitoring undertaken during this reporting month conducted in accordance with the EPL.

The EPL can be found by following the link below to the EPA's website:

https://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=194995&SYSUID=1&LICID=21278



3. Water Monitoring

Water monitoring was undertaken during this reporting period. Table 1 and 2 contains the water monitoring results.



Table 1 Surface water quality monitoring results

Discharge/Monitoring Point	Date sampled	Turbidity (NTU)	рН	Oil & Grease	Monitoring frequency	Comment
		50 ¹	6.5-8.5	Visible	N/A	Licence Limit
ICL02	01/08/2020	12.6	6.54	No	Each discharge	Compliant
ICL02	01/08/2020	11.0	6.62	No	Each discharge	Compliant
ICL02	03/08/2020	0.0	8.22	No	Each discharge	Compliant
ICL06	03/08/2020	37.9	8.04	No	Each discharge	Compliant
ICL02	03/08/2020	41.6	6.69	No	Each discharge	Compliant
ICL04	03/08/2020	5.9	6.50	No	Each discharge	Compliant
ICL02	03/08/2020	25.2	7.32	No	Each discharge	Compliant
ICL04	03/08/2020	5.2	6.87	No	Each discharge	Compliant
RRY06	01/08/2020	15.9	8.32	No	Each discharge	Compliant
ICL06	03/08/2020	13.0	6.87	No	Each discharge	Compliant
ICL02	04/08/2020	11.7	7.29	No	Each discharge	Compliant
ICL02	04/08/2020	3.3	8.10	No	Each discharge	Compliant
ICL04	04/08/2020	27.7	7.12	No	Each discharge	Compliant
CWL03	04/08/2020	7.8	8.25	No	Each discharge	Compliant
ICL02	04/08/2020	7.0	7.85	No	Each discharge	Compliant
ICL02	04/08/2020	43.9	7.20	No	Each discharge	Compliant
ICL02	05/08/2020	6.9	7.45	No	Each discharge	Compliant
ICL04	05/08/2020	14.5	6.60	No	Each discharge	Compliant
CWL03	06/08/2020	20.5	8.26	No	Each discharge	Compliant
ICL04	06/08/2020	32.3	6.69	No	Each discharge	Compliant
ICL02	07/08/2020	22.1	7.31	No	Each discharge	Compliant
ICL04	07/08/2020	47.9	6.77	No	Each discharge	Compliant
ICL02	10/08/2020	6.5	7.73	No	Each discharge	Compliant
ICL02	10/08/2020	6.9	8.28	No	Each discharge	Compliant
ICL01	10/08/2020	45	8.49	No	Each discharge	Compliant

¹ A correlation between TSS and Turbidity has been established. Including a safety factor the turbidity limit is 50 NTU



