

>C10-C40 Sum*	-	-	-	-	-	-	-	-	<100
F2*	-	-	-	-	-	-	-	-	<100

Tables notes:

1. All measurements are in mg/L unless stated otherwise;
2. BD1 = blind field duplicate of BH3B;
3. SWL = Standing Water Level (mAHD)
4. TDS = Total Dissolved Solids;
5. BOD = Biological Oxygen Demand; and
6. TOC = Total Organic Carbon;
7. Total P = Total Phosphorus
8. TKN = Total Kjeldahl Nitrogen
9. F1 = C6 – C10 Fraction minus BTEX
10. F2 = >C10 – C16 Fraction Minus Napthalene
11. Values with < are below the limit of reporting (LOR).
12. * after silica clean up gel

Mercury	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Phosphorus	-	-	-	-	-	-	-	-	2.2

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6. Values with < are below the limit of reporting (LOR)

Total phosphorus	<0.1	<0.1	0.1	<0.1	<0.1	0.11	<0.1	0.11	0.12
Total kjeldahl nitrogen	-	-	-	-	-	-	-	-	2.9

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Inverell Landfill

Sampling Point: All Monitoring Points						EPL No. 7463			
Licence Period 19 November 2016 to 18 November 2017 http://www.environment.nsw.gov.au/prpoeoapp/uetan.aspx?instid=7463&id=7463&option=licence&searchrange=licence&range=POEO						Licencee: Inverell Shire Council			
licence&prp=no&status=Issued						144 Otho Street, Inverell			
						Monitoring Frequency - Quarterly			
Date Sampled	14-Nov-17								
Date Reported	12-Dec-17								
Date Published	8-Jan-18								
Sampling Notes:									
The laboratory and field analysis results indicate that landfill leachate does not appear to be impacting groundwater at the monitoring locations. All groundwater monitoring bores were sampled, however the leachate dam was dry this round, so no sample was collected. Groundwater from the up gradient monitoring well BH1 exceeded the established threshold levels for nitrate (at 82 mg/L) and the L/N ratio (29.28). The continuing elevated nitrate and sulphate levels detected in monitoring well BH1 is not associated with any other landfill leachate indicators. Bores down gradient of the landfill did not have these characteristics. As this monitoring well is situated up gradient of the landfill, the elevated level of nitrate could be representative of an outside regional/local influence such as agriculture.									
Sampling point	BH1	BH2a	BH2b	BH3a	BH3b	BD1	BH4	BH5	LP1
EPA Identification Numbers	6	7	8	9	10	-	11	12	1
pH (field)	6.5	6.68	6.78	7.85	7.04	6.99	7.03	7.24	7.61
Conductivity	1,641	2,578	3,221	2,217	1,442	-	1,495	1261	1491
Standing Water Level	607.31	595	596	597.5	597.5	-	605	614.5	-
pH (lab)	7	6.9	7	7	7.1	7.1	7	7.1	8
TDS	940	1480	1900	1180	890	890	800	745	765
BOD	<2	<2	<2	2	2	<2	<2	<2	3
TOC	4	11	11	4	2	<1	2	6	32
Total Phenols	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron	0.01	0.42	0.05	0.06	0.1	0.08	0.02	0.01	0.02
Manganese	<0.01	0.44	0.05	0.18	0.2	0.19	0.15	0.02	0.02
Sodium	42	150	320	140	105	110	38	56	96
Calcium	130	130	67	110	120	115	115	125	58
Potassium	3.8	2.1	2.9	2.6	5	4.8	2.9	2.8	18
Magnesium	120	210	250	170	82	65	120	65	94
Ammonia	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4
Chloride	43	235	320	200	27	27	49	21	185
Fluoride	<0.1	0.13	0.11	<0.1	<0.1	<0.1	<0.1	<0.1	0.13
Nitrate	120	<0.1	<0.1	<0.1	<0.1	<0.1	6.6	86	<0.1
Sulfate	20	9	4	3	7	7	11	110	28
Bicarbonate	895	1430	1770	1210	1040	1030	950	590	585
Phosphate	<0.1	<0.1	0.12	<0.1	<0.1	<0.1	0.12	0.15	<0.1
Nitrite	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3
Total Alkalinity	735	1170	1900	965	850	845	780	485	480
Copper	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lead	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	0.006	0.005	0.007	0.003	0.004	0.003	0.005	0.01	0.005
Cadium	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Arsenic	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total phosphorus	<0.1	<0.1	0.1	<0.1	<0.1	0.11	<0.1	<0.1	0.15
Total kjeldahl nitrogen	-	-	-	-	-	-	-	-	3.3

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