

MOHILL LANDFILL WASTE LICENCE W0065-01

ANNUAL ENVIRONMENTAL REPORT 2010

1. Reporting Period

1st January 2010 – 31st December 2010

2. Waste Activities Carried out at the Facility

The facility is licensed under the Waste Management Acts 1996 to 2003 under Class 1, 4, and 13 of the third Schedule and Class 13 of the fourth Schedule of the 1996 Act. The disposal of municipal waste and non-hazardous industrial wastes ceased on 30th April 2002. Selected soil and boulder clay waste only from local construction projects was used in the capping and restoration of the landfill.

A Civic Amenity Recycling Facility has been built on a site between the public road and the landfill and is fully operational. This recycling centre is open to the public on Wednesdays and Saturdays and provides a full range collection of household recyclables.

3. Quantity and Composition of Waste Received for capping/restoration during the reporting period and each previous year.

No municipal waste and non-hazardous industrial waste was received or disposed of at this facility as per condition 1.4 of Waste Licence W0065-01 during the reporting period.

No clays were used as capping in the reporting period. Capping completed in the previous reporting period.

4 and 5. Summary Report on Emissions and Summary of results and interpretation of environmental monitoring

Please see attached results for various parameters required to be monitored and analysed as per Waste Licence W0065-01.

6. Resource and Energy Consumption Summary

There was no resource or energy consumption associated with waste activities at this landfill site during the reporting period. The Civic amenity site is connected to mains ESB supply for the day to day running of the recycling activity.

7. Volume of leachate produced and volume transported/discharged off-site

The leachate collection system is complete and piped to the Mohill town foul sewer.

8. Report on restoration of the facility

Restoration works completed in 2006.

9. Estimated annual and cumulative quantity of landfill gas emitted from the facility

Approval was granted by the EPA for a passive landfill gas venting system, as there were insufficient gas volumes to sustain a flaring system. Methane and Carbon Dioxide are measured in concentration % v/v. However it is not possible to obtain accurate flow data so as provide an estimate of annual and cumulative quantity of landfill gas emitted from the facility.

10. Full title and written summary of any restoration and monitoring procedures developed by the licensee in the year which relates to the facility operation.

There were no new procedures developed during the reporting period.

11. Tank, pipeline and bund testing and inspection report

The installation of the leachate collection system and manholes was constructed in accordance with the landfill design manual.

All pipeline works were checked and approved by Leitrim County Council Engineering Staff and supervised at all times by the site executive civil technician. There are no tanks or bunds at the facility.

12. Reported Incidents and Complaints Summaries

Leitrim County Council did not receive any complaints in relation to Mohill landfill during this AER reporting period 2008 and there were no reportable incidents in this period.

13. Review of Nuisance Controls

There have been no complaints during the reporting period in relation to nuisance from birds, rodents etc. at this facility.

14. Report on training of staff

Given that the facility is not operational a formal training programme is not in place. The Civic Amenity site or recycling centre is now fully operational and a comprehensive training programme has been provided for the operator.

15. Reports on financial provision made under this licence, management and staffing structure of the facility, and a programme for public information

Leitrim County Council have budgeted to allow for monitoring of the landfill in accordance with the requirements of the license. Staff resources are allocated towards carrying out and overseeing this work

16. Other items Specified by the Agency

There are no other items specified by the Agency for inclusion in this Report

Gas Monitoring at Mohill Landfill - January 2010 to December 2010

Methane (CH₄) Monitoring (% v/v) at Mohill Landfill - January 2010 to December 2010

Date	22-Jan-10	22-Feb-10	5-Mar-10	7-Apr-10	19-May-10	3-Jun-10	14-Jul-10	12-Aug-10	28-Sep-10	12-Oct-10	11-Nov-10	2-Dec-10
GP9	0	0	0	0	0	0	0	0	0	0	0	0
GP10	0.2	0.5	0	0.3	0.1	0	0	0.2	0.1	0	0.1	0.2
GP11	0	0	0	0	0	0	0	0	0	0	0	0
GP15	40.2	45	50.1	46.3	59	51	44.2	60.5	48.5	61.3	55	49
GP16	0	0	0	0	0	0	0	0	0	0	0	0
Licence Limit	1	1	1	1	1	1	1	1	1	1	1	1

Note¹: It is not feasible to monitor at GP 5, 13, 14 and 16.

Carbon Dioxide (CO₂) Monitoring (% v/v) at Mohill Landfill - January 2010 to December 2010

Date	22-Jan-10	22-Feb-10	5-Mar-10	7-Apr-10	19-May-10	3-Jun-10	14-Jul-10	12-Aug-10	28-Sep-10	12-Oct-10	11-Nov-10	2-Dec-10
GP9	0	0.1	0	0	0.6	0.1	0	0	0	0	0	0
GP10	0	0	0	0	0	0	0	0	0	0	0	0
GP11	5.5	4.3	6.4	5.4	4.5	4.6	5.4	6.5	6.2	5.9	6.4	5.8
GP15	21.5	24	26	23.6	19.4	18.7	23	19.6	18	22.1	23	19.5
GP16	0.3	0.9	0.8	0.9	1.4	1.2	1.3	0.8	1.2	1.5	0.5	0.9
Licence Limit	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Oxygen (O₂) Monitoring (% v/v) at Mohill Landfill - January 2010 to December 2010

Date	22-Jan-10	22-Feb-10	5-Mar-10	7-Apr-10	19-May-10	3-Jun-10	14-Jul-10	12-Aug-10	28-Sep-10	12-Oct-10	11-Nov-10	2-Dec-10
GP9	20.2	20.6	20.9	20.8	20.5	20.4	21	20.7	20.8	20.6	20.4	21
GP10	18.5	16.5	17.2	16.4	17.6	18.6	19.5	18	19.9	17	16.9	18
GP11	9.4	6.6	9	11.2	8.9	9.6	7.8	6.8	9.3	8.6	6.7	8
GP15	5	2.5	1.5	4.6	5.5	5.2	7	7.2	5.9	2	3.5	4.2
GP16	19.3	21.2	20.5	19.8	20.4	19.9	20.4	20.7	20.5	20.4	20.6	20.9

Ambient Temperature (°C) & Atmospheric Pressure (mb) Monitoring at Mohill Landfill - January 2010 to December 2010

Date	22-Jan-10	22-Feb-10	5-Mar-10	7-Apr-10	19-May-10	3-Jun-10	14-Jul-10	12-Aug-10	28-Sep-10	12-Oct-10	11-Nov-10	2-Dec-10
Ambient Temperature	8.5	5	9	12	15	18	19	15	16	14	10	1
Atmospheric Pressure	992	1015	1001	1010	1002	1006	1022	1014	1007	998	1012	1004



LEITRIM COUNTY COUNCIL

QUARTERLY MONITORING REPORT

Mohill LANDFILL

Landfill Licence from the EPA – W-0065

1ST QUARTER 2010

For the Attention of:

**Mr Sean Scott
Leitrim Co Co
Aras an Chontae
Carrick On Shannon
Co Leitrim**

Prepared by:


Jenny Pender

City Analysts Ltd

RESULTS:

MW8 Shallow Quarterly Results – Mohill

Sampled Time: 15/03/10

Time: 16:00

Depth (m): 1.8

Odour: No unusual odour

Weather/Visual Observation: Dry

City Analysts Ref: 78987

Analysis	Results	Units
Ammonia	<0.1	Mg/l
Conductivity	1140	µs/cm
pH	7.175	pH units
Temp	7.4	°C
TOC	3.57	Mg/l

Leachate Quarterly Results – Mohill

Sampled Time: 15/03/10

Time: 17:00

Depth (m): Approx 20cm

Odour: No unusual odour

Weather/Visual Observation: Dry

City Analysts Ref: 78988

Analysis	Results	Units
Ammonia	12.43	Mg/l
Conductivity	2460	µs/cm
pH	6.891	pH units
Temp	6.6	°C
TON	<5	Mg/l
Chloride	481	Mg/l
COD	220	Mg/l
BOD	<4	Mg/l

SW4 Quarterly Results – Mohill

Sampled Time: 29/03/10

Time: 16:20

Depth (m): N/A

Odour: No unusual odour

Weather/Visual Observation: Raining/Stream was silty

City Analysts Ref: 79594

Analysis	Results	Units
Ammonia	0.16	Mg/l
Conductivity	501	µs/cm
pH	7.10	pH units
Temp	7.6	°C
Chloride	22.3	Mg/l
Dissolved Oxygen	6.9	Mg/l
BOD	<4	Mg/l
TSS	6	Mg/l
COD	29	Mg/l

SW6 Quarterly Results – Mohill

Sampled Time: 29/03/10

Time: 16:45

Depth (m): N/A

Odour: No unusual odour

Weather/Visual Observation: Raining/Stream was silty

City Analysts Ref: 79595

Analysis	Results	Units
Ammonia	0.29	Mg/l
Conductivity	604	µs/cm
pH	7.10	pH units
Temp	8.0	°C
Chloride	29.6	Mg/l
Dissolved Oxygen	7.3	Mg/l
BOD	<4	Mg/l
TSS	8	
COD	40	Mg/l

MW5 Shallow Quarterly Results – Mohill

Sampled Time: 29/03/10

Time: 14:00

Depth (m): 4.8

Odour: No unusual odour

Weather/Visual Observation: Rain all day

City Analysts Ref: 79596

Analysis	Results	Units
Ammonia	<0.1	Mg/l
Conductivity	652	µs/cm
pH	7.20	pH units
Temp	8.6	°C
TOC	1.19	Mg/l
Dissolved Oxygen	3.9	Mg/l

MW5 Deep Quarterly Results – Mohill

Sampled Time: 29/03/10

Time: 14:20

Depth (m): >30 m, Static water depth 0.5m

Odour: No unusual odour

Weather/Visual Observation: Rain all day

City Analysts Ref: 79597

Analysis	Results	Units
Ammonia	0.47	Mg/l
Conductivity	799	µs/cm
pH	7.98	pH units
Temp	7.5	°C
TOC	1.17	Mg/l
Dissolved Oxygen	4.0	Mg/l

MW6 Shallow Quarterly Results – Mohill

Sampled Time: 29/03/10

Time: 14:50

Depth (m): 4m

Odour: No unusual odour

Weather/Visual Observation: Rain all day

City Analysts Ref: 79598

Analysis	Results	Units
Ammonia	<0.1	Mg/l
Conductivity	669	µs/cm
pH	7.32	pH units
Temp	7.3	°C
TOC	1.54	Mg/l
Dissolved Oxygen	6.0	Mg/l

