

# Environment Protection Licence Monitoring Data

Project name:	WestConnex – New M5	
Licensee	CPB Contractors Pty Limited	
Monitoring period	August 2019	
Website:	<a href="https://www.westconnex.com.au/NewM5Environment">https://www.westconnex.com.au/NewM5Environment</a>	
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	1/08/2019	50	*3.7	6.5-8.5	7.75	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	1/08/2019	50	*0.98	6.5-8.5	7.5	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	2/08/2019	50	*9	6.5-8.5	8.1	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	2/08/2019	50	*0.98	6.5-8.5	7.4	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	3/08/2019	50	*19	6.5-8.5	8.25	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	4/08/2019	50	*20.9	6.5-8.5	8.25	None visible	None	Each discharge	Compliant
Sediment Basin SPI-2	4/08/2019	50	*30	6.5-8.5	7.9	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	5/08/2019	50	*24	6.5-8.5	8.1	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	5/08/2019	50	*0.92	6.5-8.5	7.3	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	6/08/2019	50	*17	6.5-8.5	8.29	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	7/08/2019	50	*5.36	6.5-8.5	8.07	None visible	None	Each discharge	Compliant

# Environment Protection Licence Monitoring Data

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	9/08/2019	50	*23	6.5-8.5	7.5	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	9/08/2019	50	*0.82	6.5-8.5	7.1	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	10/08/2019	50	*13.6	6.5-8.5	7.52	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	11/08/2019	50	*10.5	6.5-8.5	7.5	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	12/08/2019	50	*14.7	6.5-8.5	7.1	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	12/08/2019	50	*0.82	6.5-8.5	7.1	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	13/08/2019	50	*11.4	6.5-8.5	7.21	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	13/08/2019	50	*1.08	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	14/08/2019	50	*26.8	6.5-8.5	8.25	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	14/08/2019	50	*1.13	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	15/08/2019	50	*13.7	6.5-8.5	7.3	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	15/08/2019	50	*1.10	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	16/08/2019	50	*1.27	6.5-8.5	6.98	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	16/08/2019	50	*1.20	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	17/08/2019	50	*3.9	6.5-8.5	7.77	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	17/08/2019	50	*1.26	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	18/08/2019	50	*7.9	6.5-8.5	8.48	None visible	None	Each discharge	Compliant

# Environment Protection Licence Monitoring Data

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	19/08/2019	50	*4.5	6.5-8.5	8.1	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	20/08/2019	50	*3.7	6.5-8.5	8.1	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	20/08/2019	50	*1.05	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	21/08/2019	50	*3.5	6.5-8.5	8.09	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	22/08/2019	50	*3.8	6.5-8.5	8.1	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	23/08/2019	50	*4	6.5-8.5	8.06	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	24/08/2019	50	*4.1	6.5-8.5	8.09	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	25/08/2019	50	*4.6	6.5-8.5	7.94	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	26/08/2019	50	*10.7	6.5-8.5	7.71	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	27/08/2019	50	*7.3	6.5-8.5	7.66	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	28/08/2019	50	*0.8	6.5-8.5	7.49	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	29/08/2019	50	*1.5	6.5-8.5	7.88	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	30/08/2019	50	*6.9	6.5-8.5	7.43	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	31/08/2019	50	*3.9	6.5-8.5	7.5	None visible	None	Each discharge	Compliant

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

# Environment Protection Licence Monitoring Data

## Monitoring Type: Dust Monitoring (EPL 4627)

Monitoring Point / EPA Identification point (EPL 4627)	Start Date	Finish Date	Dust Deposition g/m2/month	Comment
DG01	12/07/2019	12/08/2019	6.1	
DG02	12/07/2019	12/08/2019	14.9	
DG03	12/07/2019	12/08/2019	5.7	
DG04	12/07/2019	12/08/2019	2.6	

