Surface Water Results
January 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 = 244.6 mm

Purpose of Sampling				
CN ID	**EPL ID**	1/01/2025	2/01/2025	3/01/2025
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

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Purpose of Sampling				
CN ID		4/01/2025	5/01/2025	6/01/2025
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

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Purpose of Sampling				SW57
CN ID		7/01/2025	8/01/2025	9/01/2025
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	7.16
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	310
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	8
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	<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	N/A	8
SW58a	**61**	N/A	N/A	N/A
SW59	**66**	N/A	N/A	N/A

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Purpose of Sampling		SW57	SW57	SW57
CN ID		10/01/2025	11/01/2025	12/01/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.17	7.24	7.26
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**	296	295	301
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**	12	6	8
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**	<0.05	<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**	4	2	<2
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		13/01/2025	14/01/2025	15/01/2025
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

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Purpose of Sampling		SW57	SW57	SW55,SW56, SW57,SW58a & SW59
CN ID	**EPL ID**	16/01/2025	17/01/2025	18/01/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	N/A	7.20
SW56	**56**	N/A	N/A	7.27
SW57	**57**	7.26	7.00	7.17
SW58a	**61**	N/A	N/A	7.00
SW59	**66**	N/A	N/A	7.44
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	N/A	433
SW56	**56**	N/A	N/A	489
SW57	**57**	262	227	220
SW58a	**61**	N/A	N/A	331
SW59	**66**	N/A	N/A	653
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	N/A	91
SW56	**56**	N/A	N/A	565
SW57	**57**	10	22	19
SW58a	**61**	N/A	N/A	150
SW59	**66**	N/A	N/A	185
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	N/A	0.12
SW56	**56**	N/A	N/A	1.02
SW57	**57**	<0.05	<0.05	<0.05
SW58a	**61**	N/A	N/A	0.17
SW59	**66**	N/A	N/A	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	N/A	4
SW56	**56**	N/A	N/A	3
SW57	**57**	2	3	<2
SW58a	**61**	N/A	N/A	3
SW59	**66**	N/A	N/A	<2

Surface Water Results January 2025

Purpose of Sampling		SW55,SW56,SW57,SW58a & SW59	SW55,SW56,SW57,SW58a & SW59	SW55,SW56,SW57,SW58a & SW59
CN ID	**EPL ID**	19/01/2025	20/01/2025	21/01/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	7.29	7.23	7.28
SW56	**56**	7.34	7.30	7.29
SW57	**57**	6.95	6.80	6.89
SW58a	**61**	7.34	7.27	7.25
SW59	**66**	7.48	7.56	7.59
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	412	428	435
SW56	**56**	572	575	512
SW57	**57**	241	259	252
SW58a	**61**	572	575	567
SW59	**66**	603	607	617
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	62	35	17
SW56	**56**	323	462	336
SW57	**57**	14	16	14
SW58a	**61**	124	75	47
SW59	**66**	399	433	393
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	0.10	<0.05	0.07
SW56	**56**	4.46	4.49	4.450
SW57	**57**	<0.05	<0.05	<0.05
SW58a	**61**	1.14	0.51	0.09
SW59	**66**	<0.05	<0.05	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	4	3	3
SW56	**56**	6	5	5
SW57	**57**	<2	<2	3
SW58a	**61**	3	<2	3
SW59	**66**	2	2	3

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Purpose of Sampling		SW55,SW57,SW58a & SW59	SW55,SW57,SW58a & SW59	SW55,SW57,SW58a & SW59
CN ID	**EPL ID**	22/01/2025	23/01/2025	24/01/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	7.29	7.36	7.36
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7.05	7.10	N/A
SW58a	**61**	7.23	7.20	7.29
SW59	**66**	7.58	7.43	7.42
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	432	440	440
SW56	**56**	N/A	N/A	N/A
SW57	**57**	253	254	N/A
SW58a	**61**	560	565	516
SW59	**66**	634	651	655
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	10	15	8
SW56	**56**	N/A	N/A	N/A
SW57	**57**	7	2.5	N/A
SW58a	**61**	30	35	15
SW59	**66**	136	297	106
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	<0.05	<0.05	<0.05
SW56	**56**	N/A	N/A	N/A
SW57	**57**	0.07	<0.05	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**	4	4	3
SW56	**56**	N/A	N/A	N/A
SW57	**57**	3	4	N/A
SW58a	**61**	2	2	<2
SW59	**66**	2	3	2

