Surface Water Results
April 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 = 220.0 mm

Purpose of Sampling		SW57, SW58a, SW59	SW57, SW58a, SW59	SW57, SW58a, SW59
CN ID	**EPL ID**	1/04/2025	2/04/2025	3/04/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	6.99	6.97	7.02
SW58a	**61**	7.38	7.35	7.32
SW59	**66**	7.82	7.88	7.79
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	221	226	233
SW58a	**61**	714	750	763
SW59	**66**	750	756	765
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	10	7	<5
SW58a	**61**	98	30	72
SW59	**66**	231	83	174
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**	0.06	<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**	2	2	<2
SW58a	**61**	<2	<2	<2
SW59	**66**	4	<2	<2

Surface Water Results
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Purpose of Sampling		SW57, SW58a, SW59	SW57, SW59	SW57, SW59
CN ID	**EPL ID**	4/04/2025	5/04/2025	6/04/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.17	7.43	7.40
SW58a	**61**	7.27	N/A	N/A
SW59	**66**	7.85	8.14	8.02
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	229	232	233
SW58a	**61**	783	N/A	N/A
SW59	**66**	770	763	774
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	<5	<5	<5
SW58a	**61**	238	N/A	N/A
SW59	**66**	59	50	45
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	N/A	N/A
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	<2
SW58a	**61**	3	N/A	N/A
SW59	**66**	<2	3	3

Surface Water Results
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Purpose of Sampling		SW57, SW59	SW57, SW58a, SW59	SW57, SW58a, SW59
CN ID	**EPL ID**	7/04/2025	8/04/2025	9/04/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.50	7.20	7.75
SW58a	**61**	N/A	7.22	7.42
SW59	**66**	8.14	8.00	7.96
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	237	242	239
SW58a	**61**	N/A	455	774
SW59	**66**	784	770	785
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	<5	<5	6
SW58a	**61**	N/A	11	19
SW59	**66**	52	33	115
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**	N/A	<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**	<2	<2	2
SW58a	**61**	N/A	<2	<2
SW59	**66**	2	2	2

Surface Water Results
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Purpose of Sampling		SW56, SW58a, SW59	SW55, SW56, SW58a, SW59	SW55, SW56, SW58a, SW59
CN ID	**EPL ID**	10/04/2025	11/04/2025	12/04/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	6.98	7.02
SW56	**56**	7.84	7.91	7.93
SW57	**57**	N/A	N/A	N/A
SW58a	**61**	7.28	7.74	7.72
SW59	**66**	7.93	7.92	8.02
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	458	514
SW56	**56**	658	655	663
SW57	**57**	N/A	N/A	N/A
SW58a	**61**	724	518	526
SW59	**66**	794	793	786
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	15	9
SW56	**56**	19	24	25
SW57	**57**	N/A	N/A	N/A
SW58a	**61**	11	8	8
SW59	**66**	41	25	33
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	0.11	0.12
SW56	**56**	<0.05	0.07	<0.05
SW57	**57**	N/A	N/A	N/A
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	3	3
SW56	**56**	2	3	2
SW57	**57**	N/A	N/A	N/A
SW58a	**61**	<2	<2	2
SW59	**66**	<2	<2	2

Surface Water Results
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Purpose of Sampling		SW55, SW56, SW58a, SW59	SW56, SW58a, SW59	SW56, SW57, SW58a, SW59
CN ID	**EPL ID**	13/04/2025	14/04/2025	15/04/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	7.79	N/A	N/A
SW56	**56**	8.14	7.93	7.88
SW57	**57**	N/A	N/A	7.01
SW58a	**61**	7.68	7.52	7.39
SW59	**66**	8.19	7.97	7.94
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	596	N/A	N/A
SW56	**56**	670	682	673
SW57	**57**	N/A	N/A	241
SW58a	**61**	548	602	459
SW59	**66**	788	800	704
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	230	N/A	N/A
SW56	**56**	33	62	47
SW57	**57**	N/A	N/A	8
SW58a	**61**	12	12	18
SW59	**66**	38	92	107
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	1.02	N/A	N/A
SW56	**56**	<0.05	0.06	<0.05
SW57	**57**	N/A	N/A	0.44
SW58a	**61**	<0.05	<0.05	<0.05
SW59	**66**	<0.05	<0.05	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	8	N/A	N/A
SW56	**56**	5	6	2
SW57	**57**	N/A	N/A	2
SW58a	**61**	6	4	<2
SW59	**66**	3	7	3

