

Surface Water Results

December 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 = 22.4 mm

Purpose of Sampling				
CN ID	EPL ID	1/12/2024	2/12/2024	3/12/2024
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

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Purpose of Sampling				
CN ID		4/12/2024	5/12/2024	6/12/2024
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

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Purpose of Sampling				
CN ID		7/12/2024	8/12/2024	9/12/2024
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

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Purpose of Sampling				
CN ID		10/12/2024	11/12/2024	12/12/2024
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

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Purpose of Sampling				
CN ID		13/12/2024	14/12/2024	15/12/2024
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

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Purpose of Sampling				
CN ID	EPL ID	16/12/2024	17/12/2024	18/12/2024
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

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Purpose of Sampling				
CN ID	EPL ID	19/12/2024	20/12/2024	21/12/2024
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

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Purpose of Sampling				
CN ID	EPL ID	22/12/2024	23/12/2024	24/12/2024
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 ($\mu\text{S/cm}$)		
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

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Purpose of Sampling				
CN ID	EPL ID	25/12/2024	26/12/2024	27/12/2024
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
	57	N/A	N/A	N/A
	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
	57	N/A	N/A	N/A
	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

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Purpose of Sampling				SW55 and SW57 (Monthly/Quarterly Sampling - sites not discharging)
CN ID	EPL ID	28/12/2024	29/12/2024	30/12/2024
Parameter:		pH (pH unit)		
SW55	55	N/A	N/A	7.71
SW56	56	N/A	N/A	NR*
SW57	57	N/A	N/A	7.52
SW58a	61	N/A	N/A	NR*
SW59	66	N/A	N/A	NR*
Parameter:		Electrical Conductivity (µS/cm)		
SW55	55	N/A	N/A	926
SW56	56	N/A	N/A	NR*
SW57	57	N/A	N/A	313
SW58a	61	N/A	N/A	NR*
SW59	66	N/A	N/A	NR*
Parameter:		Suspended Solids (mg/L)		
SW55	55	N/A	N/A	91
SW56	56	N/A	N/A	NR*
SW57	57	N/A	N/A	22
SW58a	61	N/A	N/A	NR*
SW59	66	N/A	N/A	NR*
Parameter:		Ammonia (mg/L)		
SW55	55	N/A	N/A	0.025
SW56	56	N/A	N/A	NR*
SW57	57	N/A	N/A	0.06
SW58a	61	N/A	N/A	NR*
SW59	66	N/A	N/A	NR*
Parameter:		Biological Oxygen Demand (mg/L)		
SW55	55	N/A	N/A	7
SW56	56	N/A	N/A	NR*
SW57	57	N/A	N/A	4
SW58a	61	N/A	N/A	NR*
SW59	66	N/A	N/A	NR*

*Monthly sampling at SW56, SW58a and SW59 unable to be conducted on 30 December 2024 due to insufficient water at all locations.

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Purpose of Sampling		
CN ID	EPL ID	31/12/2024
Parameter:		pH (pH unit)
SW55	55	N/A
SW56	56	N/A
SW57	57	N/A
SW58a	61	N/A
SW59	66	N/A
Parameter:		Electrical Conductivity (µS/cm)
SW55	55	N/A
SW56	56	N/A
SW57	57	N/A
SW58a	61	N/A
SW59	66	N/A
Parameter:		Suspended Solids (mg/L)
SW55	55	N/A
SW56	56	N/A
SW57	57	N/A
SW58a	61	N/A
SW59	66	N/A
Parameter:		Ammonia (mg/L)
SW55	55	N/A
SW56	56	N/A
SW57	57	N/A
SW58a	61	N/A
SW59	66	N/A
Parameter:		Biological Oxygen Demand (mg/L)
SW55	55	N/A
SW56	56	N/A
SW57	57	N/A
SW58a	61	N/A
SW59	66	N/A

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Environment Protection Licence 5897 - Condition M2 – SF1 and SF2 Sampling
(Monthly - not discharging)

	CN ID		SW57
	EPL ID		57
DATE			30/12/24
Parameter	Units	LOR	
Alkalinity (as calcium carbonate)	mg/L	1	101
Aluminium	mg/L	0.01	0.20
Ammonia	mg/L	0.05	0.06
Copper	mg/L	0.001	<0.001
Biological Oxygen Demand	mg/L	2	4
Electrical Conductivity	uS/cm	10	313
Iron	mg/L	0.05	0.44
Lead	mg/L	0.001	<0.001
Nitrate as N	mg/L	0.05	<0.05
Organochlorine Pesticides	mg/L	0.0005	<0.0005
Organophosphate Pesticides	mg/L	0.0005	<0.0005
pH	pH Units	0.01	7.52
Total Suspended Solids	mg/L	5	22
Zinc	mg/L	0.005	<0.005

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Environment Protection Licence 5897 - Condition M2 – SF1, SF2 and SF3
Sampling (Quarterly - not discharging)

	CN ID		SW55
	EPL ID		55
DATE			30/12/24
Parameter	Units	LOR	
Alkalinity (as calcium carbonate)	mg/L	1	310
Aluminium	mg/L	0.01	0.69
Ammonia	mg/L	0.05	<0.05
Arsenic	mg/L	0.001	0.008
Barium	mg/L	0.001	0.068
Benzene	mg/L	0.001	<0.001
BOD	mg/L	2	7
Cadmium	mg/L	0.0001	<0.0001
Calcium	mg/L	1	30
Chloride	mg/L	1	114
Chromium (Hex)	mg/L	0.01	<0.01
Chromium (Total)	mg/L	0.001	<0.001
Cobalt	mg/L	0.001	<0.001
Copper	mg/L	0.001	<0.001
Electrical Conductivity	uS/cm	11	926
Ethyl benzene	mg/L	0.002	<0.002
Fluoride	mg/L	0.1	0.8
Iron	mg/L	0.05	1.94
Lead	mg/L	0.001	0.004
Magnesium	mg/L	1	20
Manganese	mg/L	0.001	0.394
Mercury	mg/L	0.0001	<0.0001
Nitrate as N	mg/L	0.01	<0.01
Organochlorine Pesticides	mg/L	0.0005	<0.0005
Organophosphate Pesticides	mg/L	0.0005	<0.0005
pH	pH Units	0.01	7.71
Polycyclic Aromatic Hydrocarbons	mg/L	0.0005	<0.0005

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	CN ID		SW55
	EPL ID		55
DATE			30/12/24
Parameter	Units	LOR	
Potassium	mg/L	1	16
Sodium	mg/L	1	130
Sulfate	mg/L	1	13
Total Suspended Solids	mg/L	5	91
Toluene	mg/L	0.002	<0.002
Total Dissolved Solids	mg/L	10	503
Total Organic Carbon	mg/L	1	36
Total Petroleum Hydrocarbons	mg/L	0.05	<0.05
Total Phenolics	mg/L	0.05	<0.05
Zinc	mg/L	0.005	0.010

Summerhill Waste Management Centre

141 Minmi Road, Wallsend, NSW

- Final data obtained: 8/01/25
- Date published: 15/01/25
- 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>