

Environmental Protection Licence Monitoring Data

Project name:	WestConnex – New M5	
Licensee	CPB Contractors Pty Limited	
Monitoring period	November 2016	
Website:	WestConnex – Explore the Route – New M5 (Beverly Hills to St Peters) – New M5 Resources	
Environmental Protection licence number/s:	20772	4627
Premise addresses	WestConnex New M5, between Beverly Hills and St Peters, Beverly Hills NSW 2209	New M5 St Peters Interchange, 10-16 Albert Street, St Peters NSW 2044

Monitoring Type: Water Discharge Monitoring

Discharge/Monitoring Point	Date sampled	Total suspended solids		pH		Oil & Grease		Monitoring frequency	Comment
		Licence limit	Result	Licence limit	Result	Licence limit	Result		
Water Treatment Plant ARN-1	1/11/2016	50	18	6.5-8.5	8.5	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-1	2/11/2016	50	24	6.5-8.5	6.22	None visible	None	Each discharge	Non-compliant. Reported to EPA.
Water Treatment Plant ARN-2	8/11/2016	50	<5	6.5-8.5	7.52	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	9/11/2016	50	<5	6.5-8.5	7.45	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	10/11/2016	50	<5	6.5-8.5	7.51	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	11/11/2016	50	<5	6.5-8.5	7.5	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	14/11/2016	50	<5	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	15/11/2016	50	<5	6.5-8.5	7.9	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	16/11/2016	50	<5	6.5-8.5	7.21	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	17/11/2016	50	9	6.5-8.5	6.97	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	18/11/2016	50	<5	6.5-8.5	7.26	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	19/11/2016	50	<5	6.5-8.5	7.61	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	21/11/2016	50	<5	6.5-8.5	7.25	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	22/11/2016	50	<5	6.5-8.5	7.35	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	23/11/2016	50	<5	6.5-8.5	7.5	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	24/11/2016	50	9	6.5-8.5	7.4	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	25/11/2016	50	<5	6.5-8.5	7.32	None visible	None	Each discharge	Compliant

November 2016 Monitoring data for EPLs 20772 and 4627

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Discharge/Monitoring Point	Date sampled	Total suspended solids		pH		Oil & Grease		Monitoring frequency	Comment
		Licence limit	Result	Licence limit	Result	Licence limit	Result		
Water Treatment Plant ARN-2	26/11/2016	50	13	6.5-8.5	7.72	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	28/11/2016	50	8	6.5-8.5	7.8	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	29/11/2016	50	6	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	30/11/2016	50	10	6.5-8.5	7.1	None visible	None	Each discharge	Compliant

Monitoring Type: Ground Water Monitoring

Date Sampled: 08/11/2016	Monitoring Point					
Pollutant	2 (MW1)	3 (LDS-BH-3071)	4 (LDS-BH-3071a)	5 (LDS-BH-2023)	6 (MW4b)	Frequency (MP 2-6)
Standing Water Level	11.71	12.68	2.45	11.38	14.62	Quarterly
Temperature (field)	22.5	22.5	21.7	21.4	22.2	Quarterly
pH (field)	6.68	10.8	7.05	6.35	5.4	Quarterly
Electrical Conductivity (field)	2280	1836	1267	11830	4720	Quarterly
Redox (field)	111	-117	101	-255	333	Quarterly
Dissolved Oxygen (field)	3.78	2.81	0.4	0.23	1.91	Quarterly
Total Organic Carbon	3	13	2	11	6	Quarterly
Total Dissolved Solids	1200	890	760	7000	2800	Quarterly
Chloride	440	390	37	3700	1100	Quarterly
Sulphate	110	41	120	170	410	Quarterly
Sodium (Na)	410	300	65	2800	1100	Quarterly
Potassium (I) Ion	6.9	37	21	42	13	Quarterly
Calcium (II) Ion	41	52	180	130	14	Quarterly
Magnesium (II) Ion	31	12	21	260	60	Quarterly
Ammonia as N	0.008	1.8	0.34	1.8	0.12	Quarterly

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Date Sampled: 08/11/2016	Monitoring Point					
Pollutant	2 (MW1)	3 (LDS-BH-3071)	4 (LDS-BH-3071a)	5 (LDS-BH-2023)	6 (MW4b)	Frequency (MP 2-6)
Total Alkalinity (Carbonate and Bicarbonate)	96	63	430	360	80	Quarterly
pH	6.5	10	6.8	6.6	5.8	Quarterly