## Monitoring Type: Ground Water Monitoring (EPL 4627)

Date Sampled: 19/08/2019		Monitoring Point					
Pollutant	Units	2 (MW1)	3 (LDS-BH-3071)	4 (LDS-BH-3071a)	5 (LDS-BH-2023)	6 (MW4b)	Frequency (MP 2-6)
Standing Water Level	mBTOC	Destroyed	13.30	2.20	Dry	Blocked	Quarterly
Temperature (field)	deg c	Destroyed	20.6	20.4	Dry	Blocked	Quarterly
pH (field)	pH units	Destroyed	8.09	6.6	Dry	Blocked	Quarterly
Electrical Conductivity (field)	uS/cm	Destroyed	3144	1255	Dry	Blocked	Quarterly
Redox (field)	mV	Destroyed	80.7	73.7	Dry	Blocked	Quarterly
Dissolved Oxygen (field)	mg/L	Destroyed	4.27	2.13	Dry	Blocked	Quarterly
Total Organic Carbon	mg/L	Destroyed	4	2	Dry	Blocked	Quarterly



# Environment Protection Licence Monitoring Data

Date Sampled: 19/08/2019		Monitoring Point					
Pollutant	Units	2 (MW1)	3 (LDS-BH-3071)	4 (LDS-BH-3071a)	5 (LDS-BH-2023)	6 (MW4b)	Frequency (MP 2-6)
Total Dissolved Solids	mg/L	Destroyed	2000	860	Dry	Blocked	Quarterly
Chloride	mg/L	Destroyed	960	52	Dry	Blocked	Quarterly
Sulphate	mg/L	Destroyed	76	170	Dry	Blocked	Quarterly
Sodium (Na)	mg/L	Destroyed	540	55	Dry	Blocked	Quarterly
Potassium (I) Ion	mg/L	Destroyed	16	22	Dry	Blocked	Quarterly
Calcium (II) Ion	mg/L	Destroyed	110	180	Dry	Blocked	Quarterly
Magnesium (II) Ion	mg/L	Destroyed	38	19	Dry	Blocked	Quarterly
Ammonia as N	mg/L	Destroyed	0.69	0.012	Dry	Blocked	Quarterly
Total Alkalinity (Carbonate and Bicarbonate)	mg/L	Destroyed	54	470	Dry	Blocked	Quarterly
pH	pH Units	Destroyed	8.2	7.2	Dry	Blocked	Quarterly

## Monitoring Type: Leachate Analytical Results (EPL 4627)

Date Sampled: 19/08/19		Monitoring Point	
Pollutant	Units	7 (LP1)	Frequency (MP 7)
Temperature (field)	deg c	13.9	Quarterly

# Environment Protection Licence Monitoring Data

Date Sampled: 19/08/19	Monitoring Point		
Pollutant	Units	7 (LP1)	Frequency (MP 7)
pH (field)	pH units	7.17	Quarterly
Electrical Conductivity (field)	uS/cm	4129	Quarterly
Redox (field)	mV	88.1	Quarterly
Dissolved Oxygen (field)	mg/L	0.90	Quarterly
Electrical Conductivity	µS/cm	5100	Quarterly
pH	pH units	7.7	Quarterly
Biological Oxygen Demand	mg/L	19	Quarterly
Total Dissolved Solids	mg/L	2700	Quarterly
Ammonia as N	mg/L	84	Quarterly
Total Alkalinity (Carbonate and Bicarbonate)	mg/L	1200	Quarterly
Chloride	mg/L	820	Quarterly
Sulphate	mg/L	84	Quarterly
Sodium (Na)	mg/L	660	Quarterly
Potassium (I) Ion	mg/L	100	Quarterly
Calcium (II) Ion	mg/L	96	Quarterly
Magnesium (II) Ion	mg/L	59	Quarterly
Fluoride, F	mg/L	0.2	Quarterly

