

# Environmental Protection Licence Monitoring Data



Project name:	WestConnex – New M5	
Licensee	CPB Contractors Pty Limited	
Monitoring period	February 2017	
Website:	<a href="#">WestConnex – Explore the Route – New M5 (Beverly Hills to St Peters) – New M5 Resources</a>	
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-2	1/02/2017	50	10	6.5-8.5	7.5	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	1/02/2017	50	<5	6.5-8.5	7	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	2/02/2017	50	<5	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	2/02/2017	50	<5	6.5-8.5	6.6	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	3/02/2017	50	14	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	6/02/2017	50	22	6.5-8.5	7.4	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	6/02/2017	50	14	6.5-8.5	7.1	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	7/02/2017	50	<5	6.5-8.5	7.8	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	7/02/2017	50	17	6.5-8.5	7.88	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	8/02/2017	50	15	6.5-8.5	8	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	8/02/2017	50	8	6.5-8.5	7.3	None visible	None	Each discharge	Compliant

February 2017 Monitoring data for EPLs 20772 and 4627

# Environmental 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	9/02/2017	50	<5	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	9/02/2017	50	14	6.5-8.5	7.67	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	10/02/2017	50	19	6.5-8.5	7.1	None visible	None	Each discharge	Compliant
Water Treatment Plant KGD-1	10/02/2017	50	<5	6.5-8.5	7.81	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	11/02/2017	50	26	6.5-8.5	7.32	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	13/02/2017	50	20	6.5-8.5	7.26	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	13/02/2017	50	6	6.5-8.5	7	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	13/02/2017	50	25	6.5-8.5	7.0	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	13/02/2017	50	30	6.5-8.5	6.8	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	14/02/2017	50	<5	6.5-8.5	7.6	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	14/02/2017	50	9	6.5-8.5	7.7	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	15/02/2017	50	<5	6.5-8.5	7.97	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	15/02/2017	50	13	6.5-8.5	6.5	None visible	None	Each discharge	Compliant
Sediment Basin WSW-1	15/02/2017	50	18	6.5-8.5	7.24	None visible	None	Each discharge	Compliant
Water Treatment Plant KGD-1	15/02/2017	50	8	6.5-8.5	7.7	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	15/02/2017	50	22	6.5-8.5	6.7	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	16/02/2017	50	6	6.5-8.5	7.67	None visible	None	Each discharge	Compliant

# Environmental 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	16/02/2017	50	15	6.5-8.5	8	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	17/02/2017	50	<5	6.5-8.5	7.41	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	17/02/2017	50	8	6.5-8.5	8	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	17/02/2017	50	24	6.5-8.5	6.9	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	18/02/2017	50	20	6.5-8.5	6.7	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	18/02/2017	50	<5	6.5-8.5	7.3	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	18/02/2017	50	8	6.5-8.5	7.16	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	20/02/2017	50	<5	6.5-8.5	7.31	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	20/02/2017	50	30	6.5-8.5	6.65	None visible	None	Each discharge	Compliant
Water Treatment Plant KGD-1	21/02/2017	50	<5	6.5-8.5	7.4	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	21/02/2017	50	<5	6.5-8.5	7.44	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	22/02/2017	50	9	6.5-8.5	7.04	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	22/02/2017	50	<5	6.5-8.5	7.59	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	23/02/2017	50	8	6.5-8.5	6.93	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	23/02/2017	50	<5	6.5-8.5	7.44	None visible	None	Each discharge	Compliant
Sediment Basin SPI-1	24/02/2017	50	25	6.5-8.5	7.2	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	24/02/2017	50	<5	6.5-8.5	7.57	None visible	None	Each discharge	Compliant

## Environmental 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	25/02/2017	50	<5	6.5-8.5	6.65	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	27/02/2017	50	<5	6.5-8.5	7.26	None visible	None	Each discharge	Compliant
Water Treatment Plant KGD-1	27/02/2017	50	15	6.5-8.5	7.66	None visible	None	Each discharge	Compliant
Water Treatment Plant BED-1	28/02/2017	50	6	6.5-8.5	7.49	None visible	None	Each discharge	Compliant
Sediment Basin WSW-1	28/02/2017	50	23	6.5-8.5	7.69	None visible	None	Each discharge	Compliant
Water Treatment Plant ARN-2	28/02/2017	50	6	6.5-8.5	7.12	None visible	None	Each discharge	Compliant

