

# Appendix 3

# Leachate Visual Inspection

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Type of sample:  
 Location code:  
 Sampling point:  
 Sampled by:  
 Time Sampled:  
 Start/End - Dates of Analysis:  
 Status of results:

Leachate	Leachate	Leachate	Leachate	Leachate
00078/1-LM1	00078/1-LM3	00078/1-LM5	00078/1-LM7	00078/1-LM8
Layering of sample - clear with red solids	Light brown colour	Black colour	Dark brown colour	Dark brown colour
JMcG/JS	JMcG/JS	JMcG/JS	JMcG/JS	JMcG/JS
12:15	12:20	12:30	12:35	12:40
Final Report	Final Report	Final Report	Final Report	Final Report

Parameter	Units	Limits					
F Depth of Borehole	m		nm	nm	nm	nm	nm
F Leachate Level	m		nm	nm	nm	nm	nm
F Temperature	°C		10.0	12.0	21.0	34.0	37.0
pH	pH		7.1	7.0	7.4	7.5	7.9
Conductivity	µS/cm		3900.0	3910.0	11850.0	25000.0	25800.0
Biochemical Oxygen Demand	mg/l O2		12.6	38.1	88.0	188.0	345.0
Chemical Oxygen Demand	mg/l O2		169	356	980	3505	5005
Ammonia	mg/l N		175.927	223.472	757.897	2056.106	2237.512
Chloride	mg/l Cl		299	296	1131	2648	2661
Total Oxidised Nitrogen	mg/l N		0.3	<0.3	<0.3	<0.3	<0.3
Nitrite	mg/l N		<0.005	<0.005	<0.005	<0.005	<0.005
Ortho-Phosphate	mg/l P		0.129	1.072	1.257	18.197	22.023

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Comments:

- 1) Results highlighted and in bold are outside specified limits.
- 2) All Metals Analysed in the EPA Dublin Laboratory,  
Cyanide Analysed in the EPA Cork Laboratory,  
Phenols Analysed in the EPA Castlebar Laboratory.
- 3) nm "Not measured"
- 4) nd "None detected"
- 5) nt "No time" - Time not recorded
- 6) tntc "Too numerous to count"
- 7) F "Field measured parameters"

Signed:



PP Michael Neill, Regional  
Chemist

Date:

9/6/04

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# Appendix 4

## Surface water composition

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Parameter	2402043	2402040	2402041	2402040	2402049
Type of sample:	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Location code:	00078/1 - SW1	00078/1 - SW2	00078/1 - SW3	00078/1 - SW4	00078/1 - SW6
Sampling point:	Clear yellow colour	Clear sample		Slight yellow colour - low flow, lot of grass	Clear sample
Sampled by:	JMcG/JS	JMcG/JS	JMcG/JS	JMcG/JS	JMcG/JS
Time Sampled:	15:35	13:45	13:00	11:45	13:30
Start/End - Dates of Analysis:					
Status of results:	Final Report	Final Report	Final Report	Final Report	Final Report

Parameter	Units	Limite	2402043	2402040	2402041	2402040	2402049	
F Temperature	°C		14.1	11.2	12.3	10.6	11.2	14.0
F Dissolved Oxygen	% Saturation		90.7	90.1	101.7	82.0	106.6	77.4
pH	pH		7.9	7.9	8.3	7.7	8.2	7.9
Conductivity	µS/cm		706.0	824.0	346.0	637.0	394.0	988.0
Biochemical Oxygen Demand	mg/l O2		4.0	0.9	2.4	1.4	2.3	5.3
Chemical Oxygen Demand	mg/l O2		40	24	34	35	39	40
Ammonia	mg/l N		0.062	0.005	0.013	0.034	0.04	1.511
Chloride	mg/l Cl		29	30	19	20	18	46
Total Oxidised Nitrogen	mg/l N		2.1	5.9	2.7	1.5	3.0	2.7
Nitrite	mg/l N		0.04	0.012	0.015	<0.001	0.015	0.058
Ortho-Phosphate	mg/l P		<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Suspended Solids	mg/l		<10.0	<10	<10	<10	16.0	<11

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Comments:

- 1) Results highlighted and in bold are outside specified limits.
- 2) All Metals Analysed in the EPA, Dublin Laboratory.  
Cyanide Analysed in the EPA Cork Laboratory.  
Phenols Analysed in the EPA Castlebar Laboratory.
- 3) nm "Not measured"
- 4) nd "None detected"
- 5) nt "No time" - Time not recorded
- 6) tntc "Too numerous to count"
- 7) F "Field measured parameters"

Signed:



PP Michael Neill, Regional  
Chemist

Date:

9/6/06

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# Appendix 5

## Surface water visual inspection

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## Weekly Surface Water Inspection

<b>Date and time of Inspection:</b> 03/4/04			
<b>Name of inspection personnel:</b> Olga Broderick			
<b>Signature:</b>			
<b>Weather Conditions:</b> Calm Overcast Day			
Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken
<b>Comments :</b>			
There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.			



