

Environment Protection Licence Monitoring Data

Project name:	WestConnex – New M5	
Licensee	CPB Contractors Pty Limited	
Monitoring period	February 2020	
Website:	https://www.westconnex.com.au/NewM5Environment	
Environment 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-2	1/02/2020	50	10	6.5-8.5	7.6	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	2/02/2020	50	9.6	6.5-8.5	7.57	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	3/02/2020	50	9.3	6.5-8.5	8	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	3/02/2020	50	32	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	4/02/2020	50	6.9	6.5-8.5	8.15	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	4/02/2020	50	40	6.5-8.5	8.4	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	7/02/2020	50	16.57	6.5-8.5	8.19	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	9/02/2020	50	8.2	6.5-8.5	8.32	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	10/02/2020	50	1	6.5-8.5	8.4	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	11/02/2020	50	35	6.5-8.5	7.5	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	11/02/2020	50	5.3	6.5-8.5	7.81	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	12/02/2020	50	2.8	6.5-8.5	8.2	None visible	None	Each discharge	Compliant

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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		
Sediment Basin SPI-1	12/02/2020	50	30	6.5-8.5	6.5	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	13/02/2020	50	11.9	6.5-8.5	8.14	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	14/02/2020	50	20	6.5-8.5	8.3	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	15/02/2020	50	13	6.5-8.5	7.57	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	16/02/2020	50	12	6.5-8.5	7.7	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	17/02/2020	50	25	6.5-8.5	7.7	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	18/02/2020	50	6.9	6.5-8.5	7.84	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	19/02/2020	50	7.6	6.5-8.5	8.25	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	19/02/2020	50	22	6.5-8.5	8.3	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	20/02/2020	50	8.3	6.5-8.5	8.26	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	20/02/2020	50	12	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	21/02/2020	50	8.76	6.5-8.5	7.76	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	22/02/2020	50	11	6.5-8.5	7.9	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	23/02/2020	50	10	6.5-8.5	8.1	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	26/02/2020	50	11	6.5-8.5	8	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	27/02/2020	50	11	6.5-8.5	8.06	None visible	None	Each discharge	Compliant

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

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Monitoring Type: Ground Water Monitoring (EPL 4627)

Date Sampled: 20/02/2020		Monitoring Point					
Pollutant	Units	2 (MW1)	3 (LDS-BH-3071)	4 (LDS-BH-3071a)	5 (LDS-BH-2023)	6 (MW4)	Frequency (MP 2-6)
Standing Water Level	mBTOC	Destroyed	12.68	2.05	Dry	27.56	Quarterly
Temperature (field)	deg c	Destroyed	24.6	23.9	Dry	25.3	Quarterly
pH (field)	pH units	Destroyed	7.95	6.92	Dry	7.05	Quarterly
Electrical Conductivity (field)	uS/cm	Destroyed	358.9	1317	Dry	7700	Quarterly
Redox (field)	mV	Destroyed	-64.2	66.2	Dry	-120.5	Quarterly
Dissolved Oxygen (field)	mg/L	Destroyed	4.94	1.58	Dry	1.54	Quarterly
Total Dissolved Solids	mg/L	Destroyed	200	960	Dry	4600	Quarterly
Chloride	mg/L	Destroyed	68	56	Dry	2200	Quarterly
Sulphate	mg/L	Destroyed	13	200	Dry	180	Quarterly
Sodium (Na)	mg/L	Destroyed	54	68	Dry	1300	Quarterly
Potassium (I) Ion	mg/L	Destroyed	2.7	22	Dry	9.4	Quarterly
Calcium (II) Ion	mg/L	Destroyed	13	200	Dry	140	Quarterly
Magnesium (II) Ion	mg/L	Destroyed	2.3	20	Dry	92	Quarterly
Ammonia as N	mg/L	Destroyed	0.12	0.02	Dry	2.2	Quarterly
Total Alkalinity (Carbonate and Bicarbonate)	mg/L	Destroyed	57	430	Dry	690	Quarterly

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Monitoring Type: Leachate Analytical Results (EPL 4627)

Date Sampled: 24/02/2020	Monitoring Point			
	Pollutant	Frequency	Units	7 (LPI)
Temperature (field)	Quarterly	deg c	27.9	
pH (field)	Quarterly	pH units	6.88	
Electrical Conductivity (field)	Quarterly	uS/cm	6328	
Redox (field)	Quarterly	mV	-129.5	
Dissolved Oxygen (field)	Quarterly	mg/L	0.89	
Total Dissolved Solids	Quarterly	mg/L	3100	
Ammonia as N	Quarterly	mg/L	170	
Total Alkalinity (Carbonate and Bicarbonate)	Quarterly	mg/L	1200	
Chloride	Quarterly	mg/L	850	
Sulphate	Quarterly	mg/L	10	
Sodium (Na)	Quarterly	mg/L	770	
Potassium (I) Ion	Quarterly	mg/L	160	
Calcium (II) Ion	Quarterly	mg/L	120	
Magnesium (II) Ion	Quarterly	mg/L	68	
Fluoride, F	Quarterly	mg/L	0.43	
Nitrate as N in water	Quarterly	mg/L	<0.050	
Nitrite as N in water	Quarterly	mg/L	<0.005	
Total Oxidised Nitrogen as N	Quarterly	mg/L	<0.005	
Total Phenolics (as Phenol)	Quarterly	mg/L	0.09	
Total Organic Carbon	Quarterly	mg/L	93	
Benzene	Quarterly	µg/L	1	
Toluene	Quarterly	µg/L	<0.5	
Ethylbenzene	Quarterly	µg/L	<0.5	
m+p-xylene	Quarterly	µg/L	<1	
o-xylene	Quarterly	µg/L	<0.5	
Naphthalene	Quarterly	µg/L	7.4	
TRH C6 - C9	Quarterly	µg/L	<40	
TRH C10 - C14	Quarterly	µg/L	930	
TRH C15 - C28	Quarterly	µg/L	8600	
TRH C29 - C36	Quarterly	µg/L	1000	