MW6 Deep Quarterly Results – Mohill

Sampled Time: 29/03/10

Time: 15:20

Depth (m): >30 m, Static water depth 0.7m

Odour: No unusual odour

Weather/Visual Observation: Rain all day

City Analysts Ref: 79599

Analysis	Results	Units
Ammonia	<0.1	Mg/l
Conductivity	695	µs/cm
pH	7.78	pH units
Temp	7.3	°C
TOC	1.14	Mg/l
Dissolved Oxygen	7.0	Mg/l

MW8 Deep Quarterly Results – Mohill

Sampled Time: 29/03/10

Time: 12:30

Depth (m): >30 m, Static water depth 7m

Odour: No unusual odour

Weather/Visual Observation: Rain all day

City Analysts Ref: 79600

Analysis	Results	Units
Ammonia	0.41	Mg/l
Conductivity	891	µs/cm
pH	7.21	pH units
Temp	8.2	°C
TOC	1.47	Mg/l
Dissolved Oxygen	2.8	Mg/l

LEITRIM COUNTY COUNCIL
ENVIRONMENT SECT
25 AUG 2010



LEITRIM COUNTY COUNCIL

QUARTERLY MONITORING REPORT

Mohill LANDFILL

Landfill Licence from the EPA – W-0065

2ND QUARTER 2010

For the Attention of:

Mr Sean Scott
Leitrim Co Co
Aras an Chontae
Carrick On Shannon
Co Leitrim

Prepared by:


Jenny Pender

City Analysts Ltd

CORPORATE SECRETARIES
25 AUG 2010
LEITRIM COUNTY COUNCIL

RESULTS:

SW4 Results – Mohill

Sampled Time: 14/06/10

Time: 16:30

Depth (m): n/a

Odour: No unusual odour

Weather/Visual Observation: Sunny

City Analysts Ref: 83954

Analysis	Results	Units
Ammonia as N	<0.1	mg/l
Chloride	<10	mg/l
Conductivity	485	µs/cm at 20°C
Dissolved Oxygen	7.4	mg/l O ₂
pH	7.76	pH Units
Sodium	16.120	mg/l
Temperature	17.7	°C
TON as N	<2	mg/l
Potassium	11.7	mg/l
CBOD5	<2	mg/l
COD	46	mg/l
TSS	2	mg/l
Alkalinity as HCO ₃	342	mg/l
Boron, Total	<100	ug/l
Cadmium, Total	<0.5	ug/l
Calcium	84.3	mg/l
Chromium, Total	<5	ug/l
Copper, Total	<20	ug/l
Iron, Total	377	ug/l
Lead, Total	<2.5	ug/l
Magnesium, Total	5.2	mg/l
Manganese, Total	122	ug/l
Mercury, Total as Hg	<0.015	ug/l
Phosphorus, total as P	151.9	ug/l
Sulphate	27.9	mg/l
Zinc, total	<20	ug/l

SW6 Results – Mohill

Sampled Time: 14/06/10

Time: 09:30

Depth (m): n/a

Odour: No unusual odour

Weather/Visual Observation: Sunny

City Analysts Ref: 83955

Analysis	Results	Units
Ammonia as N	<0.1	mg/l
Chloride	<10	mg/l
Conductivity	569	µs/cm at 20°C
Dissolved Oxygen	8.1	mg/l O ₂
pH	7.73	pH Units
Sodium	29.420	mg/l
Temperature	12.3	°C
TON as N	<2	mg/l
Potassium	<5	mg/l
CBOD ₅	<2	mg/l
COD	45	mg/l
TSS	3	mg/l
Alkalinity as HCO ₃	348	mg/l
Boron, Total	<100	ug/l
Cadmium, Total	<0.5	ug/l
Calcium	90.2	mg/l
Chromium, Total	<5	ug/l
Copper, Total	<20	ug/l
Iron, Total	310	ug/l
Lead, Total	<2.5	ug/l
Magnesium, Total	5.8	mg/l
Manganese, Total	43	ug/l
Mercury, Total as Hg	<0.015	ug/l
Phosphorus, total as P	120.2	ug/l
Sulphate	31.7	mg/l
Zinc, total	<20	ug/l

MW5 Shallow Quarterly Results – Mohill

Sampled Time: 14/06/10

Time: 12:20

Depth (m): 4.2

Odour: No unusual odour

Weather/Visual Observation: Dry

City Analysts Ref: 83956

Analysis	Results	Units
Coliform	241960	MPN/100ml
Feacal coliform	190	Cfu/100ml
Ammonia	<0.1	Mg/l
Conductivity	592	µs/cm
pH	7.33	pH units
TOC	4.32	Mg/l
Temperature	15.6	°C
Boron	<100	µg/l
Cadmium	0.5	µg/l
Chloride	<10	Mg/l
Chromium	<5	µg/l
Copper	<20	µg/l
Flouride	0.4	Mg/l
Iron	<20	µg/l
Lead	<2.5	µg/l
Alkalinity as HCO ₃	159	Mg/l
Magnesium	7.3	Mg/l
Manganese	21	µg/l
Total Phosphorous	<100	µg/l
Potassium	5.3	Mg/l
Sodium	18.260	Mg/l
Sulphate	21.8	Mg/l
TON as N	<2	Mg/l
Zinc	25.5	µg/l
Calcium	<5	Mg/l
Residue on Ignition	<0.1	%

List 1 and 2 Organics - MW5 Shallow Quarterly Results – Mohill

Analysis	Results	Units
Barium, Total as Ba	0.029	mg/l
Beryllium	<0.01	mg/l
Cobalt	<0.001	mg/l
Mercury, Total as Hg	<0.0001	mg/l
Molybdenum	<0.002	mg/l
Nickel, Total	<0.002	mg/l
Silver	0.002	mg/l
Tellurium	<0.110	ug/l
Thallium	<0.004	mg/l
Tin	<0.01	mg/l
Uranium	0.8	ug/l
Vanadium	0.002	mg/l
Nitrate as N	0.90	mg/l
Cyanide, Total	<0.1	mg/l
2,3,6 TBA	<0.50	ug/l
2,4 D	<0.50	ug/l
2,4 Db	<0.50	ug/l
2,4,5-T	<0.50	ug/l
Bentazone	<0.50	ug/l
Bromoxynil	<0.50	ug/l
Clopyralid	<0.50	ug/l
Dicamba	<0.50	ug/l
Dichlorprop	<0.50	ug/l
Fluroxypyr	<0.50	ug/l
loxynil	<0.50	ug/l
MCPA	<0.50	ug/l
MCPB	<0.50	ug/l
Mecoprop (Total)	<0.50	ug/l
Triclopyr	<0.50	ug/l
Benazolin	<0.60	ug/l
Fenoprop	<0.50	ug/l
124 TCB	<20.00	ng/l
Aldrin	<8.00	ng/l
Alpha HCH	<6.00	ng/l
Beta HCH	<6.00	ng/l
Dichlobenil	<4.00	ng/l
Dieldrin	<8.00	ng/l
EndosulfanA (alpha-Endosulfan)	<8.00	ng/l
EndosulfanB (beta-Endosulfan)	<8.00	ng/l
Endrin	<8.00	ng/l
Hexachlorobenzene	<4.00	ng/l
Hexachlorobutadiene	<14.00	ng/l
Gamma-HCH (Lindane)	<4.00	ng/l
Heptachlor Epoxide	<4.00	ng/l

Isodrin	<8.00	ng/l
op`-DDE	<4.00	ng/l
op`-DDT	<4.00	ng/l
op`-DDD (TDE)	<4.00	ng/l
pp`-DDE	<4.00	ng/l
pp`-DDD (TDE)	<4.00	ng/l
pp`-DDT	<4.00	ng/l
1,3,5 Trichlorobenzene	<20.00	ng/l
Tecnazene	<20.00	ng/l
Triallate	<20.00	ng/l
1,2,3 Trichlorobenzene	<20.00	ng/l
Trifluralin	<60.00	ng/l
alpha - Chlordane	<8.00	ng/l
gamma - Chlordane	<4.00	ng/l
Azinphos methyl	<0.004	ug/l
Carbophenothion	<0.006	ug/l
Chlorfenvinphos	<0.004	ug/l
Demeton-S-Methyl	See Note	ug/l
Diazinon	<0.006	ug/l
Dichlorvos	<0.004	ug/l
Dimethoate	<0.040	ug/l
Fenithroton	<0.004	ug/l
Malathion	<0.008	ug/l
Mevinphos	<0.040	ug/l
Phorate	<0.008	ug/l
Phosalone	<0.008	ug/l
Pirimiphos methyl	<0.010	ug/l
Propetamphos	<0.006	ug/l
Triazophos	<0.004	ug/l
Azinphos ethyl	<0.008	ug/l
Chloropyriphos	<0.004	ug/l
Fenithion	<0.004	ug/l
Disulphoton	See Note	ug/l
Parathion - ethyl	<0.01	ug/l
Parathion - methyl	<0.006	ug/l
Chlortoluron	<0.05	ug/l
Diuron	<0.05	ug/l
Isoproturon	<0.05	ug/l
Linuron	<0.05	ug/l
Monuron	<0.05	ug/l
Methabenzthiazuron	<0.05	ug/l
Monolinuron	<0.05	ug/l
TPH >C6 - C8	<10	ug/l
TPH >C8 - C10	<10	ug/l
TPH >C10 - C16	<10	ug/l
TPH >C16 - C24	17	ug/l
TPH >C24 - C40	35	ug/l
TPH >C6 - C40	52	ug/l

Tributyltin	<0.020	ug/l
Antimony	<0.004	mg/l
Arsenic, Total as As	0.001	mg/l
Selenium, Total as Se	<0.0010	mg/l
Titanium	0.010	mg/l
Dichlorodifluoromethane	3.5	ug/l
Chloromethane	<1.0	ug/l
Bromomethane	<1.0	ug/l
Vinyl Chloride	<1.0	ug/l
Chloroethane	<1.0	ug/l
Trichlorofluoromethane	2.3	ug/l
1,2-Dichloroethane	<1.0	ug/l
Cis-1,2-dichloroethene	<1.0	ug/l
2,2-Dichloropropane	<1.0	ug/l
Chloroform	<1.0	ug/l
1,1-Dichloroethene	<1.0	ug/l
1,1,1-Trichloroethane	<1.0	ug/l
1,1-Dichloropropene	<1.0	ug/l
Benzene	<1.0	ug/l
Carbon Tetrachloride	<1.0	ug/l
1,2-Dichloropropane	<1.0	ug/l
Trichloroethene	<1.0	ug/l
Dibromomethane	<1.0	ug/l
Bromodichloromethane	<1.0	ug/l
Trans-1,3-dichloropropene	<1.0	ug/l
Cis-1,3-dichloropropene	<1.0	ug/l
Toluene	<1.0	ug/l
1,1,2-trichloroethane	<1.0	ug/l
Dibromochloromethane	<1.0	ug/l
1,2-dibromoethane	<1.0	ug/l
Tetrachloroethene	<1.0	ug/l
Chlorobenzene	<1.0	ug/l
1,1,1,2-tetrachloroethane	<1.0	ug/l
Ethyl Benzene	<1.0	ug/l
m,p-xylene	<1.0	ug/l
Bromoform	<1.0	ug/l
Stryrene	<1.0	ug/l
1,1,2,2-tetrachloroethane	<1.0	ug/l
o-xylene	<1.0	ug/l
1,2,3-trichloropropane	<1.0	ug/l
Isopropylbenzene	<1.0	ug/l
2-chlorotoluene	<1.0	ug/l
n-propylbenzene	<1.0	ug/l
4-chlorotoluene	<1.0	ug/l
1,3,5-trimethylbenzene	<1.0	ug/l
tert-butylbenzene	<1.0	ug/l
sec-butylbenzene	<1.0	ug/l
p-isopropyltoluene	<1.0	ug/l

