

Surface Water Results

March 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 = 137.2mm

Purpose of Sampling		SW56, SW58a	SW56, SW58a	SW56, SW58a
CN ID	EPL ID	1/03/2025	2/03/2025	3/03/2025
Parameter:		pH (pH unit)		
SW55	55	N/A	N/A	N/A
SW56	56	7.60	7.46	7.62
SW57	57	N/A	N/A	N/A
SW58a	61	6.98	7.03	7.13
SW59	66	N/A	N/A	N/A
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	N/A	N/A	N/A
SW56	56	641	631	632
SW57	57	N/A	N/A	N/A
SW58a	61	703	688	672
SW59	66	N/A	N/A	N/A
Parameter:		Suspended Solids (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	43	35	41
SW57	57	N/A	N/A	N/A
SW58a	61	27	16	12
SW59	66	N/A	N/A	N/A
Parameter:		Ammonia (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	<0.05	0.09	<0.05
SW57	57	N/A	N/A	N/A
SW58a	61	0.10	0.10	0.08
SW59	66	N/A	N/A	N/A
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	7	5	4
SW57	57	N/A	N/A	N/A
SW58a	61	5	<2	<2
SW59	66	N/A	N/A	N/A

Surface Water Results

March 2025

Purpose of Sampling		SW55, SW56, SW58a	SW56, SW58a	SW56, SW58a
CN ID	EPL ID	4/03/2025	5/03/2025	6/03/2025
Parameter:		pH (pH unit)		
SW55	55	7.56	N/A	N/A
SW56	56	7.88	7.73	7.67
SW57	57	N/A	N/A	N/A
SW58a	61	7.55	7.58	7.51
SW59	66	N/A	N/A	N/A
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	800	N/A	N/A
SW56	56	633	635	637
SW57	57	N/A	N/A	N/A
SW58a	61	631	683	628
SW59	66	N/A	N/A	N/A
Parameter:		Suspended Solids (mg/L)		
SW55	55	40	N/A	N/A
SW56	56	75	90	98
SW57	57	N/A	N/A	N/A
SW58a	61	47	42	53
SW59	66	N/A	N/A	N/A
Parameter:		Ammonia (mg/L)		
SW55	55	0.10	N/A	N/A
SW56	56	0.11	0.09	0.14
SW57	57	N/A	N/A	N/A
SW58a	61	<0.05	<0.05	0.06
SW59	66	N/A	N/A	N/A
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	9	N/A	N/A
SW56	56	7	5	3
SW57	57	N/A	N/A	N/A
SW58a	61	3	3	<2
SW59	66	N/A	N/A	N/A

Surface Water Results

March 2025

Purpose of Sampling			SW57	SW57
CN ID	EPL ID	7/03/2025	8/03/2025	9/03/2025
Parameter:		pH (pH unit)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	N/A	7.01	7.20
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	N/A	270	285
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A
Parameter:		Suspended Solids (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	N/A	<5	<5
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A
Parameter:		Ammonia (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	N/A	<0.05	<0.05
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	N/A	3	3
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A

Surface Water Results

March 2025

Purpose of Sampling		SW57	SW56, SW57	SW56, SW57, SW58a
CN ID	EPL ID	10/03/2025	11/03/2025	12/03/2025
Parameter:		pH (pH unit)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	7.58	7.50
SW57	57	7.28	7.26	7.11
SW58a	61	N/A	N/A	7.49
SW59	66	N/A	N/A	N/A
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	643	649
SW57	57	285	290	288
SW58a	61	N/A	N/A	605
SW59	66	N/A	N/A	N/A
Parameter:		Suspended Solids (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	31	34
SW57	57	<5	<5	<5
SW58a	61	N/A	N/A	19
SW59	66	N/A	N/A	N/A
Parameter:		Ammonia (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	0.37	0.43
SW57	57	<0.05	<0.05	<0.05
SW58a	61	N/A	N/A	0.08
SW59	66	N/A	N/A	N/A
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	5	4
SW57	57	3	3	3
SW58a	61	N/A	N/A	3
SW59	66	N/A	N/A	N/A

