Surface Water Results August 2024

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 = 48.6mm

Purpose of Sampling		SW57, SW58A & SW59	SW57, SW58A & SW59	SW57, SW58A & SW59
CN ID	**EPL ID**	1/08/2024	2/08/2024	3/08/2024
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.52	7.52	7.47
SW58a	**61**	7.17	7.28	7.19
SW59	**66**	7.77	7.74	7.37
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	406	404	400
SW58a	**61**	813	685	783
SW59	**66**	652	650	662
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	14	16	12
SW58a	**61**	87	88	36
SW59	**66**	59	45	196
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	<0.05	0.31	<0.05
SW58a	**61**	<0.05	<0.05	<0.05
SW59	**66**	<0.05	<0.05	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	5	6	6
SW58a	**61**	4	3	3
SW59	**66**	5	4	7

Surface Water Results August 2024

Purpose of Sampling		SW57, SW58A & SW59	SW57, SW58A & SW59	SW57, SW58A & SW59
CN ID		4/08/2024	5/08/2024	6/08/2024
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.69	7.54	7.51
SW58a	**61**	7.20	7.21	7.39
SW59	**66**	7.34	7.87	7.45
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	404	401	316
SW58a	**61**	806	836	639
SW59	**66**	664	663	631
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	21	69	20
SW58a	**61**	35	35	94
SW59	**66**	59	16	53
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	<0.05	<0.05	<0.05
SW58a	**61**	0.06	<0.05	<0.05
SW59	**66**	<0.05	<0.05	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	8	23	4
SW58a	**61**	3	4	4
SW59	**66**	6	5	6

Surface Water Results August 2024

Purpose of Sampling		SW57, SW58A & SW59	SW57, SW58A & SW59	SW57, SW58A & SW59
CN ID		7/08/2024	8/08/2024	9/08/2024
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.50	7.37	7.03
SW58a	**61**	7.37	7.24	7.03
SW59	**66**	7.60	7.58	7.91
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	349	386	389
SW58a	**61**	138	711	703
SW59	**66**	169	667	671
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	15	15	10
SW58a	**61**	138	134	215
SW59	**66**	169	149	176
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	<0.05	<0.05	<0.05
SW58a	**61**	<0.05	0.06	0.05
SW59	**66**	<0.05	<0.05	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	3	2	3
SW58a	**61**	5	3	4
SW59	**66**	5	4	4

Surface Water Results August 2024

Purpose of Sampling		SW57, SW58A & SW59	SW57, SW58A & SW59	SW57, SW58A & SW59
CN ID		10/08/2024	11/08/2024	12/08/2024
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.70	7.79	7.85
SW58a	**61**	7.35	7.27	7.26
SW59	**66**	8.34	8.66	8.46
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	383	384	380
SW58a	**61**	717	715	682
SW59	**66**	661	650	661
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	13	24	14
SW58a	**61**	168	160	120
SW59	**66**	182	192	186
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	<0.05	<0.05	<0.05
SW58a	**61**	<0.05	<0.05	<0.05
SW59	**66**	<0.05	<0.05	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	3	4	4
SW58a	**61**	4	3	2
SW59	**66**	3	6	3

Surface Water Results
August 2024

Purpose of Sampling		SW57, SW58A & SW59	SW57, SW58A &SW59	SW57, SW58A &SW59
CN ID		13/08/2024	14/08/2024	15/08/2024
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.49	7.58	7.40
SW58a	**61**	7.10	6.96	7.25
SW59	**66**	8.03	8.19	7.56
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	380	370	349
SW58a	**61**	705	731	639
SW59	**66**	658	653	642
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	10	8	13
SW58a	**61**	41	31	52
SW59	**66**	76	46	60
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	0.06	<0.05	<0.05
SW58a	**61**	<0.05	<0.05	<0.05
SW59	**66**	<0.05	<0.05	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	4	4	3
SW58a	**61**	2	2	2
SW59	**66**	3	4	4

Surface Water Results August 2024

Purpose of Sampling		SW57, SW58A &SW59	SW57, SW58A &SW59	SW57, SW58A &SW59
CN ID	**EPL ID**	16/08/2024	17/08/2024	18/08/2024
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.45	7.98	8.08
SW58a	**61**	7.34	7.35	7.31
SW59	**66**	7.70	7.58	7.62
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	348	364	371
SW58a	**61**	620	679	727
SW59	**66**	643	681	193
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	11	14	12
SW58a	**61**	34	94	121
SW59	**66**	46	178	193
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	<0.05	<0.05	<0.05
SW58a	**61**	<0.05	<0.05	0.06
SW59	**66**	<0.05	0.08	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	4	3	3
SW58a	**61**	3	2	2
SW59	**66**	4	5	4