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Date Sampled: 24/02/2020	Monitoring Point		
Pollutant	Frequency	Units	7 (LPI)
TRH C37 - C40	Quarterly	µg/L	<200
TRH C6 - C10	Quarterly	µg/L	<50
TRH C6 - C10 less BTEX (F1)	Quarterly	µg/L	<50
TRH >C10 - C16	Quarterly	µg/L	1300
TRH >C10 - C16 less Naphthalene (F2)	Quarterly	µg/L	1300
TRH >C16 - C34	Quarterly	µg/L	9000
TRH >C34 - C40	Quarterly	µg/L	<500
Naphthalene	Quarterly	µg/L	2.6
1-methylnaphthalene	Quarterly	µg/L	0.8
2-methylnaphthalene	Quarterly	µg/L	1.1
Acenaphthylene	Quarterly	µg/L	<0.1
Acenaphthene	Quarterly	µg/L	<0.5
Fluorene	Quarterly	µg/L	<0.4
Phenanthrene	Quarterly	µg/L	0.3
Anthracene	Quarterly	µg/L	<0.1
Fluoranthene	Quarterly	µg/L	<0.1
Pyrene	Quarterly	µg/L	<0.1
Benzo(a)anthracene	Quarterly	µg/L	<0.1
Chrysene	Quarterly	µg/L	<0.1
Benzo(b,j+k)fluoranthene	Quarterly	µg/L	<0.1
Benzo(k)fluoranthene	Quarterly	µg/L	<0.1
Benzo(a)pyrene	Quarterly	µg/L	<0.1
Indeno(1,2,3-c,d)pyrene	Quarterly	µg/L	<0.1
Dibenzo(a,h)anthracene	Quarterly	µg/L	<0.1
Benzo(g,h,i)perylene	Quarterly	µg/L	<0.1
Total +ve PAH's	Quarterly	µg/L	6
HCB	Quarterly	µg/L	<0.1
alpha-BHC	Quarterly	µg/L	<0.1
gamma-BHC	Quarterly	µg/L	<0.1
beta-BHC	Quarterly	µg/L	<0.1
Heptachlor	Quarterly	µg/L	<0.1
delta-BHC	Quarterly	µg/L	<0.1

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Date Sampled: 24/02/2020	Monitoring Point		
Pollutant	Frequency	Units	7 (LPI)
Aldrin	Quarterly	µg/L	<0.1
Heptachlor Epoxide	Quarterly	µg/L	<0.1
gamma-Chlordane	Quarterly	µg/L	<0.1
alpha-Chlordane	Quarterly	µg/L	<0.1
Endosulfan I	Quarterly	µg/L	<0.1
op-DDE	Quarterly	µg/L	<0.1
pp-DDE	Quarterly	µg/L	<0.1
Dieldrin	Quarterly	µg/L	<0.1
Endrin	Quarterly	µg/L	<0.1
Endrin ketone	Quarterly	µg/L	<0.1
op-DDD	Quarterly	µg/L	<0.1
pp-DDD	Quarterly	µg/L	<0.1
Endosulfan II	Quarterly	µg/L	<0.1
op-DDT	Quarterly	µg/L	<0.1
pp-DDT	Quarterly	µg/L	<0.1
Endrin Aldehyde	Quarterly	µg/L	<0.1
Endosulfan Sulphate	Quarterly	µg/L	<0.1
Isodrin	Quarterly	µg/L	<0.1
Methoxychlor	Quarterly	µg/L	<0.1
Mirex	Quarterly	µg/L	<0.1
trans-nonachlor	Quarterly	µg/L	<0.1
Azinphos-methyl (Guthion)	Quarterly	µg/L	<0.2
Bromophos ethyl	Quarterly	µg/L	<0.2
Chlorpyrifos	Quarterly	µg/L	<0.2
Diazinon	Quarterly	µg/L	<0.5
Dichlorovos	Quarterly	µg/L	<0.5
Dimethoate	Quarterly	µg/L	<0.5
Ethion	Quarterly	µg/L	<0.2
Fenitrothion	Quarterly	µg/L	<0.2
Malathion	Quarterly	µg/L	0.2
Methidathion	Quarterly	µg/L	<0.5
Parathion	Quarterly	µg/L	0.4

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Pollutant	Frequency	Units	7 (LPI)
Aluminium	Quarterly	µg/L	<5
Arsenic	Quarterly	µg/L	4
Barium	Quarterly	µg/L	1500
Cadmium	Quarterly	µg/L	<0.1
Chromium	Quarterly	µg/L	11
Hexavalent Chromium, Cr6+	Quarterly	mg/L	<0.004
Cobalt	Quarterly	µg/L	4
Copper	Quarterly	µg/L	<1
Lead	Quarterly	µg/L	<1
Manganese	Quarterly	µg/L	170
Mercury	Quarterly	µg/L	<0.0001
Zinc	Quarterly	µg/L	<5

Monitoring Type: Dust Monitoring (EPL 4627)

Monitoring Point / EPA Identification point (EPL 4627)	Start Date	Finish Date	Dust Deposition g/m2/month	Comment
DG01	17/01/2020	17/02/2020	18.1	
DG02	17/01/2020	17/02/2020	12.6	
DG03	17/01/2020	17/02/2020	24.2	
DG04	17/01/2020	17/02/2020	59.9	