Surface Water Results

March 2025

Purpose of Sampling		SW56, SW57, SW58a & SW59	SW57, SW58a & SW59	SW57, SW58a & SW59
CN ID	EPL ID	13/03/2025	14/03/2025	15/03/2025
Parameter:		pH (pH unit)		
SW55	55	N/A	N/A	N/A
SW56	56	7.40	N/A	N/A
SW57	57	7.19	7.16	7.44
SW58a	61	7.45	7.44	7.35
SW59	66	7.31	7.67	7.63
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	N/A	N/A	N/A
SW56	56	650	N/A	N/A
SW57	57	282	288	298
SW58a	61	647	651	647
SW59	66	767	733	739
Parameter:		Suspended Solids (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	58	N/A	N/A
SW57	57	<5	<5	<5
SW58a	61	26	24	39
SW59	66	41	94	58
Parameter:		Ammonia (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	0.52	N/A	N/A
SW57	57	<0.05	<0.05	0.11
SW58a	61	0.07	0.10	0.16
SW59	66	<0.05	<0.05	<0.05
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	3	N/A	N/A
SW57	57	<2	2	3
SW58a	61	<2	3	3
SW59	66	2	3	3

Surface Water Results

March 2025

Purpose of Sampling				
CN ID	EPL ID	16/03/2025	17/03/2025	18/03/2025
Parameter:		pH (pH unit)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	N/A	N/A	N/A
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	N/A	N/A	N/A
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A
Parameter:		Suspended Solids (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	N/A	N/A	N/A
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A
Parameter:		Ammonia (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	N/A	N/A	N/A
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	N/A
SW57	57	N/A	N/A	N/A
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A

Surface Water Results

March 2025

Purpose of Sampling				SW56
CN ID	EPL ID	19/03/2025	20/03/2025	21/03/2025
Parameter:		pH (pH unit)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	7.44
SW57	57	N/A	N/A	N/A
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	706
SW57	57	N/A	N/A	N/A
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A
Parameter:		Suspended Solids (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	13
SW57	57	N/A	N/A	N/A
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A
Parameter:		Ammonia (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	0.59
SW57	57	N/A	N/A	N/A
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	N/A	N/A	2
SW57	57	N/A	N/A	N/A
SW58a	61	N/A	N/A	N/A
SW59	66	N/A	N/A	N/A

Surface Water Results

March 2025

Purpose of Sampling		SW56 & SW58a	SW56, SW57 & SW58a	SW56, SW57 & SW58a
CN ID	EPL ID	22/03/2025	23/03/2025	24/03/2025
Parameter:		pH (pH unit)		
SW55	55	N/A	N/A	N/A
SW56	56	7.52	7.60	7.47
SW57	57	N/A	7.21	7.16
SW58a	61	7.03	7.29	7.19
SW59	66	N/A	N/A	N/A
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	N/A	N/A	N/A
SW56	56	700	693	690
SW57	57	N/A	283	275
SW58a	61	244	411	346
SW59	66	N/A	N/A	N/A
Parameter:		Suspended Solids (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	15	8	15
SW57	57	N/A	<5	<5
SW58a	61	14	10	17
SW59	66	N/A	N/A	N/A
Parameter:		Ammonia (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	0.44	0.50	0.62
SW57	57	N/A	<0.05	<0.05
SW58a	61	0.12	<0.05	<0.05
SW59	66	N/A	N/A	N/A
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	3	2	3
SW57	57	N/A	2	2
SW58a	61	2	<2	2
SW59	66	N/A	N/A	N/A