1,2,4-trimethylbenzene	<1.0	ug/l
1,3-dichlorobenzene	<1.0	ug/l
1,4-dichlorobenzene	<1.0	ug/l
1,2-dichlorobenzene	<1.0	ug/l
n-butylbenzene	<1.0	ug/l
1,2-dibromo-3-chloropropane	<2.0	ug/l
Bromochloromethane	<1.0	ug/l
1,3-dichloropropane	<1.0	ug/l
Bromobenzene	<1.0	ug/l
1,2,3-trichlorobenzene	<1.0	ug/l
1,2,4-trichlorobenzene	<1.0	ug/l
Dichloromethane	<1.000	ug/l
Hexachlorobutadiene	<1.0	ug/l
MTBE	<1.0	ug/l
Naphthalene	<2.0	ug/l
Trans-1,2-dichloroethene	<1.0	ug/l
1,1-Dichloroethane	<1.0	ug/l
VOC + TICS	<1.000	ug/l
Acenaphthene	<1.0	ug/l
Acenaphthylene	<1.0	ug/l
Anthracene	<1.0	ug/l
Benzo (a) anthracene	<1.0	ug/l
Benzo (a) pyrene	<1.0	ug/l
Benzo (b) flouranthene	<1.0	ug/l
Benzo (ghi) perylene	<1.0	ug/l
Benzo (k) fluoranthene	<1.0	ug/l
Chrysene	<1.0	ug/l
Dibenz(a,h) anthracene	<1.0	ug/l
Fluorene	<1.0	ug/l
Fluoranthene	<1.0	ug/l
Indeno(1,2,3-cd)pyrene	<1.0	ug/l
Naphthalene	<1.0	ug/l
Phenanthrene	<1.0	ug/l
Pyrene	<1.0	ug/l
2-Chlorophenol	<1.0	ug/l
4-Chloro-3-methylphenol	<1.0	ug/l
2,4-Dichlorophenol	<1.0	ug/l
2,4-Dimethylphenol	<1.0	ug/l
2 Nitrophenol	<1.0	ug/l
Pentachlorophenol	<1.0	ug/l
2,4,5-Trichlorophenol	<1.0	ug/l
2,4,6-Trichlorophenol	<1.0	ug/l
4-Nitrophenol	<5.0	ug/l
Bis(2-chloroisopropyl)ether	<1.0	ug/l
Bis(2-chloroethyl)ether	<1.0	ug/l
4-Chlorophenyl-phenylether	<1.0	ug/l
4-Bromophenyl-phenylether	<1.0	ug/l
Bis(2-ethylhexyl)phthlate	<1.0	ug/l

Benzylbutylphthalate	<1.0	ug/l
Dimethylphthalate	<1.0	ug/l
Di-n-butylphthalate	<1.0	ug/l
Di-n-octylphthalate	<1.0	ug/l
1,2 Dichlorobenzene	<1.000	ug/l
1,2,4-Trichlorobenzene	<1.000	ug/l
1,3 Dichlorobenzene	<1.000	ug/l
1,4 Dichlorobenzene	<1.000	ug/l
2,4,6-Tribromophenol	91.800	% Recovery
2,4-Dinitrotoluene	<1.000	ug/l
2,6-Dintrotoluene	<1.000	ug/l
2-Chloronaphthalene	<1.000	ug/l
2-Flourobiphenyl	<1.000	% Recovery
2-Fluorophenol	95.600	% Recovery
2-Methylnaphthalene	<1.000	ug/l
2-Methylphenol	<1.000	ug/l
3&4-Methylphenol	<1.000	ug/l
bis(2-chloroethoxy)methane	<1.000	ug/l
Dibenzofuran	<1.000	ug/l
Diphenylamine	<1.000	ug/l
Hexachlorobenzene	<1.000	ug/l
Hexachlorobutadiene	<1.000	ug/l
Hexachloroethane	<1.000	ug/l
Isophorone	<1.000	ug/l
N-nitrosodi-n-propylamine	<1.000	ug/l
Nitrobenzene	<1.000	ug/l
Nitrobenzene-d5	98.800	% Recovery
Phenol	2.700	ug/l
Phenol-d6	91.900	% Recovery
SVOC	<1.000	ug/l
Terphenyl-d14	93.100	% Recovery
Diethylphthalate	<1.000	ug/l
SVOC + TICS	<1.000	ug/l

Note: Unable to analyse for Demeton-S-Methyl and Disulphoton due to AQC failure.

MW5 Deep Quarterly Results – Mohill

Sampled Time: 14/06/10

Time: 13:00

Depth (m): >30 m. Static water /depth 4.0m

Odour: No unusual odour

Weather/Visual Observation: Dry

City Analysts Ref: 83957

Analysis	Results	Units
Coliform	290.9	MPN/100ml
Feecal coliform	0	Cfu/100ml
Ammonia	<0.1	Mg/l
Conductivity	1008	µs/cm
pH	7.92	pH units
TOC	3.35	Mg/l
Temperature	14.4	°C
Boron	4437	µg/l
Cadmium	2.3	µg/l
Chloride	13.29	Mg/l
Chromium	21	µg/l
Copper	60	µg/l
Flouride	6.4	Mg/l
Iron	35440	µg/l
Lead	56.99	µg/l
Alkalinity as HCO ₃	400	Mg/l
Magnesium	33.2	Mg/l
Manganese	944	µg/l
Total Phosphorous	1091.0	µg/l
Potassium	14.8	Mg/l
Sodium	204	Mg/l
Sulphate	132.4	Mg/l
TON as N	<2	Mg/l
Zinc	201	µg/l
Calcium	141	Mg/l
Residue on Ignition	<0.1	%

List 1 and 2 Organics – MW5 Deep Quarterly Results – Mohill

Analysis	Result	Units
Barium, Total as Ba	0.022	ug/l
Beryllium	<0.01	mg/l
Cobalt	0.001	mg/l
Mercury, Total as Hg	0.0001	mg/l
Molybdenum	<0.002	mg/l
Nickel, Total	<0.002	mg/l
Silver	0.004	mg/l
Tellurium	<0.110	ug/l
Thallium	<0.004	mg/l
Tin	<0.01	mg/l
Uranium	2.6	ug/l
Vanadium	0.004	mg/l
Nitrate as N	1.00	mg/l
Cyanide, Total	<0.1	mg/l
2,3,6 TBA	<0.50	ug/l
2,4 D	<0.50	ug/l
2,4 Db	<0.50	ug/l
2,4,5-T	<0.50	ug/l
Bentazone	<0.50	ug/l
Bromoxynil	<0.50	ug/l
Clopyralid	<0.50	ug/l
Dicamba	<0.50	ug/l
Dichlorprop	<0.50	ug/l
Fluroxypyr	<0.50	ug/l
loxynil	<0.50	ug/l
MCPA	<0.50	ug/l
MCPB	<0.50	ug/l
Mecoprop (Total)	<0.50	ug/l
Triclopyr	<0.50	ug/l
Benazolin	<0.60	ug/l
Fenoprop	<0.50	ug/l
124 TCB	<20.00	ng/l
Aldrin	<8.00	ng/l
Alpha HCH	<6.00	ng/l
Beta HCH	<6.00	ng/l
Dichlobenil	<4.00	ng/l
Dieldrin	<8.00	ng/l
EndosulfanA (alpha-Endosulfan)	<8.00	ng/l
EndosulfanB (beta-Endosulfan)	<8.00	ng/l
Endrin	<8.00	ng/l
Hexachlorobenzene	<4.00	ng/l
Hexachlorobutadiene	<14.00	ng/l
Gamma-HCH (Lindane)	<4.00	ng/l

Heptachlor Epoxide	<4.00	ng/l
Isodrin	<8.00	ng/l
op`-DDE	<4.00	ng/l
op`-DDT	<4.00	ng/l
op`-DDD (TDE)	<4.00	ng/l
pp`-DDE	<4.00	ng/l
pp`-DDD (TDE)	<4.00	ng/l
pp`-DDT	<4.00	ng/l
1,3,5 Trichlorobenzene	<20.00	ng/l
Tecnazene	<20.00	ng/l
Triallate	<20.00	ng/l
1,2,3 Trichlorobenzene	<20.00	ng/l
Trifluralin	<60.00	ng/l
alpha - Chlordane	<8.00	ng/l
gamma - Chlordane	<4.00	ng/l
Azinphos methyl	<0.004	ug/l
Carbophenothion	<0.006	ug/l
Chlorfenvinphos	<0.004	ug/l
Demeton-S-Methyl	See Note	ug/l
Diazinon	<0.006	ug/l
Dichlorvos	<0.004	ug/l
Dimethoate	<0.040	ug/l
Fenithrothion	<0.004	ug/l
Malathion	<0.008	ug/l
Mevinphos	<0.040	ug/l
Phorate	<0.008	ug/l
Phosalone	<0.008	ug/l
Pirimiphos methyl	<0.010	ug/l
Propetamphos	<0.006	ug/l
Triazophos	<0.004	ug/l
Azinphos ethyl	<0.008	ug/l
Chloropyriphos	<0.004	ug/l
Fenithion	<0.004	ug/l
Disulphoton	See Note	ug/l
Parathion - ethyl	<0.01	ug/l
Parathion - methyl	<0.006	ug/l
Chlortoluron	<0.05	ug/l
Diuron	<0.05	ug/l
Isoproturon	<0.05	ug/l
Linuron	<0.05	ug/l
Monuron	<0.05	ug/l
Methabenzthiazuron	<0.05	ug/l
Monolinuron	<0.05	ug/l
TPH >C6 - C8	<10	ug/l
TPH >C8 - C10	<10	ug/l
TPH >C10 - C16	<10	ug/l