## Weekly Surface Water Inspection

**Date and time of inspection:** 10/4/04

**Name of inspection personnel:** Olga Broderick

**Signature:**

**Weather Conditions:** Cloudy Overcast Day

Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken

**Comments :**

There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.

## Weekly Surface Water Inspection

**Date and time of inspection:** 17/4/04

**Name of inspection personnel:** Olga Broderick

**Signature:**

**Weather Conditions:** Sunny Day

Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken

**Comments :**

There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.

## Weekly Surface Water Inspection

**Date and time of inspection:** 24/4/04

**Name of inspection personnel:** Olga Broderick

**Signature:**

**Weather Conditions:** Overcast Day

Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken

**Comments :**

There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.

## Weekly Surface Water Inspection

<b>Date and time of inspection:</b> 01/5/04			
<b>Name of inspection personnel:</b> Olga Broderick			
<b>Signature:</b>			
<b>Weather Conditions:</b> Calm Dry Day			
Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken
<b>Comments :</b>			
There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.			

## Weekly Surface Water Inspection

**Date and time of inspection:** 08/5/04

**Name of inspection personnel:** Olga Broderick

**Signature:**

**Weather Conditions:** Sunny Day

Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken

**Comments :**

There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.

## Weekly Surface Water Inspection

<b>Date and time of Inspection:</b> 15/5/04			
<b>Name of inspection personnel:</b> Olga Broderick			
<b>Signature:</b>			
<b>Weather Conditions:</b> Sunny Dry Day			
Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken
<b>Comments :</b>			
There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.			

## Weekly Surface Water Inspection

**Date and time of inspection:** 22/5/04

**Name of inspection personnel:** Olga Broderick

**Signature:**

**Weather Conditions:** Sunny Day

Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken

**Comments :**

There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.

## Weekly Surface Water Inspection

**Date and time of inspection:** 29/5/04

**Name of inspection personnel:** Olga Broderick

**Signature:**

**Weather Conditions:** Sunny Day

Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken

**Comments :**

There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.



## Weekly Surface Water Inspection

**Date and time of inspection:** 05/6/04

**Name of inspection personnel:** Olga Broderick

**Signature:**

**Weather Conditions:** Dry Sunny Day

Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken

**Comments :**

There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.

## Weekly Surface Water Inspection

**Date and time of inspection:** 12/6/04

**Name of inspection personnel:** Olga Broderick

**Signature:**

**Weather Conditions:** Dry Sunny Day

Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken

**Comments :**

There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.

## Weekly Surface Water Inspection

<b>Date and time of inspection:</b> 19/6/04			
<b>Name of inspection personnel:</b> Olga Broderick			
<b>Signature:</b>			
<b>Weather Conditions:</b> Dry Sunny Day			
Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken
<b>Comments :</b>			
There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.			

## Weekly Surface Water Inspection

**Date and time of Inspection:** 26/6/04

**Name of inspection personnel:** Olga Broderick

**Signature:**

**Weather Conditions:** Overcast and Dry

Monitoring Location	Visual Inspection	Odour Inspection	Suspended Solids (mg/L)
<b>SW1</b> (Bridge above landfill entrance)	Dark Peaty colour	No odour	Not taken
<b>SW2</b> (stream prior to Ollatrim River)	Clear	No odour	Not taken
<b>SW3</b> (Ollatrim River before stream enters)	Clear	No odour	Not taken
<b>SW4</b> (Bog above landfill)	Dark Peaty colour from bog (a lot of grass growth)	No odour	Not taken
<b>SW6</b> (Ollatrim River after stream enters)	Clear	No odour	Not taken
<b>Discharge point from the surface water lagoon to the Ballaghveny Stream.</b>	Clear	No odour	Not taken

**Comments :**

There appears to be no visual or nasal evidence of contamination of the surface waters around the landfill by leachate.