Discharge/Monitoring Point	Date sampled	Turbidity (NTU)	рН	Oil & Grease	Monitoring frequency	Comment
		50 ¹	6.5-8.5	Visible	N/A	Licence Limit
ICL04	10/08/2020	16.5	6.95	No	Each discharge	Compliant
ICL02	10/08/2020	39.4	6.51	No	Each discharge	Compliant
ICL02	10/08/2020	35.2	7.70	No	Each discharge	Compliant
ICL04	10/08/2020	8.7	7.00	No	Each discharge	Compliant
ICL02	10/08/2020	37.9	8.34	No	Each discharge	Compliant
ICL06	10/08/2020	44.6	6.56	No	Each discharge	Compliant
ICL02	11/08/2020	10.1	8.30	No	Each discharge	Compliant
ICL02	11/08/2020	0.6	7.06	No	Each discharge	Compliant
ICL02	11/08/2020	4.9	8.33	No	Each discharge	Compliant
ICL02	11/08/2020	17.2	7.91	No	Each discharge	Compliant
ICL01	11/08/2020	22.9	7.77	No	Each discharge	Compliant
ICL01	11/08/2020	15.7	8.11	No	Each discharge	Compliant
ICL04	11/08/2020	12.3	7.09	No	Each discharge	Compliant
ICL06	11/08/2020	45.8	8.30	No	Each discharge	Compliant
ICL02	11/08/2020	49.9	6.77	No	Each discharge	Compliant
ICL02	11/08/2020	46.1	6.70	No	Each discharge	Compliant
ICL02	12/08/2020	48.9	7.01	No	Each discharge	Compliant
ICL02	12/08/2020	27.8	8.12	No	Each discharge	Compliant
ICL02	13/08/2020	11	6.98	No	Each discharge	Compliant
ICL02	13/08/2020	5.9	7.39	No	Each discharge	Compliant
ICL02	13/08/2020	35.9	7.07	No	Each discharge	Compliant
ICL04	13/08/2020	28.3	7.82	No	Each discharge	Compliant
ICL02	13/08/2020	15.8	7.89	No	Each discharge	Compliant
ICL02	13/08/2020	48.6	8.23	No	Each discharge	Compliant
ICL04	14/08/2020	29.8	7.32	No	Each discharge	Compliant
ICL04	14/08/2020	29.2	6.86	No	Each discharge	Compliant
ICL04	14/08/2020	14.9	6.79	No	Each discharge	Compliant



Discharge/Monitoring Point	Date sampled	Turbidity (NTU)	рН	Oil & Grease	Monitoring frequency	Comment
		50 ¹	6.5-8.5	Visible	N/A	Licence Limit
ICL02	17/08/2020	36.2	7.57	No	Each discharge	Compliant
ICL02	17/08/2020	18.3	6.57	No	Each discharge	Compliant
ICL04	18/08/2020	3.4	7.08	No	Each discharge	Compliant
ICL04	19/08/2020	20.0	6.52	No	Each discharge	Compliant
ICL04	20/08/2020	0.0	6.50	No	Each discharge	Compliant
ICL02	20/08/2020	33.8	8.39	No	Each discharge	Compliant
ICL02	20/08/2020	35.8	7.25	No	Each discharge	Compliant
ICL02	20/08/2020	48.7	6.80	No	Each discharge	Compliant
ICL02	24/08/2020	43.3	7.32	No	Each discharge	Compliant
ICL04	24/08/2020	43.3	7.37	No	Each discharge	Compliant
ICL02	26/08/2020	6.1	7.11	No	Each discharge	Compliant
ICL02	26/08/2020	43.7	8.29	No	Each discharge	Compliant
ICL04	27/08/2020	2.9	6.83	No	Each discharge	Compliant
ICL04	31/08/2020	8.9	6.58	No	Each discharge	Compliant

Table 2 Water quality monitoring results at Water Treatment Plant which processes ground water

Date Sampled	Discharge	Turbidity (NTU)	рН	Oil & Grease	Arsenic (mg/L)	Cadmium (mg/L)	Chromium (hexavalent) (mg/L)	Chromium (trivalent) (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Monitoring frequency	Comment
Bate Sampled	Point	50 ¹	6.5 - 8.5	Visible	0.05	0.014	0.07 ²	0.15	0.04 ²	1.5	0.03	2.5	0.0007	0.2	0.15 ²	N/A	Licence Limit
21/08/2020	RRY-A	3.8	6.5	None visible	0.0003	0.00005	0.002	0.001	0.0006	0.064	0.0001	0.0166	0.0001	0.0033	0.012	Monthly	Compliant
21/08/2020	RRY-A	3.8	6.57	None visible	0.0002	0.00005	0.004	0.006	0.0006	0.003	0.0001	0.0149	0.0001	0.0006	0.005	Monthly	Compliant
21/08/2020	RRY-C	14	7.0	None visible	0.0002	0.00005	0.034	0.001	0.0012	0.002	0.0001	0.0018	0.0001	0.0006	0.002	Monthly	Compliant
21/08/2020	RRY-C	2.9	7.2	None visible	0.0003	0.00005	0.030	0.004	0.0013	0.002	0.0001	0.0005	0.0001	0.0005	0.004	Monthly	Compliant
21/08/2020	RRY-C	16.5	7.1	None visible	0.0003	0.00005	0.040	0.001	0.0011	0.002	0.0001	0.0016	0.0001	0.0005	0.002	Monthly	Compliant
21/08/2020	RRY-C	0.1	7.1	None visible	0.0003	0.00005	0.035	0.001	0.0012	0.002	0.0001	0.0098	0.0001	0.0005	0.003	Monthly	Compliant