TPH >C16 - C24	<10	ug/l
TPH >C24 - C40	18	ug/l
TPH >C6 - C40	18	ug/l
Tributyltin	<0.020	ug/l
Antimony	0.011	mg/l
Arsenic, Total as As	0.004	mg/l
Selenium, Total as Se	0.0010	mg/l
Titanium	0.053	mg/l
Dichlorodifluoromethane	<1.0	ug/l
Chloromethane	<1.0	ug/l
Bromomethane	<1.0	ug/l
Vinyl Chloride	<1.0	ug/l
Chloroethane	<1.0	ug/l
Trichlorofluoromethane	<1.0	ug/l
1,2-Dichloroethane	<1.0	ug/l
Cis-1,2-dichloroethene	<1.0	ug/l
2,2-Dichloropropane	<1.0	ug/l
Chloroform	<1.0	ug/l
1,1-Dichloroethene	<1.0	ug/l
1,1,1-Trichloroethane	<1.0	ug/l
1,1-Dichloropropene	<1.0	ug/l
Benzene	<1.0	ug/l
Carbon Tetrachloride	<1.0	ug/l
1,2-Dichloropropane	<1.0	ug/l
Trichloroethene	<1.0	ug/l
Dibromomethane	<1.0	ug/l
Bromodichloromethane	<1.0	ug/l
Trans-1,3-dichloropropene	<1.0	ug/l
Cis-1,3-dichloropropene	<1.0	ug/l
Toluene	<1.0	ug/l
1,1,2-trichloroethane	<1.0	ug/l
Dibromochloromethane	<1.0	ug/l
1,2-dibromoethane	<1.0	ug/l
Tetrachloroethene	<1.0	ug/l
Chlorobenzene	<1.0	ug/l
1,1,1,2-tetrachloroethane	<1.0	ug/l
Ethyl Benzene	<1.0	ug/l
m,p-xylene	<1.0	ug/l
Bromoform	<1.0	ug/l
Styrene	<1.0	ug/l
1,1,2,2-tetrachloroethane	<1.0	ug/l
o-xylene	<1.0	ug/l
1,2,3-trichloropropane	<1.0	ug/l
Isopropylbenzene	<1.0	ug/l
2-chlorotoluene	<1.0	ug/l
n-propylbenzene	<1.0	ug/l
4-chlorotoluene	<1.0	ug/l
1,3,5-trimethylbenzene	<1.0	ug/l

tert-butylbenzene	<1.0	ug/l
sec-butylbenzene	<1.0	ug/l
p-isopropyltoluene	<1.0	ug/l
1,2,4-trimethylbenzene	<1.0	ug/l
1,3-dichlorobenzene	<1.0	ug/l
1,4-dichlorobenzene	<1.0	ug/l
1,2-dichlorobenzene	<1.0	ug/l
n-butylbenzene	<1.0	ug/l
1,2-dibromo-3-chloropropane	<2.0	ug/l
Bromochloromethane	<1.0	ug/l
1,3-dichloropropane	<1.0	ug/l
Bromobenzene	<1.0	ug/l
1,2,3-trichlorobenzene	<1.0	ug/l
1,2,4-trichlorobenzene	<1.0	ug/l
Dichloromethane	<1.000	ug/l
Hexachlorobutadiene	<1.0	ug/l
MTBE	<1.0	ug/l
Naphthalene	<2.0	ug/l
Trans-1,2-dichloroethene	<1.0	ug/l
1,1-Dichloroethane	<1.0	ug/l
VOC + TICS	<1.000	ug/l
Acenaphthene	<1.0	ug/l
Acenaphthylene	<1.0	ug/l
Anthracene	<1.0	ug/l
Benzo (a) anthracene	<1.0	ug/l
Benzo (a) pyrene	<1.0	ug/l
Benzo (b) flouranthene	<1.0	ug/l
Benzo (ghi) perylene	<1.0	ug/l
Benzo (k) fluoranthene	<1.0	ug/l
Chrysene	<1.0	ug/l
Dibenz(a,h) anthracene	<1.0	ug/l
Fluorene	<1.0	ug/l
Fluoranthene	<1.0	ug/l
Indeno(1,2,3-cd)pyrene	<1.0	ug/l
Naphthalene	<1.0	ug/l
Phenanthrene	<1.0	ug/l
Pyrene	<1.0	ug/l
2-Chlorophenol	<1.0	ug/l
4-Chloro-3-methylPhenol	<1.0	ug/l
2,4-Dichlorophenol	<1.0	ug/l
2,4-Dimethylphenol	<1.0	ug/l
2 Nitrophenol	<1.0	ug/l
Pentachlorophenol	<1.0	ug/l
2,4,5-Trichlorophenol	<1.0	ug/l
2,4,6-Trichlorophenol	<1.0	ug/l
4-Nitrophenol	<5.0	ug/l
Bis(2-chloroisopropyl)ether	<1.0	ug/l
Bis(2-chloroethyl)ether	<1.0	ug/l

4-Chlorophenyl-phenylether	<1.0	ug/l
4-Bromophenyl-phenylether	<1.0	ug/l
Bis(2-ethylhexyl)phthalate	<1.0	ug/l
Benzylbutylphthalate	<1.0	ug/l
Dimethylphthalate	<1.0	ug/l
Di-n-butylphthalate	<1.0	ug/l
Di-n-octylphthalate	<1.0	ug/l
1,2 Dichlorobenzene	<1.000	ug/l
1,2,4-Trichlorobenzene	<1.000	ug/l
1,3 Dichlorobenzene	<1.000	ug/l
1,4 Dichlorobenzene	<1.000	ug/l
2,4,6-Tribromophenol	86.500	% Recovery
2,4-Dinitrotoluene	<1.000	ug/l
2,6-Dinitrotoluene	<1.000	ug/l
2-Chloronaphthalene	<1.000	ug/l
2-Fluorobiphenyl	<1.000	% Recovery
2-Fluorophenol	92.900	% Recovery
2-Methylnaphthalene	<1.000	ug/l
2-Methylphenol	<1.000	ug/l
3&4-Methylphenol	<1.000	ug/l
bis(2-chloroethoxy)methane	<1.000	ug/l
Dibenzofuran	<1.000	ug/l
Diphenylamine	<1.000	ug/l
Hexachlorobenzene	<1.000	ug/l
Hexachlorobutadiene	<1.000	ug/l
Hexachloroethane	<1.000	ug/l
Isophorone	<1.000	ug/l
N-nitrosodi-n-propylamine	<1.000	ug/l
Nitrobenzene	<1.000	ug/l
Nitrobenzene-d5	97.000	% Recovery
Phenol	2.800	ug/l
Phenol-d6	90.400	% Recovery
SVOC	<1.000	ug/l
Terphenyl-d14	85.400	% Recovery
Diethylphthalate	<1.000	ug/l
SVOC + TICS	<1.000	ug/l

Note: Unable to analyse for Demeton-S-Methyl and Disulphoton due to AQC failure.

MW6 Shallow Quarterly Results – Mohill

Sampled Time: 14/06/10

Time: 15:10

Depth (m): 3.2

Odour: No unusual odour

Weather/Visual Observation: Dry

City Analysts Ref: 83958

Analysis	Results	Units
Coliform	76.3	MPN/100ml
Feacal coliform	10	Cfu/100ml
Ammonia	<0.1	Mg/l
Conductivity	693	µs/cm
pH	7.19	pH units
TOC	6.02	Mg/l
Temperature	15.6	°C
Boron	285	µg/l
Cadmium	5.4	µg/l
Chloride	<10	Mg/l
Chromium	103	µg/l
Copper	119	µg/l
Fluoride	0.2	Mg/l
Iron	95020	µg/l
Lead	85.04	µg/l
Alkalinity as HCO ₃	155	Mg/l
Magnesium	27.5	Mg/l
Manganese	1310	µg/l
Total Phosphorous	2912.0	µg/l
Potassium	2912.0	Mg/l
Sodium	30.360	Mg/l
Sulphate	<20	Mg/l
TON as N	<2	Mg/l
Zinc	331	µg/l
Calcium	638.0	Mg/l
Residue on Ignition	<0.1	%

List 1 and 2 Organics MW6 Shallow Quarterly Results – Mohill

Analysis	Result	Units
Barium, Total as Ba	0.069	ug/l
Beryllium	<0.01	mg/l
Cobalt	<0.006	mg/l
Mercury, Total as Hg	0.0007	mg/l
Molybdenum	<0.002	mg/l
Nickel, Total	<0.002	mg/l
Silver	<0.001	mg/l
Tellurium	<0.110	ug/l
Thallium	0.005	mg/l
Tin	<0.01	mg/l
Uranium	1.0	ug/l
Vanadium	0.006	mg/l
Nitrate as N	0.70	mg/l
Cyanide, Total	<0.1	mg/l
2,3,6 TBA	<0.50	ug/l
2,4 D	<0.50	ug/l
2,4 Db	<0.50	ug/l
2,4,5-T	<0.50	ug/l
Bentazone	<0.50	ug/l
Bromoxynil	<0.50	ug/l
Clopyralid	<0.50	ug/l
Dicamba	<0.50	ug/l
Dichlorprop	<0.50	ug/l
Fluroxypyr	<0.50	ug/l
loxynil	<0.50	ug/l
MCPA	<0.50	ug/l
MCPB	<0.50	ug/l
Mecoprop (Total)	<0.50	ug/l
Triclopyr	<0.50	ug/l
Benazolin	<0.60	ug/l
Fenoprop	<0.50	ug/l
124 TCB	<20.00	ng/l
Aldrin	<8.00	ng/l
Alpha HCH	<6.00	ng/l
Beta HCH	<6.00	ng/l
Dichlobenil	<4.00	ng/l
Dieldrin	<8.00	ng/l
EndosulfanA (alpha-Endosulfan)	<8.00	ng/l
EndosulfanB (beta-Endosulfan)	<8.00	ng/l
Endrin	<8.00	ng/l
Hexachlorobenzene	<4.00	ng/l
Hexachlorobutadiene	<14.00	ng/l
Gamma-HCH (Lindane)	<4.00	ng/l

