

Surface Water Results

August 2025



City of Newcastle - Summerhill Waste Management Centre

141 Minmi Road, Wallsend, NSW

Environment Protection License 5897 - Condition M2 – Special Frequency 1 (Daily during discharge)

Monthly rainfall = 272.2mm

Purpose of Sampling		SW55, SW57, SW58a, SW59	SW55, SW57, SW58a & SW59	SW55, SW56, SW57, SW58a & SW59
CN ID	EPL ID	1/08/2025	2/08/2025	3/08/2025
Parameter:		pH (pH unit)		
SW55	55	7.61	7.43	7.43
SW56	56	N/A	N/A	7.26
SW57	57	7.38	7.40	7.30
SW58a	61	7.50	7.40	7.13
SW59	66	7.57	7.35	7.04
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	490	411	221
SW56	56	N/A	N/A	343
SW57	57	408	299	154
SW58a	61	507	369	255
SW59	66	487	383	179
Parameter:		Suspended Solids (mg/L)		
SW55	55	97	126	210
SW56	56	N/A	N/A	1350
SW57	57	36	78	79
SW58a	61	290	357	668
SW59	66	599	495	840
Parameter:		Ammonia (mg/L)		
SW55	55	4.95	4.06	0.94
SW56	56	N/A	N/A	1.93
SW57	57	<0.05	0.06	0.11
SW58a	61	1.98	2.07	0.86
SW59	66	<0.05	<0.05	<0.05
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	9	14	3
SW56	56	N/A	N/A	11
SW57	57	2	2	2
SW58a	61	5	7	5
SW59	66	4	4	2

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Purpose of Sampling		SW55, SW56, SW57, SW58a & SW59	SW55, SW57, SW58a & SW59	SW55, SW56, SW57, SW58a & SW59
CN ID	EPL ID	4/08/2025	5/08/2025	6/08/2025
Parameter:		pH (pH unit)		
SW55	55	7.45	7.42	7.35
SW56	56	7.44	N/A	7.41
SW57	57	7.21	7.23	7.34
SW58a	61	7.34	7.13	7.55
SW59	66	7.28	7.38	7.35
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	255	286	283
SW56	56	347	N/A	404
SW57	57	304	373	525
SW58a	61	326	416	530
SW59	66	232	276	304
Parameter:		Suspended Solids (mg/L)		
SW55	55	132	98	72
SW56	56	893	N/A	667
SW57	57	75	34	38
SW58a	61	632	184	541
SW59	66	468	276	371
Parameter:		Ammonia (mg/L)		
SW55	55	0.86	0.87	1.00
SW56	56	1.87	N/A	2.78
SW57	57	0.17	0.13	0.14
SW58a	61	1.33	0.82	7.14
SW59	66	<0.05	<0.05	<0.05
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	4	8	<2
SW56	56	8	N/A	6
SW57	57	2	<2	2
SW58a	61	6	<2	4
SW59	66	<2	<2	<2

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Purpose of Sampling		SW55,SW56, SW57, SW58a & SW59	SW55,SW56, SW57, SW58a & SW59	SW55,SW56, SW57, SW58a & SW59
CN ID	EPL ID	7/08/2025	8/08/2025	9/08/2025
Parameter:		pH (pH unit)		
SW55	55	7.48	7.32	7.29
SW56	56	7.41	7.43	7.35
SW57	57	7.35	7.48	7.60
SW58a	61	7.70	7.38	7.39
SW59	66	7.52	7.44	7.41
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	295	289	300
SW56	56	364	372	376
SW57	57	578	540	319
SW58a	61	848	451	376
SW59	66	324	329	338
Parameter:		Suspended Solids (mg/L)		
SW55	55	67	47	42
SW56	56	727	708	395
SW57	57	27	17	31
SW58a	61	149	325	172
SW59	66	156	129	78
Parameter:		Ammonia (mg/L)		
SW55	55	1.02	1.16	1.22
SW56	56	1.96	2.67	2.50
SW57	57	0.15	0.06	<0.05
SW58a	61	16.8	3.88	1.72
SW59	66	<0.05	<0.05	<0.05
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	<2	2	2
SW56	56	4	6	5
SW57	57	<2	3	2
SW58a	61	5	4	5
SW59	66	<2	3	2