# Environment Protection Licence Monitoring Data

Date Sampled: 19/08/19	Monitoring Point		
Pollutant	Units	7 (LP1)	Frequency (MP 7)
Nitrate as N in water	mg/L	0.15	Quarterly
Nitrite as N in water	mg/L	0.093	Quarterly
Total Phenolics (as Phenol)	mg/L	<0.05	Quarterly
Total Suspended Solids	mg/L	13	Quarterly
Total Organic Carbon	mg/L	52	Quarterly
TRH C6 - C9	µg/L	16	Quarterly
TRH C6 - C10	µg/L	19	Quarterly
Benzene	µg/L	<1	Quarterly
Toluene	µg/L	<1	Quarterly
Ethylbenzene	µg/L	<1	Quarterly
m+p-xylene	µg/L	<2	Quarterly
o-xylene	µg/L	<1	Quarterly
Naphthalene	µg/L	<1	Quarterly
TRH C10 - C14	µg/L	150	Quarterly
TRH C15 - C28	µg/L	390	Quarterly
TRH C29 - C36	µg/L	<100	Quarterly
TRH >C10 - C16	µg/L	210	Quarterly

## Environment Protection Licence Monitoring Data

Date Sampled: 19/08/19	Monitoring Point		
Pollutant	Units	7 (LP1)	Frequency (MP 7)
TRH >C10 - C16 less Naphthalene (F2)	µg/L	210	Quarterly
TRH >C16 - C34	µg/L	340	Quarterly
TRH >C34 - C40	µg/L	<100	Quarterly
Naphthalene	µg/L	<1	Quarterly
Acenaphthylene	µg/L	<1	Quarterly
Acenaphthene	µg/L	<1	Quarterly
Fluorene	µg/L	<1	Quarterly
Phenanthrene	µg/L	<1	Quarterly
Anthracene	µg/L	<1	Quarterly
Fluoranthene	µg/L	<1	Quarterly
Pyrene	µg/L	<1	Quarterly
Benzo(a)anthracene	µg/L	<1	Quarterly
Chrysene	µg/L	<1	Quarterly
Benzo(b,j+k)fluoranthene	µg/L	<2	Quarterly
Benzo(a)pyrene	µg/L	<1	Quarterly
Indeno(1,2,3-c, d)pyrene	µg/L	<1	Quarterly
Dibenzo(a,h)anthracene	µg/L	<1	Quarterly

# Environment Protection Licence Monitoring Data

Date Sampled: 19/08/19	Monitoring Point		
Pollutant	Units	7 (LP1)	Frequency (MP 7)
Benzo(g,h,i)perylene	µg/L	<1	Quarterly
Benzo(a)pyrene TEQ	µg/L	<5	Quarterly
Total +ve PAH's	µg/L	NIL (+)VE	Quarterly
HCB	µg/L	<0.2	Quarterly
alpha-BHC	µg/L	<0.2	Quarterly
gamma-BHC	µg/L	<0.2	Quarterly
beta-BHC	µg/L	<0.2	Quarterly
Heptachlor	µg/L	<0.2	Quarterly
delta-BHC	µg/L	<0.2	Quarterly
Aldrin	µg/L	<0.2	Quarterly
Heptachlor Epoxide	µg/L	<0.2	Quarterly
gamma-Chlordane	µg/L	<0.2	Quarterly
alpha-Chlordane	µg/L	<0.2	Quarterly
Endosulfan I	µg/L	<0.2	Quarterly
pp-DDE	µg/L	<0.2	Quarterly
Dieldrin	µg/L	<0.2	Quarterly
Endrin	µg/L	<0.2	Quarterly

# Environment Protection Licence Monitoring Data






Date Sampled: 19/08/19	Monitoring Point		
Pollutant	Units	7 (LP1)	Frequency (MP 7)
pp-DDD	µg/L	<0.2	Quarterly
Endosulfan II	µg/L	<0.2	Quarterly
pp-DDT	µg/L	<0.2	Quarterly
Endrin Aldehyde	µg/L	<0.2	Quarterly
Endosulfan Sulphate	µg/L	<0.2	Quarterly
Methoxychlor	µg/L	<0.2	Quarterly
Azinphos-methyl (Guthion)	µg/L	<0.2	Quarterly
Bromophos ethyl	µg/L	<0.2	Quarterly
Chlorpyriphos	µg/L	<0.2	Quarterly
Chlorpyriphos-methyl	µg/L	<0.2	Quarterly
Diazinon	mg/L	<0.2	Quarterly
Dichlorovos	µg/L	<0.2	Quarterly
Dimethoate	µg/L	<0.4	Quarterly
Ethion	µg/L	<0.2	Quarterly
Fenitrothion	µg/L	<0.2	Quarterly
Malathion	µg/L	<0.2	Quarterly
Parathion	µg/L	<0.2	Quarterly