Surface Water Results

March 2025

Purpose of Sampling		SW56, SW57, SW58a & SW59	SW56, SW57, SW58a & SW59	SW56, SW57, SW58a & SW59
CN ID	EPL ID	25/03/2025	26/03/2025	27/03/2025
Parameter:		pH (pH unit)		
SW55	55	N/A	N/A	N/A
SW56	56	7.44	7.44	7.44
SW57	57	7.18	7.29	7.36
SW58a	61	7.37	7.40	7.32
SW59	66	7.73	7.46	7.36
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	N/A	N/A	N/A
SW56	56	688	687	701
SW57	57	282	281	284
SW58a	61	684	726	730
SW59	66	762	769	782
Parameter:		Suspended Solids (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	19	15	24
SW57	57	<5	<5	<5
SW58a	61	40	12	9
SW59	66	49	48	35
Parameter:		Ammonia (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	0.58	0.50	0.42
SW57	57	<0.05	<0.05	<0.05
SW58a	61	<0.05	<0.05	<0.05
SW59	66	0.38	0.14	0.13
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	5	4	4
SW57	57	3	3	2
SW58a	61	2	3	<2
SW59	66	3	3	2

Surface Water Results

March 2025

Purpose of Sampling		SW56, SW57, SW58a & SW59	SW56, SW57, SW58a & SW59	SW56, SW57, SW58a & SW59
CN ID	EPL ID	28/03/2025	29/03/2025	30/03/2025
Parameter:		pH (pH unit)		
SW55	55	N/A	N/A	N/A
SW56	56	7.43	7.59	7.58
SW57	57	7.41	7.08	7.01
SW58a	61	7.32	7.36	7.51
SW59	66	8.11	7.62	7.70
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	N/A	N/A	N/A
SW56	56	707	648	617
SW57	57	291	264	207
SW58a	61	737	420	676
SW59	66	789	719	724
Parameter:		Suspended Solids (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	31	28	32
SW57	57	<5	6	16
SW58a	61	14	113	72
SW59	66	27	76	161
Parameter:		Ammonia (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	0.42	0.54	0.49
SW57	57	<0.05	<0.05	<0.05
SW58a	61	<0.05	<0.05	<0.05
SW59	66	<0.05	0.19	0.12
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	N/A	N/A	N/A
SW56	56	3	4	7
SW57	57	<2	2	8
SW58a	61	<2	3	7
SW59	66	<2	8	7

Surface Water Results

March 2025

Purpose of Sampling		SW57, SW58a & SW59		
CN ID	EPL ID	31/03/2025		
Parameter:		pH (pH unit)		
SW55	55	N/A		
SW56	56	N/A		
SW57	57	6.93		
SW58a	61	7.42		
SW59	66	7.87		
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	N/A		
SW56	56	N/A		
SW57	57	225		
SW58a	61	615		
SW59	66	726		
Parameter:		Suspended Solids (mg/L)		
SW55	55	N/A		
SW56	56	N/A		
SW57	57	13		
SW58a	61	45		
SW59	66	136		
Parameter:		Ammonia (mg/L)		
SW55	55	N/A		
SW56	56	N/A		
SW57	57	<0.05		
SW58a	61	<0.05		
SW59	66	0.08		
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	N/A		
SW56	56	N/A		
SW57	57	3		
SW58a	61	<2		
SW59	66	3		