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Purpose of Sampling		SW55, SW56, SW57, SW58a & SW59	SW55, SW56, SW57, SW58a & SW59	SW55, SW56, SW57, SW58a & SW59
CN ID	EPL ID	10/08/2025	11/08/2025	12/08/2025
Parameter:		pH (pH unit)		
SW55	55	7.35	7.34	7.29
SW56	56	7.41	7.53	7.47
SW57	57	7.27	7.37	7.28
SW58a	61	7.27	7.25	7.37
SW59	66	7.23	7.38	7.28
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	316	357	379
SW56	56	379	392	414
SW57	57	328	476	571
SW58a	61	357	429	432
SW59	66	308	343	349
Parameter:		Suspended Solids (mg/L)		
SW55	55	122	66	52
SW56	56	250	553	539
SW57	57	29	28	20
SW58a	61	324	266	162
SW59	66	158	163	143
Parameter:		Ammonia (mg/L)		
SW55	55	1.40	1.38	1.43
SW56	56	2.60	2.61	3.19
SW57	57	<0.05	0.08	0.15
SW58a	61	1.28	1.48	1.87
SW59	66	<0.05	<0.05	<0.05
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	3	4	2
SW56	56	4	9	5
SW57	57	2	3	<2
SW58a	61	5	6	6
SW59	66	3	2	<2

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Purpose of Sampling		SW55, SW56, SW57, SW58a & SW59	SW55, SW56, SW57, SW58a & SW59	SW55, SW56, SW57, SW58a & SW59
CN ID	EPL ID	13/08/2025	14/08/2025	15/08/2025
Parameter:		pH (pH unit)		
SW55	55	7.25	7.27	7.29
SW56	56	7.40	7.46	7.40
SW57	57	7.24	7.32	7.31
SW58a	61	7.24	7.27	7.21
SW59	66	7.42	7.46	7.44
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	389	385	387
SW56	56	419	425	419
SW57	57	610	628	621
SW58a	61	489	454	493
SW59	66	365	388	397
Parameter:		Suspended Solids (mg/L)		
SW55	55	42	41	43
SW56	56	482	182	162
SW57	57	8	13	7
SW58a	61	73	68	50
SW59	66	93	105	98
Parameter:		Ammonia (mg/L)		
SW55	55	1.51	1.57	1.64
SW56	56	2.62	2.91	2.69
SW57	57	0.16	<0.05	0.08
SW58a	61	0.89	0.48	0.52
SW59	66	<0.05	<0.05	<0.05
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	<2	2	2
SW56	56	7	8	8
SW57	57	<2	<2	2
SW58a	61	4	5	4
SW59	66	<2	<2	2

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Purpose of Sampling		SW55, SW56, SW57, SW58a & SW59	SW55, SW56, SW57, SW58a & SW59	SW55, SW56, SW57, SW58a & SW59
CN ID	EPL ID	16/08/2025	17/08/2025	18/08/2025
Parameter:		pH (pH unit)		
SW55	55	7.34	7.37	7.35
SW56	56	7.62	7.70	7.66
SW57	57	8.05	7.48	7.42
SW58a	61	7.36	7.30	7.45
SW59	66	7.57	7.52	7.65
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	390	416	415
SW56	56	431	433	432
SW57	57	665	670	691
SW58a	61	425	525	710
SW59	66	427	423	423
Parameter:		Suspended Solids (mg/L)		
SW55	55	24	26	62
SW56	56	279	360	390
SW57	57	19	12	10
SW58a	61	278	166	301
SW59	66	108	243	268
Parameter:		Ammonia (mg/L)		
SW55	55	1.61	1.62	1.72
SW56	56	3.32	3.32	3.26
SW57	57	0.08	0.12	0.14
SW58a	61	0.38	0.40	4.08
SW59	66	<0.05	<0.05	<0.05
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	<2	3	<2
SW56	56	6	6	9
SW57	57	<2	<2	<2
SW58a	61	5	3	6
SW59	66	<2	<2	<2