### Monitoring Type: Ground Water Monitoring EPL 4627

Date Sampled: 23/02/2017	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	12.08	11.99	2.24	13.49	14.8	Quarterly
Temperature (field)	21.8	21.7	23.7	23.9	22.8	Quarterly
pH (field)	6.39	6.37	5.82	6.58	6.37	Quarterly
Electrical Conductivity (field)	2109	3960	1305	9340	4850	Quarterly
Redox (field)	59	-92	108	-59	90	Quarterly
Dissolved Oxygen (field)	0.70	1.07	0.52	1.02	1.27	Quarterly
Total Organic Carbon	6	17	14	70	12	Quarterly
Total Dissolved Solids	1300	2300	960	5800	3000	Quarterly
Chloride	1200	1100	38	3000	1200	Quarterly
Sulphate	150	68	160	210	450	Quarterly

## Environmental Protection Licence Monitoring Data

Date Sampled: 23/02/2017	Monitoring Point					
Pollutant	2 (MW1)	3 (LDS-BH-3071)	4 (LDS-BH-3071a)	5 (LDS-BH-2023)	6 (MW4b)	Frequency (MP 2-6)
Sodium (Na)	430	780	67	2000	1100	Quarterly
Potassium (I) Ion	9.5	27	20	27	12	Quarterly
Calcium (II) Ion	45	100	190	100	29	Quarterly
Magnesium (II) Ion	27	2.2	21	160	61	Quarterly
Ammonia as N	0.01	3	0.43	1	0.54	Quarterly
Total Alkalinity (Carbonate and Bicarbonate)	150	87	510	320	150	Quarterly
pH	7.5	9.4	6.8	7.6	6.8	Quarterly

Date Sampled: 23/02/2017	Monitoring Point	
Pollutant	7 (LP1)	Frequency (MP 7)
Temperature (field)	28.1	Quarterly
pH (field)	6.79	Quarterly
Electrical Conductivity (field)	5820	Quarterly
Redox (field)	-59	Quarterly
Dissolved Oxygen (field)	1.09	Quarterly
Electrical Conductivity	5600	Quarterly
pH	8.0	Quarterly
Biological Oxygen Demand	75	Quarterly
Total Dissolved Solids	2700	Quarterly
Ammonia as N	130	Quarterly
Total Alkalinity (Carbonate and Bicarbonate)	2300	Quarterly
Chloride	780	Quarterly
Sulphate	19	Quarterly

## Environmental Protection Licence Monitoring Data

Date Sampled: 23/02/2017	Monitoring Point	
Pollutant	7 (LP1)	Frequency (MP 7)
Sodium (Na)	850	Quarterly
Potassium (I) Ion	160	Quarterly
Calcium (II) Ion	160	Quarterly
Magnesium (II) Ion	90	Quarterly
Fluoride, F	0.4	Quarterly
Nitrate as N in water	<0.005	Quarterly
Nitrite as N in water	<0.005	Quarterly
Total Phenolics (as Phenol)	<0.05	Quarterly
Total Suspended Solids	200	Quarterly
Total Organic Carbon	2700	Quarterly
TRH C6 - C9	<10	Quarterly
TRH C6 - C10	18	Quarterly
Benzene	<1	Quarterly
Toluene	<1	Quarterly
Ethylbenzene	<1	Quarterly
m+p-xylene	<2	Quarterly
o-xylene	<1	Quarterly
TRH C10 - C14	190	Quarterly
TRH C15 - C28	920	Quarterly
TRH C29 - C36	<100	Quarterly
TRH >C10 - C16	320	Quarterly
TRH >C10 - C16 less Naphthalene (F2)	320	Quarterly
TRH >C16 - C34	790	Quarterly
TRH >C34 - C40	<100	Quarterly

# Environmental Protection Licence Monitoring Data



Date Sampled: 23/02/2017	Monitoring Point	
Pollutant	7 (LP1)	Frequency (MP 7)
Naphthalene	2	Quarterly
Acenaphthylene	<1	Quarterly
Acenaphthene	<1	Quarterly
Fluorene	<1	Quarterly
Phenanthrene	<1	Quarterly
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	1.8	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

