



# Inverell Landfill

<b>Sampling Point: All Monitoring Points</b>						<b>EPL No. 7463</b>			
<b>Licence Period 19 November 2013 to 18 November 2014</b>						<b>Licensee: Inverell Shire Council</b>			
<a href="http://www.environment.nsw.gov.au/prpoeoapp/detail.aspx?instid=7463&amp;id=463&amp;option=licence&amp;searchrange=licence&amp;range=POEO">http://www.environment.nsw.gov.au/prpoeoapp/detail.aspx?instid=7463&amp;id=463&amp;option=licence&amp;searchrange=licence&amp;range=POEO</a>						<b>144 Otho Street, Inverell</b>			
<b>licence&amp;prp=no&amp;status=Issued</b>						<b>Monitoring Frequency - Quarterly</b>			
<b>Date Sampled</b>	<b>19-Nov-14</b>								
<b>Date Reported</b>	<b>16-Dec-14</b>								
<b>Date Published</b>	<b>20-Jan-15</b>								
<b>Sampling Notes:</b>									
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.									
<b>Sampling point</b>	<b>BH1</b>	<b>BH2a</b>	<b>BH2b</b>	<b>BH3a</b>	<b>BH3b</b>	<b>BD1</b>	<b>BH4</b>	<b>BH5</b>	<b>LP1</b>
EPA Identification Numbers	6	7	8	9	10	-	11	12	1
pH (field)	6.82	6.99	6.88	6.85	6.9	-	6.84	6.68	Dry
Conductivity	1,567	3,060	3,370	1,920	1,364	-	2,810	441	-
Standing Water Level	13.21	6.6	8.37	6.57	12.39	-	13.46	10.68	-
pH (lab)	7.6	7.4	7.4	7.3	7.4	7.7	7.9	7.2	-
TDS	920	1840	2070	1170	940	855	1920	385	-
BOD	<2	<2	<2	3	2	<2	<2	<2	-
TOC	3	10	7	5	<1	1	7	3	-
Total Phenols	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Iron	0.04	0.02	0.02	0.01	0.05	0.04	0.02	0.05	-
Manganese	0.06	0.29	0.01	0.15	0.29	0.32	0.59	0.05	-
Sodium	60	305	415	140	145	140	135	92	-
Calcium	110	83	61	110	110	105	160	51	-
Potassium	2.7	1.4	1.9	1.6	3.9	3.8	2.1	2.2	-
Magnesium	120	250	270	150	79	79	270	18	-
Ammonia	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-
Chloride	17	330	350	150	21	21	495	8	-
Fluoride	0.12	0.22	0.19	0.13	<0.1	<0.1	0.13	<0.1	-
Nitrate	82	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2.7	-
Sulfate	37	4	4	4	10	10	19	20	-
Bicarbonate	955	1770	2000	1210	1110	1070	1320	465	-
Phosphate	0.37	0.24	0.37	<0.1	<0.1	<0.1	0.28	<0.1	-
Nitrite	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-

**Table notes:**

1. All measurements are in mg/L unless stated otherwise;
2. BD1 = blind field duplicate of BH3b;
3. TDS = Total Dissolved Solids; and
4. BOD = Biological Oxygen Demand; and
5. TOC = Total Organic Carbon.
6. Values with < are below the limit of reporting (LOR)