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Purpose of Sampling		SW55, SW56, SW57, SW58a & SW59	SW55, SW56, SW57, SW58a & SW59	SW55, SW56, SW57, SW58a & SW59
CN ID	EPL ID	19/08/2025	20/08/2025	21/08/2025
Parameter:		pH (pH unit)		
SW55	55	7.39	7.38	7.48
SW56	56	7.44	7.66	7.50
SW57	57	7.72	7.46	7.36
SW58a	61	7.55	7.81	7.51
SW59	66	7.52	7.41	7.11
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	414	414	393
SW56	56	418	440	403
SW57	57	579	491	274
SW58a	61	558	866	426
SW59	66	397	375	317
Parameter:		Suspended Solids (mg/L)		
SW55	55	26	69	98
SW56	56	112	374	107
SW57	57	9	20	39
SW58a	61	86	104	432
SW59	66	112	340	678
Parameter:		Ammonia (mg/L)		
SW55	55	1.84	1.34	1.32
SW56	56	1.48	2.83	2.96
SW57	57	0.12	0.07	<0.05
SW58a	61	5.77	19.1	3.83
SW59	66	<0.05	0.13	<0.05
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	<2	3	3
SW56	56	12	8	6
SW57	57	3	2	<2
SW58a	61	11	16	7
SW59	66	3	3	2

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Purpose of Sampling		SW55, SW56, SW57, SW58a & SW59	SW55, SW57, SW58a & SW59	SW55, SW57, SW58a & SW59
CN ID	EPL ID	22/08/2025	23/08/2025	24/08/2025
Parameter:		pH (pH unit)		
SW55	55	7.39	7.24	7.49
SW56	56	7.64	N/A	N/A
SW57	57	7.16	7.63	7.60
SW58a	61	7.43	7.16	7.09
SW59	66	7.11	7.21	7.36
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	355	320	389
SW56	56	503	N/A	N/A
SW57	57	258	356	476
SW58a	61	466	519	485
SW59	66	289	302	352
Parameter:		Suspended Solids (mg/L)		
SW55	55	156	97	107
SW56	56	182	N/A	N/A
SW57	57	38	24	23
SW58a	61	189	205	85
SW59	66	331	200	94
Parameter:		Ammonia (mg/L)		
SW55	55	1.02	0.80	0.98
SW56	56	4.40	N/A	N/A
SW57	57	0.05	0.09	0.06
SW58a	61	3.91	2.87	0.39
SW59	66	<0.05	0.06	<0.05
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	5	3	7
SW56	56	14	N/A	N/A
SW57	57	3	3	3
SW58a	61	10	11	5
SW59	66	4	3	3

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Purpose of Sampling		SW55, SW57, SW58a & SW59	SW55, SW57, SW58a & SW59	SW55, SW57, SW58a & SW59
CN ID	EPL ID	25/08/2025	26/08/2025	27/08/2025
Parameter:		pH (pH unit)		
SW55	55	7.41	7.46	7.50
SW56	56	N/A	N/A	N/A
SW57	57	7.27	7.34	7.40
SW58a	61	7.15	7.20	7.17
SW59	66	7.53	7.56	7.66
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	392	405	402
SW56	56	N/A	N/A	N/A
SW57	57	514	544	560
SW58a	61	518	546	596
SW59	66	394	419	445
Parameter:		Suspended Solids (mg/L)		
SW55	55	64	55	35
SW56	56	N/A	N/A	N/A
SW57	57	15	12	9
SW58a	61	68	73	108
SW59	66	91	123	53
Parameter:		Ammonia (mg/L)		
SW55	55	0.98	1.03	0.90
SW56	56	N/A	N/A	N/A
SW57	57	0.14	0.20	0.15
SW58a	61	0.22	0.15	0.37
SW59	66	<0.05	<0.05	<0.05
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	4	4	2
SW56	56	N/A	N/A	N/A
SW57	57	2	2	2
SW58a	61	4	4	4
SW59	66	3	<2	<2