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Purpose of Sampling		SW55,SW58a & SW59	SW55,SW58a & SW59	SW55,SW58a & SW59
CN ID	**EPL ID**	25/01/2025	26/01/2025	27/01/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	7.10	6.96	6.89
SW56	**56**	N/A	N/A	N/A
SW57	**57**	N/A	N/A	N/A
SW58a	**61**	7.54	7.52	7.50
SW59	**66**	7.39	7.75	7.88
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	460	484	513
SW56	**56**	N/A	N/A	N/A
SW57	**57**	N/A	N/A	N/A
SW58a	**61**	467	481	498
SW59	**66**	663	688	697
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	17	19	28
SW56	**56**	N/A	N/A	N/A
SW57	**57**	N/A	N/A	N/A
SW58a	**61**	12	11	9
SW59	**66**	94	137	54
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	0.18	0.43	0.43
SW56	**56**	N/A	N/A	N/A
SW57	**57**	N/A	N/A	N/A
SW58a	**61**	<0.05	0.09	0.09
SW59	**66**	<0.05	<0.05	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	4	4	5
SW56	**56**	N/A	N/A	N/A
SW57	**57**	N/A	N/A	N/A
SW58a	**61**	<2	<2	<2
SW59	**66**	<2	<2	<2

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Purpose of Sampling		SW55,SW58a & SW59	SW57,SW58a & SW59	SW57,SW58a & SW59
CN ID	**EPL ID**	28/01/2025	29/01/2025	30/01/2025
Parameter:			**pH (pH unit)**	
SW55	**55**	7.02	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	N/A	6.93	6.99
SW58a	**61**	7.23	7.31	7.25
SW59	**66**	7.72	7.31	7.29
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	596	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	N/A	248	239
SW58a	**61**	528	549	672
SW59	**66**	721	687	700
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	50	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	N/A	12	7
SW58a	**61**	5	29	12
SW59	**66**	47	27	15
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	0.86	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	N/A	<0.05	0.06
SW58a	**61**	0.07	<0.05	<0.05
SW59	**66**	<0.05	<0.05	<0.05
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	5	N/A	N/A
SW56	**56**	N/A	N/A	N/A
SW57	**57**	N/A	3	5
SW58a	**61**	<2	3	2
SW59	**66**	<2	3	3

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Purpose of Sampling		SW57,SW58a & SW59		
CN ID	**EPL ID**	31/01/25	-	-
Parameter:			**pH (pH unit)**	
SW55	**55**	N/A	-	-
SW56	**56**	N/A	-	-
SW57	**57**	6.92	-	-
SW58a	**61**	7.32	-	-
SW59	**66**	6.97	-	-
Parameter:			**Electrical Conductivity (µS/cm)**	
SW55	**55**	N/A	-	-
SW56	**56**	N/A	-	-
SW57	**57**	241	-	-
SW58a	**61**	663	-	-
SW59	**66**	682	-	-
Parameter:			**Suspended Solids (mg/L)**	
SW55	**55**	N/A	-	-
SW56	**56**	N/A	-	-
SW57	**57**	6	-	-
SW58a	**61**	26	-	-
SW59	**66**	45	-	-
Parameter:			**Ammonia (mg/L)**	
SW55	**55**	N/A	-	-
SW56	**56**	N/A	-	-
SW57	**57**	<0.05	-	-
SW58a	**61**	0.22	-	-
SW59	**66**	0.12	-	-
Parameter:			**Biological Oxygen Demand (mg/L)**	
SW55	**55**	N/A	-	-
SW56	**56**	N/A	-	-
SW57	**57**	2	-	-
SW58a	**61**	2	-	-
SW59	**66**	3	-	-