# Environmental Protection Licence Monitoring Data

Date Sampled: 23/02/2017	Monitoring Point	
Pollutant	7 (LP1)	Frequency (MP 7)
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
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
Chlorpyriphos	<0.2	Quarterly
Chlorpyriphos-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

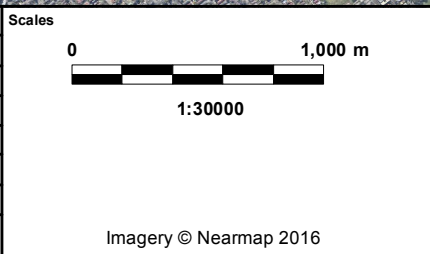


# Environmental Protection Licence Monitoring Data

Date Sampled: 23/02/2017	Monitoring Point	
	7 (LP1)	Frequency (MP 7)
Parathion	<0.2	Quarterly
Ronnel	<0.2	Quarterly
Aluminium-Total	<10	Quarterly
Arsenic-Total	5	Quarterly
Barium-Total	2000	Quarterly
Cadmium-Total	0.1	Quarterly
Chromium-Total	6	Quarterly
Hexavalent Chromium, Cr6+	<0.05	Quarterly
Cobalt-Total	4	Quarterly
Copper-Total	34	Quarterly
Lead-Total	<1	Quarterly
Manganese-Total	230	Quarterly
Mercury-Total	<0.05	Quarterly
Zinc-Total	66	Quarterly



Rev	Description	Date	Approved
E	ALF boundary modification	01/02/2017	
D	Modified Premise Area Boundary and Discharge Point	20/12/2016	
C	Modified Premise Area Boundary	15/11/2016	
B	Modified Premise Area Boundary	11/05/2016	
A	Preliminary Issue	18/03/2016	



Client

Status

**For Information Only - NOT FOR CONSTRUCTION**

Original Size	A3	Drawn	PB
Coordinate System	MGA ZONE 56	Requested by	DL
Height Datum	AHD	Date Printed	01-Feb-17
Filename:	Premise_Overview_rev6.mxd		

WestConnex New M5

**WESTCONNEX New M5**

Premise Map Overview

DOCUMENT NUMBER

M5N-ES-MAP-PWD-0001-08

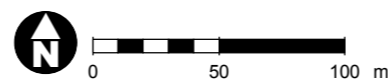


AECOM GIS Printed Date: 1/03/2016 \\nasys11p0011\Projects\60327128\4. Tech work area\4.99 GIS\02\_Maps\AECOM\G201\_01\_60327128\_A3L\_WCX\_Alexandria\_Landfill\_EPL4627\_Enviro\_Monit\_Locations\_20160301.mxd

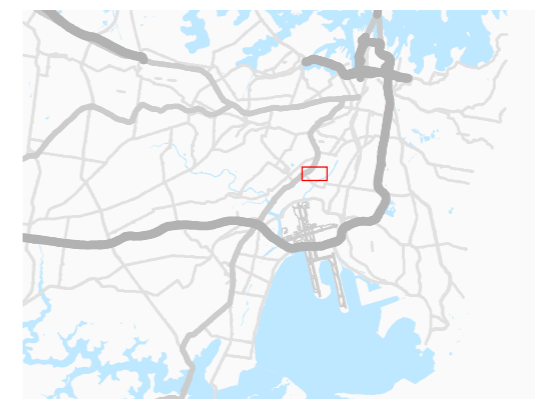
- KEY**
- ⊕ Groundwater Monitoring Location
  - ▲ Dust Monitoring Location
  - ⊙ Leachate Monitoring Locations: LP1 (leachate sump)

**WestConnex**  
Building for the future

**AECOM**



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CONFIDENTIAL GIS MAP

SCALE 1:3,000 A3  
SHEET 1 of 1 COORDINATE SYSTEM GDA 1994 MGA Zone 56

TITLE **WestConnex Motorway Alexandria Landfill, EPL4627: Environmental Monitoring Locations**

PROJECT  
**WESTCONNEX STAGE 2 TA**

CLIENT  
**SYDNEY MOTORWAY CORPORATION**

DRAWN	PROJECT #	MAP #	REV	Project
DN	60327128			
CHECK	DATE			
	21/09/16	G201 01 60327128		