Heptachlor Epoxide	<4.00	ng/l
Isodrin	<8.00	ng/l
op`-DDE	<4.00	ng/l
op`-DDT	<4.00	ng/l
op`-DDD (TDE)	<4.00	ng/l
pp`-DDE	<4.00	ng/l
pp`-DDD (TDE)	<4.00	ng/l
pp`-DDT	<4.00	ng/l
1,3,5 Trichlorobenzene	<20.00	ng/l
Tecnazene	<20.00	ng/l
Triallate	<20.00	ng/l
1,2,3 Trichlorobenzene	<20.00	ng/l
Trifluralin	<60.00	ng/l
alpha - Chlordane	<8.00	ng/l
gamma - Chlordane	<4.00	ng/l
Azinphos methyl	<0.004	ug/l
Carbophenothion	<0.006	ug/l
Chlorfenvinphos	<0.004	ug/l
Demeton-S-Methyl	See Note	ug/l
Diazinon	<0.006	ug/l
Dichlorvos	<0.004	ug/l
Dimethoate	<0.040	ug/l
Fenithroton	<0.004	ug/l
Malathion	<0.008	ug/l
Mevinphos	<0.040	ug/l
Phorate	<0.008	ug/l
Phosalone	<0.008	ug/l
Pirimiphos methyl	<0.010	ug/l
Propetamphos	<0.006	ug/l
Triazophos	<0.004	ug/l
Azinphos ethyl	<0.008	ug/l
Chloropyriphos	<0.004	ug/l
Fenithion	<0.004	ug/l
Disulphoton	See Note	ug/l
Parathion - ethyl	<0.01	ug/l
Parathion - methyl	<0.006	ug/l
Chlortoluron	<0.05	ug/l
Diuron	<0.05	ug/l
Isoproturon	<0.05	ug/l
Linuron	<0.05	ug/l
Monuron	<0.05	ug/l
Methabenzthiazuron	<0.05	ug/l
Monolinuron	<0.05	ug/l
TPH >C6 - C8	<10	ug/l
TPH >C8 - C10	<10	ug/l
TPH >C10 - C16	<10	ug/l
TPH >C16 - C24	<10	ug/l
TPH >C24 - C40	16	ug/l

TPH >C6 - C40	16	ug/l
Tributyltin	<0.020	ug/l
Antimony	0.001	mg/l
Arsenic, Total as As	0.001	mg/l
Selenium, Total as Se	0.0030	mg/l
Titanium	0.009	mg/l
Dichlorodifluoromethane	<1.0	ug/l
Chloromethane	<1.0	ug/l
Bromomethane	<1.0	ug/l
Vinyl Chloride	<1.0	ug/l
Chloroethane	<1.0	ug/l
Trichlorofluoromethane	<1.0	ug/l
1,2-Dichloroethane	<1.0	ug/l
Cis-1,2-dichloroethene	<1.0	ug/l
2,2-Dichloropropane	<1.0	ug/l
Chloroform	<1.0	ug/l
1,1-Dichloroethene	<1.0	ug/l
1,1,1-Trichloroethane	<1.0	ug/l
1,1-Dichloropropene	<1.0	ug/l
Benzene	<1.0	ug/l
Carbon Tetrachloride	<1.0	ug/l
1,2-Dichloropropane	<1.0	ug/l
Trichloroethene	<1.0	ug/l
Dibromomethane	<1.0	ug/l
Bromodichloromethane	<1.0	ug/l
Trans-1,3-dichloropropene	<1.0	ug/l
Cis-1,3-dichloropropene	<1.0	ug/l
Toluene	<1.0	ug/l
1,1,2-trichloroethane	<1.0	ug/l
Dibromochloromethane	<1.0	ug/l
1,2-dibromoethane	<1.0	ug/l
Tetrachloroethene	<1.0	ug/l
Chlorobenzene	<1.0	ug/l
1,1,1,2-tetrachloroethane	<1.0	ug/l
Ethyl Benzene	<1.0	ug/l
m,p-xylene	<1.0	ug/l
Bromoform	<1.0	ug/l
Stryrene	<1.0	ug/l
1,1,2,2-tetrachloroethane	<1.0	ug/l
o-xylene	<1.0	ug/l
1,2,3-trichloropropane	<1.0	ug/l
Isopropylbenzene	<1.0	ug/l
2-chlorotoluene	<1.0	ug/l
n-propylbenzene	<1.0	ug/l
4-chlorotoluene	<1.0	ug/l
1,3,5-trimethylbenzene	<1.0	ug/l
tert-butylbenzene	<1.0	ug/l
sec-butylbenzene	<1.0	ug/l

p-isopropyltoluene	<1.0	ug/l
1,2,4-trimethylbenzene	<1.0	ug/l
1,3-dichlorobenzene	<1.0	ug/l
1,4-dichlorobenzene	<1.0	ug/l
1,2-dichlorobenzene	<1.0	ug/l
n-butylbenzene	<1.0	ug/l
1,2-dibromo-3-chloropropane	<2.0	ug/l
Bromochloromethane	<1.0	ug/l
1,3-dichloropropane	<1.0	ug/l
Bromobenzene	<1.0	ug/l
1,2,3-trichlorobenzene	<1.0	ug/l
1,2,4-trichlorobenzene	<1.0	ug/l
Dichloromethane	<1.000	ug/l
Hexachlorobutadiene	<1.0	ug/l
MTBE	<1.0	ug/l
Naphthalene	<2.0	ug/l
Trans-1,2-dichloroethene	<1.0	ug/l
1,1-Dichloroethane	<1.0	ug/l
VOC + TICS	<1.000	ug/l
Acenaphthene	<1.0	ug/l
Acenaphthylene	<1.0	ug/l
Anthracene	<1.0	ug/l
Benzo (a) anthracene	<1.0	ug/l
Benzo (a) pyrene	<1.0	ug/l
Benzo (b) flouranthene	<1.0	ug/l
Benzo (ghi) perylene	<1.0	ug/l
Benzo (k) fluoranthene	<1.0	ug/l
Chrysene	<1.0	ug/l
Dibenz(a,h) anthracene	<1.0	ug/l
Fluorene	<1.0	ug/l
Fluoranthene	<1.0	ug/l
Indeno(1,2,3-cd)pyrene	<1.0	ug/l
Naphthalene	<1.0	ug/l
Phenanthrene	<1.0	ug/l
Pyrene	<1.0	ug/l
2-Chlorophenol	<1.0	ug/l
4-Chloro-3-methylPhenol	<1.0	ug/l
2,4-Dichlorophenol	<1.0	ug/l
2,4-Dimethylphenol	<1.0	ug/l
2 Nitrophenol	<1.0	ug/l
Pentachlorophenol	<1.0	ug/l
2,4,5-Trichlorophenol	<1.0	ug/l
2,4,6-Trichlorophenol	<1.0	ug/l
4-Nitrophenol	<5.0	ug/l
Bis(2-chloroisopropyl)ether	<1.0	ug/l
Bis(2-chloroethyl)ether	<1.0	ug/l
4-Chlorophenyl-phenylether	<1.0	ug/l
4-Bromophenyl-phenylether	<1.0	ug/l

Bis(2-ethylhexyl)phthalate	<1.0	ug/l
Benzylbutylphthalate	<1.0	ug/l
Dimethylphthalate	<1.0	ug/l
Di-n-butylphthalate	<1.0	ug/l
Di-n-octylphthalate	<1.0	ug/l
1,2 Dichlorobenzene	<1.000	ug/l
1,2,4-Trichlorobenzene	<1.000	ug/l
1,3 Dichlorobenzene	<1.000	ug/l
1,4 Dichlorobenzene	<1.000	ug/l
2,4,6-Tribromophenol	92.600	% Recovery
2,4-Dinitrotoluene	<1.000	ug/l
2,6-Dinitrotoluene	<1.000	ug/l
2-Chloronaphthalene	<1.000	ug/l
2-Fluorobiphenyl	<1.000	% Recovery
2-Fluorophenol	93.600	% Recovery
2-Methylnaphthalene	<1.000	ug/l
2-Methylphenol	<1.000	ug/l
3&4-Methylphenol	<1.000	ug/l
bis(2-chloroethoxy)methane	<1.000	ug/l
Dibenzofuran	<1.000	ug/l
Diphenylamine	<1.000	ug/l
Hexachlorobenzene	<1.000	ug/l
Hexachlorobutadiene	<1.000	ug/l
Hexachloroethane	<1.000	ug/l
Isophorone	<1.000	ug/l
N-nitrosodi-n-propylamine	<1.000	ug/l
Nitrobenzene	<1.000	ug/l
Nitrobenzene-d5	97.400	% Recovery
Phenol	2.800	ug/l
Phenol-d6	87.900	% Recovery
SVOC	<1.000	ug/l
Terphenyl-d14	99.100	% Recovery
Diethylphthalate	<1.000	ug/l
SVOC + TICS	<1.000	ug/l

Note: Unable to analyse for Demeton-S-Methyl and Disulphoton due to AQC failure.

MW6 Deep Quarterly Results – Mohill

Sampled Time: 14/06/10

Time: 15:45

Depth (m): >30 m, Static water depth 4.0 m

Odour: No unusual odour

Weather/Visual Observation: Dry

City Analysts Ref: 83959

Analysis	Results	Units
Coliform	41.4	MPN/100ml
Feacal coliform	0	Cfu/100ml
Ammonia	<0.1	Mg/l
Conductivity	955	µs/cm
pH	7.81	pH units
TOC	5.80	Mg/l
Temperature	13.2	°C
Boron	2481	µg/l
Cadmium	1.4	µg/l
Chloride	32.58	Mg/l
Chromium	12	µg/l
Copper	39	µg/l
Fluoride	6.7	Mg/l
Iron	23890	µg/l
Lead	27.26	µg/l
Alkalinity as HCO ₃	376	Mg/l
Magnesium	41.4	Mg/l
Manganese	363	µg/l
Total Phosphorous	648.3	µg/l
Potassium	35.3	Mg/l
Sodium	162	Mg/l
Sulphate	90.2	Mg/l
TON as N	<2	Mg/l
Zinc	123	µg/l
Calcium	213.0	Mg/l
Residue on Ignition	<0.1	%

List 1 and 2 Organics - MW6 Deep Quarterly Results – Mohill

Analysis	Result	Units
Barium, Total as Ba	0.080	ug/l
Beryllium	<0.01	mg/l
Cobalt	0.004	mg/l
Mercury, Total as Hg	<0.0001	mg/l
Molybdenum	<0.002	mg/l
Nickel, Total	<0.002	mg/l
Silver	0.015	mg/l
Tellurium	<0.110	ug/l
Thallium	<0.004	mg/l
Tin	<0.01	mg/l
Uranium	1.1	ug/l
Vanadium	0.006	mg/l
Nitrate as N	1.00	mg/l
Cyanide, Total	<0.1	mg/l
2,3,6 TBA	<0.50	ug/l
2,4 D	<0.50	ug/l
2,4 Db	<0.50	ug/l
2,4,5-T	<0.50	ug/l
Bentazone	<0.50	ug/l
Bromoxynil	<0.50	ug/l
Clopyralid	<0.50	ug/l
Dicamba	<0.50	ug/l
Dichlorprop	<0.50	ug/l
Fluroxypyr	<0.50	ug/l
loxynil	<0.50	ug/l
MCPA	<0.50	ug/l
MCPB	<0.50	ug/l
Mecoprop (Total)	<0.50	ug/l
Triclopyr	<0.50	ug/l
Benazolin	<0.60	ug/l
Fenoprop	<0.50	ug/l
124 TCB	<20.00	ng/l
Aldrin	<8.00	ng/l
Alpha HCH	<6.00	ng/l
Beta HCH	<6.00	ng/l
Dichlobenil	<4.00	ng/l
Dieldrin	<8.00	ng/l
EndosulfanA (alpha-Endosulfan)	<8.00	ng/l
EndosulfanB (beta-Endosulfan)	<8.00	ng/l
Endrin	<8.00	ng/l
Hexachlorobenzene	<4.00	ng/l
Hexachlorobutadiene	<14.00	ng/l
Gamma-HCH (Lindane)	<4.00	ng/l