Surface Water Results
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Purpose of Sampling		SW57, SW58a, SW59	SW57, SW58a, SW59	SW57, SW58a, SW59
CN ID	**EPL ID**	16/04/2025	17/04/2025	18/04/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.11	7.11	7.24
SW58a	**61**	7.23	7.22	7.45
SW59	**66**	8.09	8.06	7.94
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	230	231	238
SW58a	**61**	511	494	479
SW59	**66**	781	783	792
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	5	<5	<5
SW58a	**61**	12	9	41
SW59	**66**	33	89	26
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**	<2	<2	<2
SW58a	**61**	<2	<2	3
SW59	**66**	<2	<2	2

Surface Water Results
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Purpose of Sampling		SW57, SW58a, SW59	SW57, SW58a, SW59	SW57, SW58a, SW59
CN ID	**EPL ID**	19/04/2025	20/04/2025	21/04/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.21	7.31	7.52
SW58a	**61**	7.22	7.20	7.26
SW59	**66**	7.98	7.97	8.01
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	235	242	241
SW58a	**61**	519	526	531
SW59	**66**	795	800	798
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	<5	<5	<5
SW58a	**61**	23	14	29
SW59	**66**	42	24	26
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	0.13	0.17
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**	<2	<2	<2
SW58a	**61**	2	2	3
SW59	**66**	2	<2	<2

Surface Water Results
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Purpose of Sampling		SW57, SW59	SW57, SW58a, SW59	SW56, SW57, SW58a, SW59
CN ID	**EPL ID**	22/04/2025	23/04/2025	24/04/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	7.72
SW57	**57**	7.49	7.06	7.04
SW58a	**61**	N/A	7.41	7.20
SW59	**66**	7.94	7.65	7.99
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	717
SW57	**57**	245	237	244
SW58a	**61**	N/A	198	491
SW59	**66**	781	550	795
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	32
SW57	**57**	<5	11	<5
SW58a	**61**	N/A	50	14
SW59	**66**	29	197	32
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	0.15
SW57	**57**	<0.05	<0.05	0.12
SW58a	**61**	N/A	<0.05	0.14
SW59	**66**	<0.05	<0.05	0.14
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	2
SW57	**57**	<2	3	2
SW58a	**61**	N/A	4	<2
SW59	**66**	<2	3	2

Surface Water Results
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Purpose of Sampling		SW56, SW57, SW58a, SW59	SW56, SW57, SW58a, SW59	SW56, SW57, SW58a, SW59
CN ID	**EPL ID**	25/04/2025	26/04/2025	27/04/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	7.80	7.98	7.45
SW57	**57**	7.14	7.23	7.22
SW58a	**61**	7.45	7.53	7.15
SW59	**66**	7.56	7.57	7.84
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	748	744	541
SW57	**57**	248	243	199
SW58a	**61**	728	787	354
SW59	**66**	812	817	704
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	29	32	394
SW57	**57**	<5	<5	24
SW58a	**61**	20	18	202
SW59	**66**	26	22	153
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	0.06	<0.05	0.10
SW57	**57**	<0.05	<0.05	<0.05
SW58a	**61**	<0.05	<0.05	<0.05
SW59	**66**	0.06	<0.05	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	2	<2	5
SW57	**57**	<2	<2	<2
SW58a	**61**	<2	<2	2
SW59	**66**	4	4	4

Surface Water Results
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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**	28/04/2025	29/04/2025	30/04/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	7.35	7.36	7.21
SW56	**56**	7.29	7.10	7.34
SW57	**57**	7.04	6.61	6.71
SW58a	**61**	7.39	7.34	7.28
SW59	**66**	7.24	7.28	7.38
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	267	285	304
SW56	**56**	401	405	425
SW57	**57**	178	183	215
SW58a	**61**	314	418	465
SW59	**66**	301	344	377
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	168	117	77
SW56	**56**	1,240	1,170	879
SW57	**57**	69	83	61
SW58a	**61**	660	822	267
SW59	**66**	740	726	478
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	0.14	0.16	0.28
SW56	**56**	3.82	2.84	3.34
SW57	**57**	<0.05	<0.05	<0.05
SW58a	**61**	1.19	1.53	<0.05
SW59	**66**	<0.05	<0.05	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	4	3	5
SW56	**56**	14	9	3
SW57	**57**	2	2	2
SW58a	**61**	7	8	2
SW59	**66**	3	2	2

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

	CN ID		SW59
	EPL ID		66
DATE			**30/04/2025**
Parameter	**Units**	**LOR**	
Alkalinity (as calcium carbonate)	mg/L	1	50
Aluminium	mg/L	0.01	15.5
Ammonia	mg/L	0.05	<0.05
Copper	mg/L	0.001	0.024
Biological Oxygen Demand	mg/L	2	2
Electrical Conductivity	uS/cm	10	377
Iron	mg/L	0.05	15.8
Lead	mg/L	0.001	0.025
Nitrate as N	mg/L	0.05	0.11
Organochlorine Pesticides	mg/L	0.0005	<0.0005
Organophosphate Pesticides	mg/L	0.0005	<0.0005
pH	pH Units	0.01	7.38
Total Suspended Solids	mg/L	5	478
Zinc	mg/L	0.005	0.104

