

June to August 2022

Discharge Location / Description	Site Water Source ID	Date of Discharge	pH (unit)	Oil and Grease (Visibility)	Turbidity (NTU)
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	Cammeray Golf Course Dam	30/6/2022	8.08	No	1.1
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	Cammeray Golf Course Dam	1/7/2022	8.27	No	1.0
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	Cammeray Golf Course Dam	7/7/2022	7.8	No	19.5
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	Cammeray Golf Course Dam	9/7/2022	7.82	No	11.1
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	Cammeray Golf Course Dam	11/7/2022	8.21	No	18.1
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	Cammeray Golf Course Dam	26/7/2022	6.97	No	4.3
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	Cammeray Golf Course Dam	26/7/2022	8.13	No	34.7
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	Cammeray Golf Course Dam	10/8/2022	8.13	No	34.7

September 2022

Pollutant	UOM	B3	B1	B3	B1	B3
		6/9 ²	26/09 ²	26/09 ²	29/09 ²	29/09 ²
Anthracene	µg/L	<1	<1	<1	<1	<1
Arsenic (total)	µg/L	<1	<1	<1	<1	1
Benzo(a)pyrene	µg/L	<5	<1	<1	<5	<5
Cadmium (total)	µg/L	<0.1	0.5	0.3	0.1	0.3
Chromium (total)	µg/L	1	<1	4	<1	3
Copper (total)	µg/L	2	1	5	2	13
Dieldrin	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2
Fluoranthene	µg/L	<1	<1	<1	<1	<1
Lead (total)	µg/L	<1	2	3	1	5
Mercury (total)	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	µg/L	<1	<1	<1	<1	<1
Nickel (total)	µg/L	2	6	<1	<1	3
Oil and Grease	n/a	NV	NV	NV	NV	NV
pH	pH	6.70	8.46	7.60	8.03	7.73
Phenanthrene	µg/L	<1	<1	<1	<1	<1
Turbidity	NTU	21.6	14.2	12.0	11.0	34
Zinc (total)	µg/L	2	2	5	<1	19
Aluminum (total)	µg/L	Not requested	3800	340	850	1000

² Sample date

NV = not visible

B1 water sent to discharge points 3 or 5 (refer to EPL Premise Mapping)

B3 water sent to same stormwater line as discharge point 1 (refer to EPL Premise Mapping)

October 2022

		B1	B1	B1	B1	B1	B3	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B3	B1	B3	B3
Pollutant	UOM	4/10 ²	5/10 ²	6/10 ²	7/10 ²	8/10 ²	8/10 ²	8/10 ²	9/10 ²	10/10 ²	12/10 ²	13/10 ²	15/10 ²	17/10 ²	18/10 ²	20/10 ²	21/10 ²	24/10 ²	25/10 ²	27/10 ²	27/10 ²	28/10 ²	28/10 ²	31/10 ²
Anthracene	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Arsenic	µg/L	1	1	<1	<1	<1	2	1	2	<1	2	2	4	3	1	<1	<1	<1 ⁵	<1	<1	1	<1 ⁵	<1 ⁵	<1 ⁵
Benzo(a)pyrene	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.5	<0.1	0.1	0.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ⁵	<0.1 ⁵	<0.1 ⁵
Chromium	µg/L	3	3	1	2	2	8	3	2	2	4	2	1	6	3	<1	<1	5 ⁵	8	1	11	<1 ⁵	6 ⁵	<1 ⁵
Copper	µg/L	5	4	<1	2	2	9	4	5	3	8	8	13	15	5	2	2	3	5	2	7	1 ⁵	5 ⁵	3
Dieldrin	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fluoranthene	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead	µg/L	1	4	2	4	2	5	6	8	3	7	4	9	42	3	<1	1	5	2	<1	4	<1 ⁵	<1 ⁵	<1 ⁵
Mercury	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	0.09	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05 ⁵	<0.05 ⁵	<0.05 ⁵
Naphthalene	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Nickel	µg/L	<1	<1	2	<1	<1	2	<1	<1	<1	2	<1	2	1	3	4	3	<1	1	3	1	2 ⁵	1 ⁵	2
Oil and Grease	n/a	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
pH	pH	8.15	8.20	8.09	7.82	7.65	7.51	8.09	7.86	8.20	8.24	8.42	8.31	9.29*	7.51	7.37	7.70	7.99	8.19	6.92	7.30	7.89	7.76	8.27
Phenanthrene	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Turbidity	NTU	6.3	41	17	<5	41	28	8.1	30	<5	29	26	29	180	<5	<5	<5	40	<5	1.3	8.6	3	6.9	9.6
Zinc	µg/L	3	6	4	5	<1	3	4	4	2	12	9	2	26	7	5	8	8	<1	5	5	2 ⁵	1 ⁵	7
Aluminum	µg/L	490	580	4300	930	320	1800	770	930	930	820	270	400	2300	4,700	460	210	2,300	3,100	550	1,300	30 ⁵	40 ⁵	20 ⁵