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Purpose of Sampling		SW55, SW57, SW58a & SW59	SW57, SW58a & SW59	SW57, SW58a & SW59
CN ID	EPL ID	28/08/2025	29/08/2025	30/08/2025
Parameter:		pH (pH unit)		
SW55	55	7.42	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	7.41	7.60	7.51
SW58a	61	7.16	7.71	7.21
SW59	66	7.55	7.57	7.58
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	405	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	573	561	601
SW58a	61	622	413	603
SW59	66	408	393	399
Parameter:		Suspended Solids (mg/L)		
SW55	55	36	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	7	6	6
SW58a	61	44	45	51
SW59	66	99	100	106
Parameter:		Ammonia (mg/L)		
SW55	55	1.16	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	0.19	0.08	0.12
SW58a	61	0.17	0.48	0.12
SW59	66	<0.05	<0.05	<0.05
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	4	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	2	<2	<2
SW58a	61	3	5	5
SW59	66	2	<2	2

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Purpose of Sampling		SW57, SW58a &SW59		
CN ID	EPL ID	31/08/2025		
Parameter:		pH (pH unit)		
SW55	55	N/A		
SW56	56	N/A		
SW57	57	7.63		
SW58a	61	7.13		
SW59	66	7.62		
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	N/A		
SW56	56	N/A		
SW57	57	612		
SW58a	61	710		
SW59	66	397		
Parameter:		Suspended Solids (mg/L)		
SW55	55	N/A		
SW56	56	N/A		
SW57	57	<5		
SW58a	61	419		
SW59	66	283		
Parameter:		Ammonia (mg/L)		
SW55	55	N/A		
SW56	56	N/A		
SW57	57	0.14		
SW58a	61	<0.05		
SW59	66	<0.05		
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	N/A		
SW56	56	N/A		
SW57	57	2		
SW58a	61	6		
SW59	66	3		

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Environment Protection Licence 5897 - Condition M2 – SF1 and SF2 Sampling (Monthly)

*Discharging

**Not Discharging

	CN ID		SW55**	SW57*	SW58a*	SW59*
	EPL ID		55	57	61	66
DATE			29/08/2025	29/08/2025	29/08/2025	29/08/2025
Parameter	Units	LOR				
Alkalinity (as calcium carbonate)	mg/L	1	135	150	122	59
Aluminium	mg/L	0.01	5.58	0.84	5.19	16.0
Ammonia	mg/L	0.05	1.48	0.08	0.48	<0.05
Copper	mg/L	0.001	0.010	0.002	0.009	0.018
Biological Oxygen Demand	mg/L	2	<2	<2	5	<2
Electrical Conductivity	uS/cm	1	397	561	413	393
Iron	mg/L	0.05	5.20	0.77	4.93	13.8
Lead	mg/L	0.001	0.013	<0.001	0.012	0.023
Nitrate as N	mg/L	0.05	0.10	0.23	0.56	0.03
Organochlorine Pesticides	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Organophosphate Pesticides	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
pH	pH Units	0.01	7.48	7.60	7.71	7.57
Total Suspended Solids	mg/L	5	97	6	45	100
Zinc	mg/L	0.005	0.053	0.007	0.047	0.079

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Environment Protection Licence 5897 - Condition M2 – SF1, SF2 and SF3
Sampling (First Day Discharge)