Date Sampled: 08/11/2016	Monitoring Point	
Pollutant	7 (LP1)	Frequency (MP 7)
Temperature (field)	23.5	Quarterly
pH (field)	7.4	Quarterly
Electrical Conductivity (field)	740	Quarterly
Redox (field)	-113	Quarterly
Dissolved Oxygen (field)	2	Quarterly
Electrical Conductivity	590	Quarterly
pH	6.9	Quarterly
Biological Oxygen Demand	<5	Quarterly
Total Dissolved Solids	300	Quarterly
Ammonia as N	8.5	Quarterly
Total Alkalinity (Carbonate and Bicarbonate)	130	Quarterly
Chloride	66	Quarterly
Sulphate	42	Quarterly
Sodium (Na)	66	Quarterly
Potassium (I) Ion	12	Quarterly
Calcium (II) Ion	30	Quarterly
Magnesium (II) Ion	12	Quarterly
Fluoride, F	<0.1	Quarterly

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Date Sampled: 08/11/2016	Monitoring Point	
	7 (LP1)	Frequency (MP 7)
Nitrate as N in water	<0.05	Quarterly
Nitrite as N in water	<0.05	Quarterly
Total Phenolics (as Phenol)	<0.05	Quarterly
Total Suspended Solids	23	Quarterly
Total Organic Carbon	7	Quarterly
TRH C6 - C9	71	Quarterly
TRH C6 - C10	85	Quarterly
Benzene	<1	Quarterly
Toluene	<1	Quarterly
Ethylbenzene	<1	Quarterly
m+p-xylene	<2	Quarterly
o-xylene	2	Quarterly
TRH C10 - C14	<50	Quarterly
TRH C15 - C28	110	Quarterly
TRH C29 - C36	<100	Quarterly
TRH >C10 - C16	<50	Quarterly
TRH >C10 - C16 less Naphthalene (F2)	<50	Quarterly
TRH >C16 - C34	<100	Quarterly
TRH >C34 - C40	<100	Quarterly
Naphthalene	1	Quarterly
Acenaphthylene	<1	Quarterly
Acenaphthene	<1	Quarterly
Fluorene	<1	Quarterly
Phenanthrene	<1	Quarterly

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Date Sampled: 08/11/2016	Monitoring Point	
Pollutant	7 (LP1)	Frequency (MP 7)
Anthracene	<1	Quarterly
Fluoranthene	<1	Quarterly
Pyrene	<1	Quarterly
Benzo(a)anthracene	<1	Quarterly
Chrysene	<1	Quarterly
Benzo(b,j+k)fluoranthene	<2	Quarterly
Benzo(a)pyrene	<1	Quarterly
Indeno(1,2,3-c,d)pyrene	<1	Quarterly
Dibenzo(a,h)anthracene	<1	Quarterly
Benzo(g,h,i)perylene	<1	Quarterly
Benzo(a)pyrene TEQ	<5	Quarterly
Total +ve PAH's	1.3	Quarterly
HCB	<0.2	Quarterly
alpha-BHC	<0.2	Quarterly
gamma-BHC	<0.2	Quarterly
beta-BHC	<0.2	Quarterly
Heptachlor	<0.2	Quarterly
delta-BHC	<0.2	Quarterly
Aldrin	<0.2	Quarterly
Heptachlor Epoxide	<0.2	Quarterly
gamma-Chlordane	<0.2	Quarterly
alpha-Chlordane	<0.2	Quarterly
Endosulfan I	<0.2	Quarterly
pp-DDE	<0.2	Quarterly

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Date Sampled: 08/11/2016	Monitoring Point	
Pollutant	7 (LP1)	Frequency (MP 7)
Dieldrin	<0.2	Quarterly
Endrin	<0.2	Quarterly
pp-DDD	<0.2	Quarterly
Endosulfan II	<0.2	Quarterly
pp-DDT	<0.2	Quarterly
Endrin Aldehyde	<0.2	Quarterly
Endosulfan Sulphate	<0.2	Quarterly
Methoxychlor	<0.2	Quarterly
Azinphos-methyl (Guthion)	<0.2	Quarterly
Bromophos ethyl	<0.2	Quarterly
Chlorpyrifos	<0.2	Quarterly
Chlorpyrifos-methyl	<0.2	Quarterly
Diazinon	<0.2	Quarterly
Dichlorovos	<0.2	Quarterly
Dimethoate	<0.2	Quarterly
Ethion	<0.2	Quarterly
Fenitrothion	<0.2	Quarterly
Malathion	<0.2	Quarterly
Parathion	<0.2	Quarterly
Ronnel	<0.2	Quarterly
Aluminium-Total	<10	Quarterly
Arsenic-Total	1	Quarterly
Barium-Total	190	Quarterly

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Date Sampled: 08/11/2016	Monitoring Point	
Pollutant	7 (LP1)	Frequency (MP 7)
Cadmium-Total	<0.1	Quarterly
Chromium-Total	<1	Quarterly
Hexavalent Chromium, Cr6+	<0.005	Quarterly
Cobalt-Total	<1	Quarterly
Copper-Total	160	Quarterly
Lead-Total	5	Quarterly
Manganese-Total	48	Quarterly
Mercury-Total	<0.05	Quarterly
Zinc-Total	210	Quarterly