² Sample date

⁵ Filtered samples analyzed by the lab for dissolved metals

* Denotes an intense rainfall event

NV = not visible

B1 water sent to discharge points 3 or 5 (refer to EPL Premise Mapping)

B3 water sent to same stormwater line as discharge point 1 (refer to EPL Premise Mapping)

November 2022

		B1	B1	B1
Pollutant	UOM	2/11 ²	3/11 ²	14/11 ²
Anthracene	µg/L	<1	<1	<1
Arsenic (dissolved)	µg/L	<1	<1	<1
Benzo(a)pyrene	µg/L	<1	<1	<1
Cadmium (dissolved)	µg/L	<0.1	<0.1	<0.1
Chromium (dissolved)	µg/L	<1	<1	4
Copper (dissolved)	µg/L	2	3	6
Dieldrin	µg/L	<0.2	<0.2	<0.2
Fluoranthene	µg/L	<1	<1	<1
Lead	µg/L	<1	2	<1
Mercury	µg/L	<0.05	<0.05	<0.05
Naphthalene	µg/L	<1	<1	<1
Nickel (dissolved)	µg/L	2	3	1
Oil and Grease	n/a	NV	NV	NV
pH	pH	8.2	8.11	8.14
Phenanthrene	µg/L	<1	<1	<1
Turbidity	NTU	7.7	7.5	32
Zinc (dissolved)	µg/L	<1	7	6
Aluminum (dissolved)	µg/L	100	20	80

² Sample date

NV = not visible

B1 water sent to discharge points 3 or 5 (refer to EPL Premise Mapping)

November & December 2022

Discharge Location / Description	Site Water Source ID	Date of Discharge	pH (unit)	Oil and Grease (Visibility)	Turbidity (NTU)
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	15/11/2022	8.27	No	12.8
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	18/11/2022	8.40	No	5.6
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	5/12/2023	8.27	No	21.3
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	7/12/2022	8.32	No	38.7
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	14/12/2022	7.92	No	15.9

January 2023

Discharge Location / Description	Site Water Source ID	Date of Discharge	pH (unit)	Oil and Grease (Visibility)	Turbidity (NTU)
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	3/1/2023	7.20	No	12.9
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	6/1/2023	7.39	No	38.2
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	9/1/2023	6.93	No	3.5
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	12/1/2023	7.29	No	3.1
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	20/1/2023	8.29	No	8.8
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	21/1/2023	6.68	No	15.0
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	25/01/2023	7.25	No	5.0
Stormwater pit at Cammeray Support Site. X – 334713.549, Y – 6255800.673	B1 (Basin 1)	31/1/2023	7.54	No	11.8

February 2023

Pollutant	UOM	B1	B1	B1	B1	WHA03	B1	B1	B1	B1	WHA03	B1	WHA03
		7/2 ²	8/2 ²	9/2 ²	10/2 ²	10/2 ²	13/2 ²	17/2 ²	20/2 ²	22/2 ²	22/2 ²	24/2 ²	24/2 ²
Aluminum (dissolved)	µg/L	30	40	220	90	160	60	80	80	130	60	110	70
Aluminum ⁶ (total)	µg/L	600	200	2,600	1,700	1,900	190	500	200	1,200	1,100	900	630
Cadmium (dissolved)	µg/L	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Copper (dissolved)	µg/L	<1	<1	<1	2	<1	1	2	3	<1	<1	1	1
Lead (dissolved)	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Oil and Grease	n/a	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
pH	pH	7.50	8.30	8.11	7.32	7.48	8.22	7.92	8.11	7.45	7.59	7.28	7.33
Turbidity	NTU	43.9	14.9	87.7	14.5	41.0	10.9	32.8	24.9	27.3	37.1	12.3	26.6
Zinc (dissolved)	µg/L	19	<1	<1	6	<1	2	<1	<1	<1	<1	<1	<1