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

	CN ID		SW55	SW56	SW57	SW57	SW57
	EPL ID		55	56	57	57	57
DATE			18/01/25	18/01/25	09/01/25	16/01/25	29/01/25
Parameter	Units	LOR					
Alkalinity (as calcium carbonate)	mg/L	1	90	62	96	71	41
Aluminium	mg/L	0.01	2.88	7.35	0.13	0.17	0.78
Ammonia	mg/L	0.05	0.12	1.02	<0.05	<0.05	<0.05
Arsenic	mg/L	0.001	0.004	0.006	0.002	0.002	0.002
Barium	mg/L	0.001	0.055	0.106	0.027	0.030	0.029
Benzene	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BOD	mg/L	2	4	3	8	2	3
Cadmium	mg/L	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Calcium	mg/L	1	23	23	11	9	8
Chloride	mg/L	1	43	73	33	29	41
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	<0.001
Cobalt	mg/L	0.001	0.003	0.008	<0.001	<0.001	<0.001
Copper	mg/L	0.001	0.010	0.020	<0.001	<0.001	0.002
Electrical Conductivity	uS/cm	11	433	489	310	262	249
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	0.3	0.2	0.2
Iron	mg/L	0.05	3.10	9.40	0.58	0.91	0.99
Lead	mg/L	0.001	0.008	0.018	<0.001	<0.001	0.002
Magnesium	mg/L	1	11	12	7	6	5
Manganese	mg/L	0.001	0.182	0.369	0.466	0.280	0.175
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Nitrate as N	mg/L	0.01	0.28	0.95	<0.05	0.03	0.04
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	7.20	7.27	7.16	7.26	6.93
Polycyclic Aromatic Hydrocarbons	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Potassium	mg/L	1	13	8	3	2	3
Sodium	mg/L	1	46	58	46	43	34
Sulfate	mg/L	1	57	60	7	11	17
Total Suspended Solids	mg/L	5	91	565	8	10	12
Toluene	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Dissolved Solids	mg/L	11	282	410	174	189	149
Total Organic Carbon	mg/L	1	21	16	14	14	15
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	0.051	0.069	<0.005	<0.005	0.009

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	CN ID		SW58a	SW59
	EPL ID		58	59
DATE			18/01/25	18/01/25
Parameter	Units	LOR		
Alkalinity (as calcium carbonate)	mg/L	1	43	79
Aluminium	mg/L	0.01	6.01	7.45
Ammonia	mg/L	0.05	0.17	<0.05
Arsenic	mg/L	0.001	0.004	0.005
Barium	mg/L	0.001	0.072	0.084
Benzene	mg/L	0.001	<0.001	<0.001
BOD	mg/L	2	3	<2
Cadmium	mg/L	0.0001	0.0002	<0.0001
Calcium	mg/L	1	12	10
Chloride	mg/L	1	53	81
Chromium (Hex)	mg/L	0.01	<0.01	<0.01
Chromium (Total)	mg/L	0.001	<0.001	<0.001
Cobalt	mg/L	0.001	0.004	0.006
Copper	mg/L	0.001	0.012	0.012
Electrical Conductivity	uS/cm	11	331	653
Ethyl benzene	mg/L	0.002	<0.002	<0.002
Fluoride	mg/L	0.1	0.3	0.5
Iron	mg/L	0.05	6.74	8.15
Lead	mg/L	0.001	0.010	0.012
Magnesium	mg/L	1	9	14
Manganese	mg/L	0.001	0.188	0.257
Mercury	mg/L	0.0001	<0.0001	<0.0001
Nitrate as N	mg/L	0.01	0.26	0.13
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	7.00	7.44
Polycyclic Aromatic Hydrocarbons	mg/L	0.0005	<0.0005	<0.0005
Potassium	mg/L	1	7	7
Sodium	mg/L	1	50	107
Sulfate	mg/L	1	46	118
Total Suspended Solids	mg/L	5	150	185
Toluene	mg/L	0.002	<0.002	<0.002
Total Dissolved Solids	mg/L	11	320	549
Total Organic Carbon	mg/L	1	17	17
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	0.049	0.054

Surface Water Results January 2025

Summerhill Waste Management Centre

141 Minmi Road, Wallsend, NSW

- Final data obtained: 7/02/25
- Date published: 15/02/25

- 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