Surface Water Results August 2024

Purpose of Sampling		SW57, SW58A &SW59	SW57, SW58A &SW59	SW57, SW58A &SW59
CN ID	**EPL ID**	19/08/2024	20/08/2024	21/08/2024
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.88	7.66	7.66
SW58a	**61**	7.30	7.28	7.20
SW59	**66**	7.42	7.33	7.37
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	378	379	381
SW58a	**61**	721	730	748
SW59	**66**	696	692	699
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	14	10	25
SW58a	**61**	95	91	82
SW59	**66**	174	229	232
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	<0.05	<0.05	<0.05
SW58a	**61**	<0.05	<0.05	<0.05
SW59	**66**	<0.05	0.06	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	4	2	3
SW58a	**61**	<2	<2	<2
SW59	**66**	3	3	3

Surface Water Results August 2024

Purpose of Sampling		SW57, SW58A & SW59	SW57, SW58A & SW59	SW57, SW58A & SW59
CN ID	**EPL ID**	22/08/2024	23/08/2024	24/08/2024
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.96	7.85	8.61
SW58a	**61**	7.19	7.14	7.22
SW59	**66**	8.24	7.26	7.41
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	381	384	377
SW58a	**61**	766	783	790
SW59	**66**	692	718	715
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	14	8	8
SW58a	**61**	202	28	82
SW59	**66**	95	97	190
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	<0.05	<0.05	<0.05
SW58a	**61**	<0.05	0.08	0.07
SW59	**66**	<0.05	0.12	0.12
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	4	4	5
SW58a	**61**	3	2	3
SW59	**66**	2	3	5

Surface Water Results August 2024

Purpose of Sampling		SW57, SW58A & SW59	SW57, SW58A & SW59	SW56, SW57, SW58A & SW59
CN ID	**EPL ID**	25/08/2024	26/08/2024	27/08/2024
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	7.76
SW57	**57**	8.11	7.44	7.69
SW58a	**61**	7.33	7.18	7.73
SW59	**66**	7.41	7.87	7.44
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	788
SW57	**57**	376	387	391
SW58a	**61**	396	592	787
SW59	**66**	625	708	732
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	256
SW57	**57**	12	7	6
SW58a	**61**	30	25	34
SW59	**66**	284	46	15
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	0.05
SW57	**57**	<0.05	<0.05	<0.05
SW58a	**61**	<0.05	<0.05	<0.05
SW59	**66**	0.08	<0.05	0.06
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	5
SW57	**57**	7	4	5
SW58a	**61**	3	<2	5
SW59	**66**	5	5	5

Surface Water Results August 2024

Purpose of Sampling		SW56, SW57, SW58A & SW59	SW55, SW56, SW58A & SW59	SW55, SW57, SW58A & SW59
CN ID	**EPL ID**	28/08/2024	29/08/2024	30/08/2024
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	7.61	7.44
SW56	**56**	7.48	7.73	N/A
SW57	**57**	7.72	N/A	7.56
SW58a	**61**	7.72	7.67	7.92
SW59	**66**	7.22	7.31	7.72
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	671	744
SW56	**56**	809	803	N/A
SW57	**57**	392	N/A	400
SW58a	**61**	800	772	701
SW59	**66**	750	757	752
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	<5	8
SW56	**56**	44	215	N/A
SW57	**57**	5	N/A	121
SW58a	**61**	48	528	64
SW59	**66**	42	183	97
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	0.18	0.49
SW56	**56**	0.08	<0.05	N/A
SW57	**57**	<0.05	N/A	<0.05
SW58a	**61**	<0.05	<0.05	<0.05
SW59	**66**	<0.05	<0.05	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	<2	3
SW56	**56**	6	5	N/A
SW57	**57**	5	N/A	8
SW58a	**61**	6	5	3
SW59	**66**	6	4	4