² Sample date

NV = not visible

B1 water sent to discharge points 3 or 5 (refer to EPL Premise Mapping)

WHA03 (water holding area only) water sent to B1 (Basin 1)

March 2023

Pollutant	UOM	B1	B1	WHA03	B1	WHA03
		1/3 ²	4/3 ²	4/3 ²	6/3 ²	6/3 ²
Aluminum (dissolved)	µg/L	50	150	220	50	240
Aluminum ⁶ (total)	µg/L	230	350	400	280	320
Cadmium (dissolved)	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Copper (dissolved)	µg/L	1	3	1	2	2
Lead (dissolved)	µg/L	<1	<1	<1	<1	<1
Oil and Grease	n/a	NV	NV	NV	NV	NV
pH	pH	8.14	8.2	8.25	8.05	7.92
Turbidity	NTU	32.1	29.6	31.6	24.0	21.9
Zinc (dissolved)	µg/L	<1	<1	<1	<1	<1

² Sample date

NV = not visible

B1 water sent to discharge points 3 or 5 (refer to EPL Premise Mapping)

WHA03 (water holding area only) water sent to B1 (Basin 1)

April 2023

		WHA03	B1	WHA03	B1	B1
Pollutant	UOM	5/4 ²	6/4 ²	11/4 ²	12/4 ²	20/4 ²
Aluminum (dissolved)	µg/L	80	140	30	260	90
Aluminum ⁶ (total)	µg/L	480	490	400	680	1,200
Cadmium (dissolved)	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Copper (dissolved)	µg/L	2	2	1	1	1
Lead (dissolved)	µg/L	<1	<1	<1	<1	<1
Oil and Grease	n/a	NV	NV	NV	NV	NV
pH	pH	7.77	7.79	6.68	8.04	6.77
Turbidity	NTU	42.0	39.1	25.9	6.2	19.8
Zinc (dissolved)	µg/L	1	9	4	2	16

² Sample date

NV = not visible

B1 water sent to discharge points 3 or 5 (refer to EPL Premise Mapping)

WHA03 (water holding area only) water sent to B1 (Basin 1)

April 2023

			B1
Pollutant	ANZG ¹	UOM	26/7 ²
Aluminum (dissolved)	55	µg/L	840
Aluminum ⁶ (total)	N/A ⁶	µg/L	1,400
Cadmium (dissolved)	0.2	µg/L	<0.1
Copper (dissolved)	1.4	µg/L	3
Lead (dissolved)	3.4	µg/L	<1
Oil and Grease	Visible ⁴	n/a	NV
pH	6.5-8.5 ⁴	pH	7.82
Turbidity	6-50 ³	NTU	34.8
Zinc (dissolved)	8.0	µg/L	3

² Sample date

NV = not visible

B1 water sent to discharge points 3 or 5 (refer to EPL Premise Mapping)

August 2023

			B1	B1 Forebay	B1
Pollutant	ANZG ¹	UOM	12/8 ²	21/8 ²	21/8 ²
Aluminum (dissolved)	55	µg/L	350	120	230
Aluminum ⁶ (total)	N/A ⁶	µg/L	990	210	460
Cadmium (dissolved)	0.2	µg/L	<0.1	<0.1	<0.1
Copper (dissolved)	1.4	µg/L	3	6	6
Lead (dissolved)	3.4	µg/L	<1	<1	<1
Oil and Grease	Visible ⁴	n/a	NV	NV	NV
pH	6.5-8.5 ⁴	pH	8.35	7.47	6.71
Turbidity	6-50 ³	NTU	12.4	4.4	1.2
Zinc (dissolved)	8.0	µg/L	2	15	4

² Sample date

NV = not visible

B1 water sent to discharge points 3 or 5 (refer to EPL Premise Mapping)