## Environment Protection Licence Monitoring Data

Date Sampled: 19/08/19	Monitoring Point		
Pollutant	Units	7 (LP1)	Frequency (MP 7)
Ronnel	µg/L	<0.2	Quarterly
Aluminium	µg/L	40	Quarterly
Arsenic	µg/L	2	Quarterly
Barium	µg/L	740	Quarterly
Cadmium	µg/L	0.2	Quarterly
Chromium	µg/L	2	Quarterly
Hexavalent Chromium, Cr6+	mg/L	<0.005	Quarterly
Cobalt	µg/L	3	Quarterly
Copper	µg/L	110	Quarterly
Lead	µg/L	<1	Quarterly
Manganese	µg/L	120	Quarterly
Mercury	µg/L	<0.05	Quarterly
Zinc	µg/L	89	Quarterly





-  Discharge Point
-  Railway Station
-  ALF (subject to EPL No. 4627)
-  Deed Boundary
-  Premised Area

Rev	Description	Date	Approved
W	ALF Boundary and Premise Area modification	18/06/2019	
U	Premised Area boundary modification	17/01/2019	
T	Added Discharge Point	08/01/2019	
S	Modified premised area boundary	13/11/2018	
R	Premised Area boundary modification	04/10/2018	
Q	ALF and Premised Area boundary modification	04/09/2018	
P	Modified Premise Area Boundary	12/07/2018	

Scales

0 1,200 m

1:36000


Imagery © Nearmap 2018

Client



Status			
For Information Only - NOT FOR CONSTRUCTION			
Original Size	A3	Drawn	PB
Coordinate System	MGA ZONE 56	Requested by	CG
Height Datum	AHD	Date Printed	18/06/2019
Filename:	Premise_Overview_revW.mxd		

WestConnex New M5



**WESTCONNEX New M5**

**Premise Map Overview**

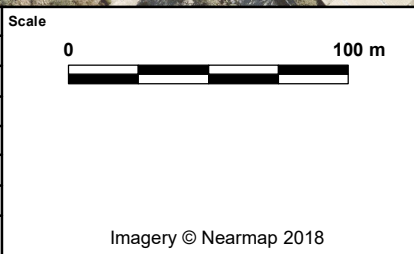
DOCUMENT NUMBER  
M5N-ES-MAP-PWD-0001-21





- ★ Discharge Point
- ▲ Dust Gauge
- Leachate Monitoring Location
- ⊕ Groundwater Monitoring Location
- ▨ ALF (subject to EPL No. 4627)
- ▭ Deed Boundary
- ▭ Premised Area

Rev	Description	Date	Approved
Q	Premised Area boundary modification	17/01/2019	
P	Added Discharge Point	08/01/2018	
O	Modified premised area boundary	04/10/2018	
N	ALF Boundary and Premise Area modification	04/09/2018	
M	ALF Boundary and Premise Area modification	03/07/2018	
L	Modified premised area boundary	14/03/2018	
K	ALF and Premised Area boundary modification	06/12/2017	



Client

Status  
For Information Only - NOT FOR CONSTRUCTION

Original Size	A3	Drawn	PB
Coordinate System	MGA ZONE 56	Requested by	CG
Height Datum	AHD	Date Printed	17/01/2019
Filename:	Premise_SPI_RevQ.mxd		

WestConnex New M5

**WESTCONNEX New M5**

**Premise Map**  
**St Peters Interchange**

DOCUMENT NUMBER  
M5N-ES-MAP-PWD-0001-21