	CN ID		SW56	SW56
	EPL ID		56	56
DATE			3/08/2025	6/08/25
Parameter	Units	LOR		
Alkalinity (as calcium carbonate)	mg/L	1	72	93
Aluminium	mg/L	0.01	15.3	10.5
Ammonia	mg/L	0.05	1.93	2.78
Arsenic	mg/L	0.001	0.011	0.006
Barium	mg/L	0.001	0.197	0.129
Benzene	mg/L	0.001	<0.001	<0.001
BOD	mg/L	2	11	6
Cadmium	mg/L	0.0001	0.0003	<0.0001
Calcium	mg/L	1	21	21
Chloride	mg/L	1	42	40
Chromium (Hex)	mg/L	0.01	<0.01	<0.01
Chromium (Total)	mg/L	0.001	0.017	0.009
Cobalt	mg/L	0.001	0.014	0.008
Copper	mg/L	0.001	0.038	0.025
Electrical Conductivity	uS/cm	1	343	404
Ethyl benzene	mg/L	0.002	<0.002	<0.002
Fluoride	mg/L	0.1	0.2	0.3
Iron	mg/L	0.05	13.7	9.23
Lead	mg/L	0.001	0.045	0.028
Magnesium	mg/L	1	12	12
Manganese	mg/L	0.001	0.538	0.376
Mercury	mg/L	0.0001	<0.0001	<0.0001
Nitrate as N	mg/L	0.01	1.40	0.63
Organochlorine Pesticides	mg/L	0.0005	<0.0005	<0.0005
Organophosphate Pesticides	mg/L	0.0005	<0.0005	<0.0005
pH	pH Units	0.01	7.26	7.41
Polycyclic Aromatic Hydrocarbons	mg/L	0.001	<0.001	<0.001
Potassium	mg/L	1	13	10
Sodium	mg/L	1	48	56
Sulfate	mg/L	1	36	40
Total Suspended Solids	mg/L	5	1350	667
Toluene	mg/L	0.002	<0.002	<0.002
Total Dissolved Solids	mg/L	11	323	554
Total Organic Carbon	mg/L	1	29	15
Total Petroleum Hydrocarbons	mg/L	0.05	<0.05	<0.05
Total Phenolics	mg/L	0.05	<0.05	<0.05
Zinc	mg/L	0.005	0.146	0.098

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	CN ID		SW58a	SW59
	EPL ID		55	56
DATE			29/08/25	29/08/25
Parameter	Units	LOR		
Alkalinity (as calcium carbonate)	mg/L	1		
Aluminium	mg/L	0.01		
Ammonia	mg/L	0.05		
Arsenic	mg/L	0.001		
Barium	mg/L	0.001		
Benzene	mg/L	0.001		
BOD	mg/L	2		
Cadmium	mg/L	0.0001		
Calcium	mg/L	1		
Chloride	mg/L	1		
Chromium (Hex)	mg/L	0.01		
Chromium (Total)	mg/L	0.001		
Cobalt	mg/L	0.001		
Copper	mg/L	0.001		
Electrical Conductivity	uS/cm	1		
Ethyl benzene	mg/L	0.002		
Fluoride	mg/L	0.1		
Iron	mg/L	0.05		
Lead	mg/L	0.001		
Magnesium	mg/L	1		
Manganese	mg/L	0.001		
Mercury	mg/L	0.0001		
Nitrate as N	mg/L	0.01		
Organochlorine Pesticides	mg/L	0.0005		
Organophosphate Pesticides	mg/L	0.0005		
pH	pH Units	0.01		
Polycyclic Aromatic Hydrocarbons	mg/L	0.001		
Potassium	mg/L	1		
Sodium	mg/L	1		
Sulfate	mg/L	1		
Total Suspended Solids	mg/L	5		
Toluene	mg/L	0.002		
Total Dissolved Solids	mg/L	11		
Total Organic Carbon	mg/L	1		
Total Petroleum Hydrocarbons	mg/L	0.05		
Total Phenolics	mg/L	0.05		
Zinc	mg/L	0.005		

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Summerhill Waste Management Centre

141 Minmi Road, Wallsend, NSW

- Final data obtained: 05/08/2025
- Date published: 15/08/2025
- Notes:
- CN = City of Newcastle
- EPL = Environment Protection Licence
- NR = no result (non-compliant sample, water body dry etc)
- N/A = Not applicable, sample not required
- SW58a located in Wentworth Creek and impacted by other catchment activities.

A copy of the Environmental Protection Licence can be viewed at:

<http://app.epa.nsw.gov.au/prpoeoapp/>

A map showing the location of monitoring points can be viewed at:

<https://www.newcastle.nsw.gov.au/Living/Waste-and-recycling/Summerhill-Waste-management-Centre/Environmental-Monitoring>