December 2023

			WTP	WTP	WTP	WTP	WTP
Pollutant	ANZG ¹	UOM	5/12 ²	20/12 ²	27/12 ²	28/12 ²	29/12 ²
Aluminum (dissolved)	55	µg/L	30	40	60	70	30
Aluminum ⁶ (total)	N/A ⁶	µg/L	1,900	1,500	620	420	250
Cadmium (dissolved)	0.2	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Copper (dissolved)	1.4	µg/L	4	3	3	4	3
Lead (dissolved)	3.4	µg/L	<1	<1	<1	<1	<1
Oil and Grease	Visible ⁴	n/a	NV	NV	NV	NV	NV
pH	6.5-8.5 ⁴	pH	7.28	7.53	7.36	7.65	7.26
Turbidity	6-50 ³	NTU	0	0	0	0	0
Zinc (dissolved)	8.0	µg/L	24	3	5	10	12

² Sample date

NV = not visible

WTP water sent to discharge points 5 (refer to EPL Premise Mapping)

CPB DTI Joint Venture | The Warringah Freeway Upgrade Project

Level 4 & 5, 116 Miller Street, North Sydney, NSW 2060, Australia

January 2024

			WTP	WTP	WTP
Pollutant	ANZG ¹	UOM	15/1 ²	18/1 ²	29/1 ²
Aluminum (dissolved)	55	µg/L	230	90	30
Aluminum ⁶ (total)	N/A ⁶	µg/L	860	1,500	1,800
Cadmium (dissolved)	0.2	µg/L	<0.1	<0.1	<0.1
Copper (dissolved)	1.4	µg/L	1	3	6
Lead (dissolved)	3.4	µg/L	<1	<1	<1
Oil and Grease	Visible ⁴	n/a	NV	NV	NV
pH (field)	6.5-8.5 ⁴	pH	8.23	7.62	7.5
Turbidity (field)	6-50 ³	NTU	11.29	0	18
Zinc (dissolved)	8.0	µg/L	2	2	6

² Sample date

NV = not visible

WTP water sent to discharge points 5 (refer to EPL Premise Mapping)

February 2024

			WTP	WTP	WTP
Pollutant	ANZG ¹	UOM	6/2 ²	13/2 ²	23/2 ²
Aluminum (dissolved)	55	µg/L	170	320	720
Aluminum ⁶ (total)	N/A ⁶	µg/L	2,800	920	1,400
Cadmium (dissolved)	0.2	µg/L	<0.1	<0.1	<0.1
Copper (dissolved)	1.4	µg/L	7	4	8
Lead (dissolved)	3.4	µg/L	<1	<1	<1
Oil and Grease	Visible ⁴	n/a	NV	NV	NV
pH (field)	6.5-8.5 ⁴	pH	7.7	7.9	7.0
Turbidity (field)	6-50 ³	NTU	49.6	77	16.1
Zinc (dissolved)	8.0	µg/L	92	15	5

² Sample date

NV = not visible

WTP water sent to discharge points 5 (refer to EPL Premise Mapping)

March 2024

			WTP
Pollutant	ANZG ¹	UOM	22/3 ²
Aluminum (dissolved)	55	µg/L	230
Aluminum ⁶ (total)	N/A ⁶	µg/L	830
Cadmium (dissolved)	0.2	µg/L	<0.1
Copper (dissolved)	1.4	µg/L	3
Lead (dissolved)	3.4	µg/L	<1
Oil and Grease	Visible ⁴	n/a	NV
pH (field)	6.5-8.5 ⁴	pH	8.18
Turbidity (field)	6-50 ³	NTU	34
Zinc (dissolved)	8.0	µg/L	2

² Sample date

NV = not visible

WTP water sent to discharge points 5 (refer to EPL Premise Mapping)

April 2024

			WTP	WTP
Pollutant	ANZG ¹	UOM	2/4 ²	30/4 ²
Aluminum (dissolved)	55	µg/L	70	140
Aluminum ⁶ (total)	N/A ⁶	µg/L	1,600	500
Cadmium (dissolved)	0.2	µg/L	<0.1	<0.1
Copper (dissolved)	1.4	µg/L	3	3
Lead (dissolved)	3.4	µg/L	<1	<1
Oil and Grease	Visible ⁴	n/a	NV	NV
pH (field)	6.5-8.5 ⁴	pH	7.8	6.7
Turbidity (field)	6-50 ³	NTU	6.4	25.7
Zinc (dissolved)	8.0	µg/L	5	6

² Sample date

NV = not visible

WTP water sent to discharge points 5 (refer to EPL Premise Mapping)