Surface Water Results

March 2025

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

			CN ID	SW55	SW56	SW56	SW57	SW57
			EPL ID	55	56	56	57	57
DATE			4/03/25	11/03/25	21/03/25	8/03/25	23/03/25	
Parameter	Units	LOR						
Alkalinity (as calcium carbonate)	mg/L	1	250	120	120	61	78	
Aluminium	mg/L	0.01	0.38	1.84	0.77	0.03	0.05	
Ammonia	mg/L	0.05	0.10	0.37	0.59	<0.05	<0.05	
Arsenic	mg/L	0.001	0.006	0.006	0.003	<0.001	<0.001	
Barium	mg/L	0.001	0.086	0.065	0.075	0.034	0.030	
Benzene	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
BOD	mg/L	2	9	5	2	3	2	
Cadmium	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Calcium	mg/L	1	38	30	33	10	9	
Chloride	mg/L	1	82	100	129	41	38	
Chromium (Hex)	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Chromium (Total)	mg/L	0.001	<0.001	0.003	<0.001	<0.001	<0.001	
Cobalt	mg/L	0.001	<0.001	0.002	0.002	<0.001	<0.001	
Copper	mg/L	0.001	0.002	0.003	<0.001	<0.001	<0.001	
Electrical Conductivity	uS/cm	1	800	643	706	270	283	
Ethyl benzene	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Fluoride	mg/L	0.1	0.6	0.4	0.5	0.2	0.3	
Iron	mg/L	0.05	0.92	3.14	0.59	0.32	0.45	
Lead	mg/L	0.001	0.001	0.004	<0.001	<0.001	<0.001	
Magnesium	mg/L	1	22	13	13	6	6	
Manganese	mg/L	0.001	0.524	0.800	1.05	0.159	0.139	
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Nitrate as N	mg/L	0.01	<0.01	0.57	0.04	<0.01	<0.01	
Organochlorine Pesticides	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Organophosphate Pesticides	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
pH	pH Units	0.01	7.56	7.58	7.44	7.01	7.21	
Polycyclic Aromatic Hydrocarbons	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Potassium	mg/L	1	12	12	12	2	2	
Sodium	mg/L	1	106	78	93	39	42	
Sulfate	mg/L	1	55	58	50	5	3	
Total Suspended Solids	mg/L	5	40	31	13	<5	<5	
Toluene	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Total Dissolved Solids	mg/L	11	445	441	409	152	178	
Total Organic Carbon	mg/L	1	<1	15	10	14	13	
Total Petroleum Hydrocarbons	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Total Phenolics	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Zinc	mg/L	0.005	0.007	0.022	<0.005	<0.005	<0.005	

Surface Water Results

March 2025

	CN ID		SW58a	SW58a	SW58a	SW59	SW59
	EPL ID		61	61	61	66	66
DATE			1/03/25	12/03/25	22/03/25	13/03/25	25/03/25
Parameter	Units	LOR					
Alkalinity (as calcium carbonate)	mg/L	1	131	97	50	141	124
Aluminium	mg/L	0.01	0.53	2.14	1.01	4.82	5.22
Ammonia	mg/L	0.05	0.10	0.08	0.12	<0.05	0.38
Arsenic	mg/L	0.001	0.006	0.004	0.002	0.008	0.009
Barium	mg/L	0.001	0.068	0.057	0.029	0.059	0.059
Benzene	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BOD	mg/L	2	5	3	2	2	3
Cadmium	mg/L	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium	mg/L	1	24	24	10	11	10
Chloride	mg/L	1	120	107	35	107	92
Chromium (Hex)	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium (Total)	mg/L	0.001	<0.001	0.001	<0.001	0.004	0.004
Cobalt	mg/L	0.001	0.004	<0.001	<0.001	0.002	0.003
Copper	mg/L	0.001	0.002	0.002	0.002	0.003	0.006
Electrical Conductivity	uS/cm	1	703	605	244	767	762
Ethyl benzene	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fluoride	mg/L	0.1	0.4	0.4	0.4	0.8	0.8
Iron	mg/L	0.05	2.79	2.99	1.22	5.87	6.86
Lead	mg/L	0.001	0.001	0.003	<0.001	0.005	0.008
Magnesium	mg/L	1	15	12	5	12	12
Manganese	mg/L	0.001	1.43	0.098	0.204	0.342	0.307
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Nitrate as N	mg/L	0.01	<0.01	0.42	0.35	0.08	0.01
Organochlorine Pesticides	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Organophosphate Pesticides	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
pH	pH Units	0.01	6.98	7.49	7.03	7.31	7.73
Polycyclic Aromatic Hydrocarbons	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Potassium	mg/L	1	8	10	4	5	5
Sodium	mg/L	1	101	70	31	121	120
Sulfate	mg/L	1	67	76	17	106	89
Total Suspended Solids	mg/L	5	27	19	14	41	49
Toluene	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Dissolved Solids	mg/L	11	406	410	173	565	612
Total Organic Carbon	mg/L	1	19	15	12	17	17
Total Petroleum Hydrocarbons	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Total Phenolics	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Zinc	mg/L	0.005	0.008	0.031	0.007	0.018	0.026

Surface Water Results

March 2025



Summerhill Waste Management Centre

141 Minmi Road, Wallsend, NSW

- Final data obtained: 8/04/2025
- Date published: 15/04/2025
- 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>