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 $^{^{1}}$ A correlation between TSS and Turbidity has been established. Including a safety factor the turbidity limit is 50NTU.

² 90 Percentile concentration limit.



4. Noise Monitoring

Noise monitoring was undertaken during this reporting period. Table 3 contains the noise monitoring results.

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Table 3 Noise monitoring results

Monitoring Location (Noise Catchment Area, Street, Suburb)	Date	Time	Attended or Continuous Monitoring	Parameter	Goal/Target dB(A)	Actual dB(A)	Comments
NCA28 Bowman Street	10/08/2020	10:00 PM	Attended	Laeq 15 minutes	59	54	
NCA27 Glebe Point Road	10/08/2020	10:30 PM	Attended	Laeq 15 minutes	66	53.9	
NCA29 Mansfield Street	10/08/2020	11:00 PM	Attended	Laeq 15 minutes	61	42.6	
NCA25 Hornsey Street	10/08/2020	11:20 PM	Attended	Laeq 15 minutes	81	54.5	
NCA27 Glebe Point Road	11/08/2020	12:40 AM	Attended	Laeq 15 minutes	66	50.3	
NCA25 Hornsey Street	11/08/2020	1:20 AM	Attended	Laeq 15 minutes	81	63.2	
NCA27 Glebe Point Road	11/08/2020	10:00 PM	Attended	Laeq 15 minutes	66	55.1	
NCA28 Bowman Street	11/08/2020	10:30 PM	Attended	Laeq 15 minutes	59	51.6	
NCA29 Mansfield Street	11/08/2020	11:00 PM	Attended	Laeq 15 minutes	61	43.4	
NCA25 Hornsey Street	11/08/2020	11:20 PM	Attended	Laeq 15 minutes	81	56.5	
NCA27 Glebe Point Road	12/08/2020	1:00 AM	Attended	Laeq 15 minutes	66	49.9	
NCA25 Hornsey Street	12/08/2020	1:30 AM	Attended	Laeq 15 minutes	81	57.2	
NCA25 Quirk Street	20/08/2020	10:00 PM	Attended	Laeq 15 minutes	80	71.4	
NCA27 Glebe Point Road	20/08/2020	10:15 PM	Attended	Laeq 15 minutes	65	57.2	
NCA29 Crescent Street	20/08/2020	11:05 PM	Attended	Laeq 15 minutes	70	66.4	
NCA25 Lilyfield Road	21/08/2020	1:00 AM	Attended	Laeq 15 minutes	61	52.9	
NCA25 Lilyfield Road	24/08/2020	10:45 PM	Attended	Laeq 15 minutes	80	53.8	
NCA29 Mansfield Street	24/08/2020	11:05 PM	Attended	Laeq 15 minutes	53	56.4	Dominant noise source – Cargo ship in the port
NCA27 Glebe Point Road	24/08/2020	11:30 PM	Attended	Laeq 15 minutes	64	52.1	
NCA25 Lilyfield Street	25/08/2020	2:00 AM	Attended	Laeq 15 minutes	80	53.4	
NCA27 Glebe Point Road	25/08/2020	10:05 PM	Attended	Laeq 15 minutes	64	54.9	
NCA29 Mansfield Street	25/08/2020	10:50 PM	Attended	Laeq 15 minutes	53	50.7	
NCA25 Lilyfield Road	25/08/2020	11:20 PM	Attended	Laeq 15 minutes	76	49	

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