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

	CN ID		SW58a	SW56	SW55	SW57	SW58a
	EPL ID		61	56	55	57	61
DATE			8/04/25	10/04/25	11/04/25	15/04/25	23/04/25
Parameter	Units	LOR					
Alkalinity (as calcium carbonate)	mg/L	1	79	104	126	64	44
Aluminium	mg/L	0.01	1.18	0.60	0.54	0.08	1.64
Ammonia	mg/L	0.05	<0.05	<0.05	0.11	0.44	<0.05
Arsenic	mg/L	0.001	0.003	0.002	0.004	0.001	0.003
Barium	mg/L	0.001	0.033	0.056	0.040	0.033	0.027
Benzene	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BOD	mg/L	2	<2	2	3	2	4
Cadmium	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium	mg/L	1	14	34	25	8	8
Chloride	mg/L	1	68	120	50	33	29
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	<0.001	0.002
Cobalt	mg/L	0.001	<0.001	0.001	0.003	<0.001	<0.001
Copper	mg/L	0.001	0.005	0.001	0.004	<0.001	0.005
Electrical Conductivity	uS/cm	1	455	658	458	241	198
Ethyl benzene	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fluoride	mg/L	0.1	0.3	0.3	0.4	0.2	0.3
Iron	mg/L	0.05	1.13	0.59	1.14	1.73	1.59
Lead	mg/L	0.001	<0.001	<0.001	0.002	<0.001	0.002
Magnesium	mg/L	1	9	12	10	5	4
Manganese	mg/L	0.001	0.161	0.448	0.280	0.343	0.099
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Nitrate as N	mg/L	0.01	0.62	0.32	<0.01	0.01	0.58
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	7.22	7.84	6.98	7.01	7.41
Polycyclic Aromatic Hydrocarbons	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Potassium	mg/L	1	4	10	13	5	3
Sodium	mg/L	1	62	71	52	35	24
Sulfate	mg/L	1	42	57	52	10	<10[#1]
Total Suspended Solids	mg/L	5	11	19	15	8	50
Toluene	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Dissolved Solids	mg/L	11	272	368	346	172	151
Total Organic Carbon	mg/L	1	14	10	23	16	14
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	<0.005	0.023	0.011	0.012

[#1]LOR for Sulfate raised due to sample matrix

Surface Water Results
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	CN ID		SW56	SW55
	EPL ID		56	55
DATE			24/04/25	28/04/25
Parameter	Units	LOR		
Alkalinity (as calcium carbonate)	mg/L	1	96	77
Aluminium	mg/L	0.01	1.04	2.75
Ammonia	mg/L	0.05	0.15	0.14
Arsenic	mg/L	0.001	0.002	0.003
Barium	mg/L	0.001	0.069	0.048
Benzene	mg/L	0.001	<0.001	<0.001
BOD	mg/L	2	2	4
Cadmium	mg/L	0.0001	<0.0001	<0.0001
Calcium	mg/L	1	38	14
Chloride	mg/L	1	125	22
Chromium (Hex)	mg/L	0.01	<0.01	<0.01
Chromium (Total)	mg/L	0.001	0.001	0.002
Cobalt	mg/L	0.001	0.002	0.002
Copper	mg/L	0.001	0.004	0.010
Electrical Conductivity	uS/cm	1	717	267
Ethyl benzene	mg/L	0.002	<0.002	<0.002
Fluoride	mg/L	0.1	0.4	0.2
Iron	mg/L	0.05	1.07	2.60
Lead	mg/L	0.001	0.001	0.009
Magnesium	mg/L	1	14	6
Manganese	mg/L	0.001	0.425	0.080
Mercury	mg/L	0.0001	<0.0001	<0.0001
Nitrate as N	mg/L	0.01	0.05	0.57
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	7.72	7.35
Polycyclic Aromatic Hydrocarbons	mg/L	0.001	<0.001	<0.001
Potassium	mg/L	1	10	8
Sodium	mg/L	1	90	28
Sulfate	mg/L	1	78	23
Total Suspended Solids	mg/L	5	32	168
Toluene	mg/L	0.002	<0.002	<0.002
Total Dissolved Solids	mg/L	11	395	224
Total Organic Carbon	mg/L	1	11	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	0.033	0.045

Surface Water Results
April 2025

Summerhill Waste Management Centre

141 Minmi Road, Wallsend, NSW

- Final data obtained: 5/05/2025
- Date published: 15/05/2025

- 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