

# Surface Water Results

## September 2023



### City of Newcastle - Summerhill Waste Management Centre

141 Minmi Road, Wallsend, NSW

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

Monthly rainfall =

No Discharge at SW56 and SW59 for the month of September 2023

Purpose of Sampling		SW55, SW5 and SW58a	SW55, SW57 and SW58a	SW55, SW57 and SW58a
CN ID	EPL ID	1/09/2023	2/09/2023	3/09/2023
Parameter:		pH (pH unit)		
SW55	55	8.86	8.81	8.81
SW56	56	N/A	N/A	N/A
SW57	57	7.59	7.82	N/A
SW58a	61	7.28	7.21	7.24
SW59	66	N/A	N/A	N/A
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	666	669	666
SW56	56	N/A	N/A	N/A
SW57	57	287	281	N/A
SW58a	61	323	345	364
SW59	66	N/A	N/A	N/A
Parameter:		Suspended Solids (mg/L)		
SW55	55	26	23	38
SW56	56	N/A	N/A	N/A
SW57	57	25	40	N/A
SW58a	61	20	12	18
SW59	66	N/A	N/A	N/A
Parameter:		Ammonia (mg/L)		
SW55	55	0.14	<0.05	<0.05
SW56	56	N/A	N/A	N/A
SW57	57	<0.05	<0.05	N/A
SW58a	61	0.08	0.13	0.21
SW59	66	N/A	N/A	N/A
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	7	5	11
SW56	56	N/A	N/A	N/A
SW57	57	<2	<2	N/A
SW58a	61	<2	<2	<2
SW59	66	N/A	N/A	N/A

# Surface Water Results September 2023

Purpose of Sampling		SW55, SW57 and SW58a	SW55, SW57 and SW58a	SW55, SW57 and SW58a
CN ID	EPL ID	4/09/2023	5/09/2023	6/09/2023
<b>Parameter:</b>		<b>pH (pH unit)</b>		
SW55	55	8.62	8.88	9.02
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
<b>Parameter:</b>		<b>Electrical Conductivity (µS/cm)</b>		
SW55	55	669	673	667
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
<b>Parameter:</b>		<b>Suspended Solids (mg/L)</b>		
SW55	55	32	21	14
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
<b>Parameter:</b>		<b>Ammonia (mg/L)</b>		
SW55	55	0.06	0.26	<0.05
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
<b>Parameter:</b>		<b>Biological Oxygen Demand (mg/L)</b>		
SW55	55	6	7	7
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 September 2023

Purpose of Sampling		SW55, SW57 and SW58a	SW55, SW57 and SW58a	SW55, SW57 and SW58a
CN ID	EPL ID	7/09/2023	8/09/2023	9/09/2023
<b>Parameter:</b>		<b>pH (pH unit)</b>		
SW55	55	8.85	9.04	8.42
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
<b>Parameter:</b>		<b>Electrical Conductivity (µS/cm)</b>		
SW55	55	674	663	684
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
<b>Parameter:</b>		<b>Suspended Solids (mg/L)</b>		
SW55	55	13	13	32
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
<b>Parameter:</b>		<b>Ammonia (mg/L)</b>		
SW55	55	0.11	0.10	0.05
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
<b>Parameter:</b>		<b>Biological Oxygen Demand (mg/L)</b>		
SW55	55	<2	4	<2
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 September 2023

Purpose of Sampling		SW55, SW57 and SW58a	SW55, SW57 and SW58a	SW55, SW57 and SW58a
CN ID	EPL ID	10/09/2023	11/09/23	12/09/23
<b>Parameter:</b>		<b>pH (pH unit)</b>		
SW55	55	8.03	7.98	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
<b>Parameter:</b>		<b>Electrical Conductivity (µS/cm)</b>		
SW55	55	690	689	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
<b>Parameter:</b>		<b>Suspended Solids (mg/L)</b>		
SW55	55	27	17	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
<b>Parameter:</b>		<b>Ammonia (mg/L)</b>		
SW55	55	0.09	0.11	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
<b>Parameter:</b>		<b>Biological Oxygen Demand (mg/L)</b>		
SW55	55	<2	<2	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 September 2023

Purpose of Sampling		SW55, SW57 and SW58a	SW55, SW57 and SW58a	SW55, SW57 and SW58a
CN ID	EPL ID	13/09/2023	14/09/23	15/09/23
<b>Parameter:</b>		<b>pH (pH unit)</b>		
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
<b>Parameter:</b>		<b>Electrical Conductivity (µS/cm)</b>		
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
<b>Parameter:</b>		<b>Suspended Solids (mg/L)</b>		
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
<b>Parameter:</b>		<b>Ammonia (mg/L)</b>		
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
<b>Parameter:</b>		<b>Biological Oxygen Demand (mg/L)</b>		
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 September 2023