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Purpose of Sampling		SW55		
CN ID	**EPL ID**	31/08/2024		
Parameter:			**pH (pH unit)**	
SW55	**55**	7.33	-	-
SW56	**56**	N/A	-	-
SW57	**57**	N/A	-	-
SW58a	**61**	N/A	-	-
SW59	**66**	N/A	-	-
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	760	-	-
SW56	**56**	N/A	-	-
SW57	**57**	N/A	-	-
SW58a	**61**	N/A	-	-
SW59	**66**	N/A	-	-
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	13	-	-
SW56	**56**	N/A	-	-
SW57	**57**	N/A	-	-
SW58a	**61**	N/A	-	-
SW59	**66**	N/A	-	-
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	0.87	-	-
SW56	**56**	N/A	-	-
SW57	**57**	N/A	-	-
SW58a	**61**	N/A	-	-
SW59	**66**	N/A	-	-
Parameter:		**Biological Oxygen Demand (mg/L)**		
SW55	**55**	3	-	-
SW56	**56**	N/A	-	-
SW57	**57**	N/A	-	-
SW58a	**61**	N/A	-	-
SW59	**66**	N/A	-	-

Surface Water Results August 2024

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

	CN ID		SW57	SW58A	SW59
	EPL ID		57	58	59
DATE			**30/08/24**	**30/08/24**	**30/08/24**
Parameter	**Units**	**LOR**			
Alkalinity (as calcium carbonate)	mg/L	1	96	168	102
Aluminium	mg/L	0.01	0.45	2.45	7.63
Ammonia	mg/L	0.05	<0.05	<0.05	<0.05
Copper	mg/L	0.001	0.002	0.004	0.013
Biological Oxygen Demand	mg/L	2	8	3	4
Electrical Conductivity	uS/cm	10	400	701	752
Iron	mg/L	0.05	0.75	2.70	8.64
Lead	mg/L	0.001	<0.001	0.003	0.010
Nitrate as N	mg/L	0.05	<0.05	0.56	0.33
Organochlorine Pesticides	mg/L	0.0005	<0.005	<0.005	<0.005
Organophosphate Pesticides	mg/L	0.0005	<0.005	<0.005	<0.005
pH	pH Units	0.01	7.56	7.92	7.72
Total Suspended Solids	mg/L	5	121	64	97
Zinc	mg/L	0.005	0.022	0.017	0.059

Surface Water Results August 2024

Environment Protection Licence 5897 - Condition M2 – SF1, SF2 and SF3 Sampling

	CN ID		SW56	SW55
	EPL ID		56	55
DATE			27/08/24	29/08/24
Parameter	**Units**	**LOR**		
Alkalinity (as calcium carbonate)	mg/L	1	114	188
Aluminium	mg/L	0.01	2.50	0.14
Ammonia	mg/L	0.05	0.05	0.018
Arsenic	mg/L	0.001	0.002	0.002
Barium	mg/L	0.001	0.070	0.050
Benzene	mg/L	0.001	<0.001	<0.001
BOD	mg/L	2	5	<2
Cadmium	mg/L	0.0001	<0.0001	<0.0001
Calcium	mg/L	1	44	28
Chloride	mg/L	1	148	48
Chromium (Hex)	mg/L	0.01	<0.01	<0.01
Chromium (Total)	mg/L	0.001	0.003	<0.001
Cobalt	mg/L	0.001	0.002	0.001
Copper	mg/L	0.001	0.008	0.002
Electrical Conductivity	uS/cm	10	788	671
Ethyl benzene	mg/L	0.002	<0.002	<0.002
Fluoride	mg/L	0.1	0.4	0.5
Iron	mg/L	0.05	1.76	0.44
Lead	mg/L	0.001	0.003	<0.001
Magnesium	mg/L	1	15	17
Manganese	mg/L	0.001	0.209	0.182
Mercury	mg/L	0.0001	<0.0001	<0.0001
Nitrate as N	mg/L	0.01	5.95	0.02
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	7.76	7.61
Polycyclic Aromatic Hydrocarbons	mg/L	0.0005	<0.0005	<0.0005
Potassium	mg/L	1	10	9
Sodium	mg/L	1	82	84
Sulfate	mg/L	1	49	77
Total Suspended Solids	mg/L	5	256	<5
Toluene	mg/L	0.002	<0.002	<0.002
Total Dissolved Solids	mg/L	10	500	411
Total Organic Carbon	mg/L	1	16	24
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	0.014	0.010

Surface Water Results August 2024

Summerhill Waste Management Centre

141 Minmi Road, Wallsend, NSW

- Final data obtained: 18/09/24
- Date published: 19/09/24

- Notes:
- CN = City of Newcastle
- EPL = Environment Protection Licence
- NR = no result (non-compliant sample, water body dry etc)
- NA = 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