Heptachlor Epoxide	<4.00	ng/l
Isodrin	<8.00	ng/l
op`-DDE	<4.00	ng/l
op`-DDT	<4.00	ng/l
op`-DDD (TDE)	<4.00	ng/l
pp`-DDE	<4.00	ng/l
pp`-DDD (TDE)	<4.00	ng/l
pp`-DDT	<4.00	ng/l
1,3,5 Trichlorobenzene	<20.00	ng/l
Tecnazene	<20.00	ng/l
Triallate	<20.00	ng/l
1,2,3 Trichlorobenzene	<20.00	ng/l
Trifluralin	<60.00	ng/l
alpha - Chlordane	<8.00	ng/l
gamma - Chlordane	<4.00	ng/l
Azinphos methyl	<0.004	ug/l
Carbophenothion	<0.006	ug/l
Chlorfenvinphos	<0.004	ug/l
Demeton-S-Methyl	See Note	ug/l
Diazinon	<0.006	ug/l
Dichlorvos	<0.004	ug/l
Dimethoate	<0.040	ug/l
Fenithroton	<0.004	ug/l
Malathion	<0.008	ug/l
Mevinphos	<0.040	ug/l
Phorate	<0.008	ug/l
Phosalone	<0.008	ug/l
Pirimiphos methyl	<0.010	ug/l
Propetamphos	<0.006	ug/l
Triazophos	<0.004	ug/l
Azinphos ethyl	<0.008	ug/l
Chloropyriphos	<0.004	ug/l
Fenithion	<0.004	ug/l
Disulphoton	See Note	ug/l
Parathion - ethyl	<0.01	ug/l
Parathion - methyl	<0.006	ug/l
Chlortoluron	<0.05	ug/l
Diuron	<0.05	ug/l
Isoproturon	<0.05	ug/l
Linuron	<0.05	ug/l
Monuron	<0.05	ug/l
Methabenzthiazuron	<0.05	ug/l
Monolinuron	<0.05	ug/l
TPH >C6 - C8	<10	ug/l
TPH >C8 - C10	<10	ug/l
TPH >C10 - C16	<10	ug/l
TPH >C16 - C24	<10	ug/l
TPH >C24 - C40	<10	ug/l

TPH >C6 - C40	<10	ug/l
Tributyltin	<0.020	ug/l
Antimony	0.002	mg/l
Arsenic, Total as As	0.005	mg/l
Selenium, Total as Se	<0.0010	mg/l
Titanium	0.063	mg/l
Dichlorodifluoromethane	<1.0	ug/l
Chloromethane	<1.0	ug/l
Bromomethane	<1.0	ug/l
Vinyl Chloride	<1.0	ug/l
Chloroethane	<1.0	ug/l
Trichlorofluoromethane	<1.0	ug/l
1,2-Dichloroethane	<1.0	ug/l
Cis-1,2-dichloroethene	<1.0	ug/l
2,2-Dichloropropane	<1.0	ug/l
Chloroform	<1.0	ug/l
1,1-Dichloroethene	<1.0	ug/l
1,1,1-Trichloroethane	<1.0	ug/l
1,1-Dichloropropene	<1.0	ug/l
Benzene	<1.0	ug/l
Carbon Tetrachloride	<1.0	ug/l
1,2-Dichloropropane	<1.0	ug/l
Trichloroethene	<1.0	ug/l
Dibromomethane	<1.0	ug/l
Bromodichloromethane	<1.0	ug/l
Trans-1,3-dichloropropene	<1.0	ug/l
Cis-1,3-dichloropropene	<1.0	ug/l
Toluene	<1.0	ug/l
1,1,2-trichloroethane	<1.0	ug/l
Dibromochloromethane	<1.0	ug/l
1,2-dibromoethane	<1.0	ug/l
Tetrachloroethene	<1.0	ug/l
Chlorobenzene	<1.0	ug/l
1,1,1,2-tetrachloroethane	<1.0	ug/l
Ethyl Benzene	<1.0	ug/l
m,p-xylene	<1.0	ug/l
Bromoform	<1.0	ug/l
Stryrene	<1.0	ug/l
1,1,2,2-tetrachloroethane	<1.0	ug/l
o-xylene	<1.0	ug/l
1,2,3-trichloropropane	<1.0	ug/l
Isopropylbenzene	<1.0	ug/l
2-chlorotoluene	<1.0	ug/l
n-propylbenzene	<1.0	ug/l
4-chlorotoluene	<1.0	ug/l
1,3,5-trimethylbenzene	<1.0	ug/l
tert-butylbenzene	<1.0	ug/l
sec-butylbenzene	<1.0	ug/l

p-isopropyltoluene	<1.0	ug/l
1,2,4-trimethylbenzene	<1.0	ug/l
1,3-dichlorobenzene	<1.0	ug/l
1,4-dichlorobenzene	<1.0	ug/l
1,2-dichlorobenzene	<1.0	ug/l
n-butylbenzene	<1.0	ug/l
1,2-dibromo-3-chloropropane	<2.0	ug/l
Bromochloromethane	<1.0	ug/l
1,3-dichloropropane	<1.0	ug/l
Bromobenzene	<1.0	ug/l
1,2,3-trichlorobenzene	<1.0	ug/l
1,2,4-trichlorobenzene	<1.0	ug/l
Dichloromethane	<1.000	ug/l
Hexachlorobutadiene	<1.0	ug/l
MTBE	<1.0	ug/l
Naphthalene	<2.0	ug/l
Trans-1,2-dichloroethene	<1.0	ug/l
1,1-Dichloroethane	<1.0	ug/l
VOC + TICS	<1.000	ug/l
Acenaphthene	<1.0	ug/l
Acenaphthylene	<1.0	ug/l
Anthracene	<1.0	ug/l
Benzo (a) anthracene	<1.0	ug/l
Benzo (a) pyrene	<1.0	ug/l
Benzo (b) flouranthene	<1.0	ug/l
Benzo (ghi) perylene	<1.0	ug/l
Benzo (k) fluoranthene	<1.0	ug/l
Chrysene	<1.0	ug/l
Dibenz(a,h) anthracene	<1.0	ug/l
Fluorene	<1.0	ug/l
Fluoranthene	<1.0	ug/l
Indeno(1,2,3-cd)pyrene	<1.0	ug/l
Naphthalene	<1.0	ug/l
Phenanthrene	<1.0	ug/l
Pyrene	<1.0	ug/l
2-Chlorophenol	<1.0	ug/l
4-Chloro-3-methylPhenol	<1.0	ug/l
2,4-Dichlorophenol	<1.0	ug/l
2,4-Dimethylphenol	<1.0	ug/l
2 Nitrophenol	<1.0	ug/l
Pentachlorophenol	<1.0	ug/l
2,4,5-Trichlorophenol	<1.0	ug/l
2,4,6-Trichlorophenol	<1.0	ug/l
4-Nitrophenol	<5.0	ug/l
Bis(2-chloroisopropyl)ether	<1.0	ug/l
Bis(2-chloroethyl)ether	<1.0	ug/l
4-Chlorophenyl-phenylether	<1.0	ug/l
4-Bromophenyl-phenylether	<1.0	ug/l

Bis(2-ethylhexyl)phthalate	<1.0	ug/l
Benzybutylphthalate	<1.0	ug/l
Dimethylphthalate	<1.0	ug/l
Di-n-butylphthalate	<1.0	ug/l
Di-n-octylphthalate	<1.0	ug/l
1,2 Dichlorobenzene	<1.000	ug/l
1,2,4-Trichlorobenzene	<1.000	ug/l
1,3 Dichlorobenzene	<1.000	ug/l
1,4 Dichlorobenzene	<1.000	ug/l
2,4,6-Tribromophenol	84.000	% Recovery
2,4-Dinitrotoluene	<1.000	ug/l
2,6-Dinitrotoluene	<1.000	ug/l
2-Chloronaphthalene	<1.000	ug/l
2-Flourobiphenyl	<1.000	% Recovery
2-Fluorophenol	91.100	% Recovery
2-Methylnaphthalene	<1.000	ug/l
2-Methylphenol	<1.000	ug/l
3&4-Methylphenol	<1.000	ug/l
bis(2-chloroethoxy)methane	<1.000	ug/l
Dibenzofuran	<1.000	ug/l
Diphenylamine	<1.000	ug/l
Hexachlorobenzene	<1.000	ug/l
Hexachlorobutadiene	<1.000	ug/l
Hexachloroethane	<1.000	ug/l
Isophorone	<1.000	ug/l
N-nitrosodi-n-propylamine	<1.000	ug/l
Nitrobenzene	<1.000	ug/l
Nitrobenzene-d5	93.900	% Recovery
Phenol	<1.000	ug/l
Phenol-d6	87.100	% Recovery
SVOC	<1.000	ug/l
Terphenyl-d14	92.500	% Recovery
Diethylphthalate	<1.000	ug/l
SVOC + TICS	<1.000	ug/l

Note: Note: Unable to analyse for Demeton-S-Methyl and Disulphoton due to AQC failure.