Purpose of Sampling		SW55, SW57 and SW58a	SW55, SW57 and SW58a	SW55, SW57 and SW58a
CN ID	EPL ID	16/09/2023	17/09/23	18/09/23
<b>Parameter:</b>		<b>pH (pH unit)</b>		
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
<b>Parameter:</b>		<b>Electrical Conductivity (µS/cm)</b>		
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
<b>Parameter:</b>		<b>Suspended Solids (mg/L)</b>		
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
<b>Parameter:</b>		<b>Ammonia (mg/L)</b>		
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
<b>Parameter:</b>		<b>Biological Oxygen Demand (mg/L)</b>		
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 September 2023

Purpose of Sampling		SW55, SW57 and SW58a	SW55, SW57 and SW58a	SW55, SW57 and SW58a
CN ID	EPL ID	19/09/2023	20/09/23	21/09/23
<b>Parameter:</b>		<b>pH (pH unit)</b>		
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
<b>Parameter:</b>		<b>Electrical Conductivity (µS/cm)</b>		
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
<b>Parameter:</b>		<b>Suspended Solids (mg/L)</b>		
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
<b>Parameter:</b>		<b>Ammonia (mg/L)</b>		
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
<b>Parameter:</b>		<b>Biological Oxygen Demand (mg/L)</b>		
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 September 2023

Purpose of Sampling		SW55, SW57 and SW58a	SW55, SW57 and SW58a	SW55, SW57 and SW58a
CN ID	EPL ID	22/09/2023	23/09/23	24/09/23
<b>Parameter:</b>		<b>pH (pH unit)</b>		
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
<b>Parameter:</b>		<b>Electrical Conductivity (µS/cm)</b>		
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
<b>Parameter:</b>		<b>Suspended Solids (mg/L)</b>		
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
<b>Parameter:</b>		<b>Ammonia (mg/L)</b>		
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
<b>Parameter:</b>		<b>Biological Oxygen Demand (mg/L)</b>		
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 September 2023

Purpose of Sampling		SW55, SW57 and SW58a	SW55, SW57 and SW58a	SW55, SW57 and SW58a
CN ID	EPL ID	25/09/2023	26/09/23	27/09/23
<b>Parameter:</b>		<b>pH (pH unit)</b>		
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
<b>Parameter:</b>		<b>Electrical Conductivity (µS/cm)</b>		
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
<b>Parameter:</b>		<b>Suspended Solids (mg/L)</b>		
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
<b>Parameter:</b>		<b>Ammonia (mg/L)</b>		
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
<b>Parameter:</b>		<b>Biological Oxygen Demand (mg/L)</b>		
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 September 2023

Purpose of Sampling		SW55, SW57 and SW58a	SW55, SW57 and SW58a	SW55, SW57 and SW58a
CN ID	EPL ID	28/09/2023	29/09/23	30/09/23
<b>Parameter:</b>		<b>pH (pH unit)</b>		
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
<b>Parameter:</b>		<b>Electrical Conductivity (µS/cm)</b>		
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
<b>Parameter:</b>		<b>Suspended Solids (mg/L)</b>		
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
<b>Parameter:</b>		<b>Ammonia (mg/L)</b>		
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
<b>Parameter:</b>		<b>Biological Oxygen Demand (mg/L)</b>		
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 September 2023

Environment Protection Licence 5897 - Condition M2 – Special Frequency (SF)  
1 and 2 Sampling

	CN ID		SW55	SW56	SW57	SW58a	SW59
	EPL ID		55	56	57	58	59
DATE			28/09/23	28/09/23	28/09/23	28/09/23	28/09/23
Parameter	Units	LOR					
Alkalinity (as calcium carbonate)	mg/L	1	180	132	88	35	136
Aluminium	mg/L	0.01	0.22	1.06	1.05	1.23	1.91
Ammonia	mg/L	0.05	1.10	0.63	<0.01	0.10	0.66
Copper	mg/L	0.001	<0.001	0.003	<0.001	0.006	0.002
Biological Oxygen Demand	mg/L	2	<2	<2	3	4	<2
Electrical Conductivity	uS/cm	10	614	980	254	299	1060
Iron	mg/L	0.05	0.77	0.90	2.08	1.04	2.04
Lead	mg/L	0.001	<0.001	0.001	0.002	0.001	0.002
Nitrate as N	mg/L	0.05	0.01	0.91	0.01	2.26	0.54
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	7.60	8.05	7.97	7.28	7.79
Total Suspended Solids	mg/L	5	<5	7	24	18	22
Zinc	mg/L	0.005	<0.005	0.015	0.006	0.015	0.013

# Surface Water Results September 2023

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## Summerhill Waste Management Centre

141 Minmi Road, Wallsend, NSW

Final data obtained: 4/10/2023

Date published: 15/10/2023

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

1. Water body not discharging from site
2. SW58a located in Wentworth Creek and impacted by other catchment activities.  
- bottle misplaced

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>