MW8 Shallow Quarterly Results – Mohill

Sampled Time: 14/06/10

Time: 17:10

Depth (m): 2.0

Odour: No unusual odour

Weather/Visual Observation: Dry

City Analysts Ref: 83960

Analysis	Results	Units
Coliform	24.1	MPN/100ml
Feacal coliform	0	Cfu/100ml
Ammonia	0.15	Mg/l
Conductivity	9760	µs/cm
pH	7.10	pH units
TOC	8.47	Mg/l
Temperature	9.6	°C
Boron	122	µg/l
Cadmium	9.6	µg/l
Chloride	278.68	Mg/l
Chromium	11	µg/l
Copper	45	µg/l
Flouride	0.1	Mg/l
Iron	40860	µg/l
Lead	14.62	µg/l
Alkalinity as HCO3	106	Mg/l
Magnesium	20.5	Mg/l
Manganese	2752	µg/l
Total Phosphorous	1228	µg/l
Potassium	13.0	Mg/l
Sodium	1590	Mg/l
Sulphate	71.8	Mg/l
TON as N	<2	Mg/l
Zinc	146	µg/l
Calcium	533	Mg/l
Residue on Ignition	<0.1	%

List 1 and 2 Organics - MW8 Shallow Quarterly Results – Mohill

Analysis	Results	Units
Barium, Total as Ba	0.169	ug/l
Beryllium	<0.01	mg/l
Cobalt	0.002	mg/l
Mercury, Total as Hg	<0.0001	mg/l
Molybdenum	<0.002	mg/l
Nickel, Total	<0.002	mg/l
Silver	0.001	mg/l
Tellurium	<0.110	ug/l
Thallium	<0.004	mg/l
Tin	<0.01	mg/l
Uranium	1.1	ug/l
Vanadium	0.009	mg/l
Nitrate as N	0.70	mg/l
Cyanide, Total	<0.1	mg/l
2,3,6 TBA	<0.50	ug/l
2,4 D	<0.50	ug/l
2,4 Db	<0.50	ug/l
2,4,5-T	<0.50	ug/l
Bentazone	<0.50	ug/l
Bromoxynil	<0.50	ug/l
Clopyralid	<0.50	ug/l
Dicamba	<0.50	ug/l
Dichlorprop	<0.50	ug/l
Fluroxypyr	<0.50	ug/l
loxynil	<0.50	ug/l
MCPA	<0.50	ug/l
MCPB	<0.50	ug/l
Mecoprop (Total)	<0.50	ug/l
Triclopyr	<0.50	ug/l
Benazolin	<0.60	ug/l
Fenoprop	<0.50	ug/l
124 TCB	<20.00	ng/l
Aldrin	<8.00	ng/l
Alpha HCH	<6.00	ng/l
Beta HCH	<6.00	ng/l
Dichlobenil	<4.00	ng/l
Dieldrin	<8.00	ng/l
EndosulfanA (alpha-Endosulfan)	<8.00	ng/l
EndosulfanB (beta-Endosulfan)	<8.00	ng/l
Endrin	<8.00	ng/l
Hexachlorobenzene	<4.00	ng/l
Hexachlorobutadiene	<14.00	ng/l
Gamma-HCH (Lindane)	<4.00	ng/l

Heptachlor Epoxide	<4.00	ng/l
Isodrin	<8.00	ng/l
op`-DDE	<4.00	ng/l
op`-DDT	<4.00	ng/l
op`-DDD (TDE)	<4.00	ng/l
pp`-DDE	<4.00	ng/l
pp`-DDD (TDE)	<4.00	ng/l
pp`-DDT	<4.00	ng/l
1,3,5 Trichlorobenzene	<20.00	ng/l
Tecnazene	<20.00	ng/l
Triallate	<20.00	ng/l
1,2,3 Trichlorobenzene	<20.00	ng/l
Trifluralin	<60.00	ng/l
alpha - Chlordane	<8.00	ng/l
gamma - Chlordane	<4.00	ng/l
Azinphos methyl	<0.004	ug/l
Carbophenothion	<0.006	ug/l
Chlorfenvinphos	<0.004	ug/l
Demeton-S-Methyl	See Note	ug/l
Diazinon	<0.006	ug/l
Dichlorvos	<0.004	ug/l
Dimethoate	<0.040	ug/l
Fenithroton	<0.004	ug/l
Malathion	<0.008	ug/l
Mevinphos	<0.040	ug/l
Phorate	<0.008	ug/l
Phosalone	<0.008	ug/l
Pirimiphos methyl	<0.010	ug/l
Propetamphos	<0.006	ug/l
Triazophos	<0.004	ug/l
Azinphos ethyl	<0.008	ug/l
Chloropyriphos	<0.004	ug/l
Fenithion	<0.004	ug/l
Disulphoton	See Note	ug/l
Parathion - ethyl	<0.01	ug/l
Parathion - methyl	<0.006	ug/l
Chlortoluron	<0.05	ug/l
Diuron	<0.05	ug/l
Isoproturon	<0.05	ug/l
Linuron	<0.05	ug/l
Monuron	<0.05	ug/l
Methabenzthiazuron	<0.05	ug/l
Monolinuron	<0.05	ug/l
TPH >C6 - C8	<20	ug/l
TPH >C8 - C10	<20	ug/l
TPH >C10 - C16	<20	ug/l
TPH >C16 - C24	<20	ug/l
TPH >C24 - C40	<20	ug/l

TPH >C6 - C40	<20	ug/l
Tributyltin	<0.020	ug/l
Antimony	<0.001	mg/l
Arsenic, Total as As	0.003	mg/l
Selenium, Total as Se	0.0060	mg/l
Titanium	0.009	mg/l
Dichlorodifluoromethane	<1.0	ug/l
Chloromethane	<1.0	ug/l
Bromomethane	<1.0	ug/l
Vinyl Chloride	<1.0	ug/l
Chloroethane	<1.0	ug/l
Trichlorofluoromethane	<1.0	ug/l
1,2-Dichloroethane	<1.0	ug/l
Cis-1,2-dichloroethene	<1.0	ug/l
2,2-Dichloropropane	<1.0	ug/l
Chloroform	<1.0	ug/l
1,1-Dichloroethene	<1.0	ug/l
1,1,1-Trichloroethane	<1.0	ug/l
1,1-Dichloropropene	<1.0	ug/l
Benzene	<1.0	ug/l
Carbon Tetrachloride	<1.0	ug/l
1,2-Dichloropropane	<1.0	ug/l
Trichloroethene	<1.0	ug/l
Dibromomethane	<1.0	ug/l
Bromodichloromethane	<1.0	ug/l
Trans-1,3-dichloropropene	<1.0	ug/l
Cis-1,3-dichloropropene	<1.0	ug/l
Toluene	<1.0	ug/l
1,1,2-trichloroethane	<1.0	ug/l
Dibromochloromethane	<1.0	ug/l
1,2-dibromoethane	<1.0	ug/l
Tetrachloroethene	<1.0	ug/l
Chlorobenzene	<1.0	ug/l
1,1,1,2-tetrachloroethane	<1.0	ug/l
Ethyl Benzene	<1.0	ug/l
m,p-xylene	<1.0	ug/l
Bromoform	<1.0	ug/l
Stryrene	<1.0	ug/l
1,1,2,2-tetrachloroethane	<1.0	ug/l
o-xylene	<1.0	ug/l
1,2,3-trichloropropane	<1.0	ug/l
Isopropylbenzene	<1.0	ug/l
2-chlorotoluene	<1.0	ug/l
n-propylbenzene	<1.0	ug/l
4-chlorotoluene	<1.0	ug/l
1,3,5-trimethylbenzene	<1.0	ug/l
tert-butylbenzene	<1.0	ug/l
sec-butylbenzene	<1.0	ug/l

p-isopropyltoluene	<1.0	ug/l
1,2,4-trimethylbenzene	<1.0	ug/l
1,3-dichlorobenzene	<1.0	ug/l
1,4-dichlorobenzene	<1.0	ug/l
1,2-dichlorobenzene	<1.0	ug/l
n-butylbenzene	<1.0	ug/l
1,2-dibromo-3-chloropropane	<2.0	ug/l
Bromochloromethane	<1.0	ug/l
1,3-dichloropropane	<1.0	ug/l
Bromobenzene	<1.0	ug/l
1,2,3-trichlorobenzene	<1.0	ug/l
1,2,4-trichlorobenzene	<1.0	ug/l
Dichloromethane	<1.000	ug/l
Hexachlorobutadiene	<1.0	ug/l
MTBE	<1.0	ug/l
Naphthalene	<2.0	ug/l
Trans-1,2-dichloroethene	<1.0	ug/l
1,1-Dichloroethane	<1.0	ug/l
VOC + TICS	<1.000	ug/l
Acenaphthene	<1.0	ug/l
Acenaphthylene	<1.0	ug/l
Anthracene	<1.0	ug/l
Benzo (a) anthracene	<1.0	ug/l
Benzo (a) pyrene	<1.0	ug/l
Benzo (b) flouranthene	<1.0	ug/l
Benzo (ghi) perylene	<1.0	ug/l
Benzo (k) fluoranthene	<1.0	ug/l
Chrysene	<1.0	ug/l
Dibenz(a,h) anthracene	<1.0	ug/l
Fluorene	<1.0	ug/l
Fluoranthene	<1.0	ug/l
Indeno(1,2,3-cd)pyrene	<1.0	ug/l
Naphthalene	<1.0	ug/l
Phenanthrene	<1.0	ug/l
Pyrene	<1.0	ug/l
2-Chlorophenol	<1.0	ug/l
4-Chloro-3-methylphenol	<1.0	ug/l
2,4-Dichlorophenol	<1.0	ug/l
2,4-Dimethylphenol	<1.0	ug/l
2 Nitrophenol	<1.0	ug/l
Pentachlorophenol	<1.0	ug/l
2,4,5-Trichlorophenol	<1.0	ug/l
2,4,6-Trichlorophenol	<1.0	ug/l
4-Nitrophenol	<5.0	ug/l
Bis(2-chloroisopropyl)ether	<1.0	ug/l
Bis(2-chloroethyl)ether	<1.0	ug/l
4-Chlorophenyl-phenylether	<1.0	ug/l
4-Bromophenyl-phenylether	<1.0	ug/l

Bis(2-ethylhexyl)phthalate	<1.0	ug/l
Benzylbutylphthalate	<1.0	ug/l
Dimethylphthalate	<1.0	ug/l
Di-n-butylphthalate	<1.0	ug/l
Di-n-octylphthalate	<1.0	ug/l
1,2 Dichlorobenzene	<1.000	ug/l
1,2,4-Trichlorobenzene	<1.000	ug/l
1,3 Dichlorobenzene	<1.000	ug/l
1,4 Dichlorobenzene	<1.000	ug/l
2,4,6-Tribromophenol	84.600	% Recovery
2,4-Dinitrotoluene	<1.000	ug/l
2,6-Dinitrotoluene	<1.000	ug/l
2-Chloronaphthalene	<1.000	ug/l
2-Fluorobiphenyl	<1.000	% Recovery
2-Fluorophenol	93.500	% Recovery
2-Methylnaphthalene	<1.000	ug/l
2-Methylphenol	<1.000	ug/l
3&4-Methylphenol	<1.000	ug/l
bis(2-chloroethoxy)methane	<1.000	ug/l
Dibenzofuran	<1.000	ug/l
Diphenylamine	<1.000	ug/l
Hexachlorobenzene	<1.000	ug/l
Hexachlorobutadiene	<1.000	ug/l
Hexachloroethane	<1.000	ug/l
Isophorone	<1.000	ug/l
N-nitrosodi-n-propylamine	<1.000	ug/l
Nitrobenzene	<1.000	ug/l
Nitrobenzene-d5	97.200	% Recovery
Phenol	<5.000	ug/l
Phenol-d6	95.400	% Recovery
SVOC	<1.000	ug/l
Terphenyl-d14	94.100	% Recovery
Diethylphthalate	<1.000	ug/l
SVOC + TICS	<1.000	ug/l

Note: Unable to analyse for Demeton-S-Methyl and Disulphoton due to AQC failure.

MW8 Deep Quarterly Results – Mohill

Sampled Time: 14/06/10

Time: 17:30

Depth (m): >30 m, Static water depth 8.0m

Odour: No unusual odour

Weather/Visual Observation: Dry

City Analysts Ref: 83961

Analysis	Results	Units
Coliform	17800	MPN/100ml
Feacal coliform	0	Cfu/100ml
Ammonia	0.2	Mg/l
Conductivity	1056	µs/cm
pH	7.19	pH units
TOC	8.35	Mg/l
Temperature	11.3	°C
Boron	138	µg/l
Cadmium	<0.5	µg/l
Chloride	137.73	Mg/l
Chromium	<5	µg/l
Copper	<20	µg/l
Fluoride	0.6	Mg/l
Iron	866	µg/l
Lead	<2.5	µg/l
Alkalinity as HCO ₃	223	Mg/l
Magnesium	43.4	Mg/l
Manganese	20	µg/l
Total Phosphorous	<100	µg/l
Potassium	<5	Mg/l
Sodium	27.350	Mg/l
Sulphate	20.2	Mg/l
TON as N	<2	Mg/l
Zinc	<20	µg/l
Calcium	142	Mg/l
Residue on Ignition	<0.1	%

List 1 and 2 Organics - MW8 Deep Quarterly Results – Mohill

Analysis	Results	Units
Barium, Total as Ba	0.163	mg/l
Beryllium	<0.01	mg/l
Cobalt	<0.001	mg/l
Mercury, Total as Hg	<0.0001	mg/l
Molybdenum	<0.002	mg/l
Nickel, Total	<0.002	mg/l
Silver	0.012	mg/l
Tellurium	<0.110	mg/l
Thallium	0.004	mg/l
Tin	<0.00	mg/l
Uranium	0.029	ug/l
Vanadium	0.005	mg/l
Nitrate as N	<0.30	mg/l
Cyanide, Total	<0.1	mg/l
2,3,6 TBA	<0.50	ug/l
2,4 D	<0.50	ug/l
2,4 Db	<0.50	ug/l
2,4,5-T	<0.50	ug/l
Bentazone	<0.50	ug/l
Bromoxynil	<0.50	ug/l
Clopyralid	<0.50	ug/l
Dicamba	<0.50	ug/l
Dichlorprop	<0.50	ug/l
Fluroxypyr	<0.50	ug/l
loxynil	<0.50	ug/l
MCPA	<0.50	ug/l
MCPB	<0.50	ug/l
Mecoprop (Total)	<0.50	ug/l
Triclopyr	<0.50	ug/l
Benazolin	<0.60	ug/l
Fenoprop	<0.50	ug/l
124 TCB	<20.00	ng/l
Aldrin	<8.00	ng/l
Alpha HCH	<6.00	ng/l
Beta HCH	<6.00	ng/l
Dichlobenil	<4.00	ng/l
Dieldrin	<8.00	ng/l
EndosulfanA (alpha-Endosulfan)	<8.00	ng/l
EndosulfanB (beta-Endosulfan)	<8.00	ng/l
Endrin	<8.00	ng/l
Hexachlorobenzene	<4.00	ng/l
Hexachlorobutadiene	<14.00	ng/l
Gamma-HCH (Lindane)	<4.00	ng/l
Heptachlor Epoxide	<4.00	ng/l

Isodrin	<8.00	ng/l
op`-DDE	<4.00	ng/l
op`-DDT	<4.00	ng/l
op`-DDD (TDE)	<4.00	ng/l
pp`-DDE	<4.00	ng/l
pp`-DDD (TDE)	<4.00	ng/l
pp`-DDT	<4.00	ng/l
1,3,5 Trichlorobenzene	<20.00	ng/l
Tecnazene	<20.00	ng/l
Triallate	<20.00	ng/l
1,2,3 Trichlorobenzene	<20.00	ng/l
Trifluralin	<60.00	ng/l
alpha - Chlordane	<8.00	ng/l
gamma - Chlordane	<4.00	ng/l
Azinphos methyl	<0.004	ug/l
Carbophenothion	<0.006	ug/l
Chlorfenvinphos	<0.004	ug/l
Demeton-S-Methyl	See Note	ug/l
Diazinon	<0.006	ug/l
Dichlorvos	<0.004	ug/l
Dimethoate	<0.040	ug/l
Fenithroton	<0.004	ug/l
Malathion	<0.008	ug/l
Mevinphos	<0.040	ug/l
Phorate	<0.008	ug/l
Phosalone	<0.008	ug/l
Pirimiphos methyl	<0.010	ug/l
Propetamphos	<0.006	ug/l
Triazophos	<0.004	ug/l
Azinphos ethyl	<0.008	ug/l
Chloropyriphos	<0.004	ug/l
Fenithion	<0.004	ug/l
Disulphoton	See Note	ug/l
Parathion - ethyl	<0.01	ug/l
Parathion - methyl	<0.006	ug/l
Chlortoluron	<0.05	ug/l
Diuron	<0.05	ug/l
Isoproturon	<0.05	ug/l
Linuron	<0.05	ug/l
Monuron	<0.05	ug/l
Methabenzthiazuron	<0.05	ug/l
Monolinuron	<0.05	ug/l
TPH >C6 - C8	<10	ug/l
TPH >C8 - C10	<10	ug/l
TPH >C10 - C16	<10	ug/l
TPH >C16 - C24	<10	ug/l
TPH >C24 - C40	<10	ug/l
TPH >C6 - C40	<10	ug/l

Tributyltin	<0.020	ug/l
Antimony	0.001	mg/l
Arsenic, Total as As	0.003	mg/l
Selenium, Total as Se	0.0030	mg/l
Titanium	0.003	mg/l
Dichlorodifluoromethane	<1.0	ug/l
Chloromethane	<1.0	ug/l
Bromomethane	<1.0	ug/l
Vinyl Chloride	<1.0	ug/l
Chloroethane	<1.0	ug/l
Trichlorofluoromethane	<1.0	ug/l
1,2-Dichloroethane	<1.0	ug/l
Cis-1,2-dichloroethene	<1.0	ug/l
2,2-Dichloropropane	<1.0	ug/l
Chloroform	<1.0	ug/l
1,1-Dichloroethene	<1.0	ug/l
1,1,1-Trichloroethane	<1.0	ug/l
1,1-Dichloropropene	<1.0	ug/l
Benzene	<1.0	ug/l
Carbon Tetrachloride	<1.0	ug/l
1,2-Dichloropropane	<1.0	ug/l
Trichloroethene	<1.0	ug/l
Dibromomethane	<1.0	ug/l
Bromodichloromethane	<1.0	ug/l
Trans-1,3-dichloropropene	<1.0	ug/l
Cis-1,3-dichloropropene	<1.0	ug/l
Toluene	<1.0	ug/l
1,1,2-trichloroethane	<1.0	ug/l
Dibromochloromethane	<1.0	ug/l
1,2-dibromoethane	<1.0	ug/l
Tetrachloroethene	<1.0	ug/l
Chlorobenzene	<1.0	ug/l
1,1,1,2-tetrachloroethane	<1.0	ug/l
Ethyl Benzene	<1.0	ug/l
m,p-xylene	<1.0	ug/l
Bromoform	<1.0	ug/l
Styrene	<1.0	ug/l
1,1,2,2-tetrachloroethane	<1.0	ug/l
o-xylene	<1.0	ug/l
1,2,3-trichloropropane	<1.0	ug/l
Isopropylbenzene	<1.0	ug/l
2-chlorotoluene	<1.0	ug/l
n-propylbenzene	<1.0	ug/l
4-chlorotoluene	<1.0	ug/l
1,3,5-trimethylbenzene	<1.0	ug/l
tert-butylbenzene	<1.0	ug/l
sec-butylbenzene	<1.0	ug/l
p-isopropyltoluene	<1.0	ug/l

1,2,4-trimethylbenzene	<1.0	ug/l
1,3-dichlorobenzene	<1.0	ug/l
1,4-dichlorobenzene	<1.0	ug/l
1,2-dichlorobenzene	<1.0	ug/l
n-butylbenzene	<1.0	ug/l
1,2-dibromo-3-chloropropane	<2.0	ug/l
Bromochloromethane	<1.0	ug/l
1,3-dichloropropane	<1.0	ug/l
Bromobenzene	<1.0	ug/l
1,2,3-trichlorobenzene	<1.0	ug/l
1,2,4-trichlorobenzene	<1.0	ug/l
Dichloromethane	<1.000	ug/l
Hexachlorobutadiene	<1.0	ug/l
MTBE	<1.0	ug/l
Naphthalene	<2.0	ug/l
Trans-1,2-dichloroethene	<1.0	ug/l
1,1-Dichloroethane	<1.0	ug/l
VOC + TICS	<1.000	ug/l
Acenaphthene	<1.0	ug/l
Acenaphthylene	<1.0	ug/l
Anthracene	<1.0	ug/l
Benzo (a) anthracene	<1.0	ug/l
Benzo (a) pyrene	<1.0	ug/l
Benzo (b) flouranthene	<1.0	ug/l
Benzo (ghi) perylene	<1.0	ug/l
Benzo (k) fluoranthene	<1.0	ug/l
Chrysene	<1.0	ug/l
Dibenz(a,h) anthracene	<1.0	ug/l
Fluorene	<1.0	ug/l
Fluoranthene	<1.0	ug/l
Indeno(1,2,3-cd)pyrene	<1.0	ug/l
Naphthalene	<1.0	ug/l
Phenanthrene	<1.0	ug/l
Pyrene	<1.0	ug/l
2-Chlorophenol	<1.0	ug/l
4-Chloro-3-methylphenol	<1.0	ug/l
2,4-Dichlorophenol	<1.0	ug/l
2,4-Dimethylphenol	<1.0	ug/l
2 Nitrophenol	<1.0	ug/l
Pentachlorophenol	<1.0	ug/l
2,4,5-Trichlorophenol	<1.0	ug/l
2,4,6-Trichlorophenol	<1.0	ug/l
4-Nitrophenol	<5.0	ug/l
Bis(2-chloroisopropyl)ether	<1.0	ug/l
Bis(2-chloroethyl)ether	<1.0	ug/l
4-Chlorophenyl-phenylether	<1.0	ug/l
4-Bromophenyl-phenylether	<1.0	ug/l
Bis(2-ethylhexyl)phthlate	<1.0	ug/l

Benzybutylphthalate	<1.0	ug/l
Dimethylphthalate	<1.0	ug/l
Di-n-butylphthalate	<1.0	ug/l
Di-n-octylphthalate	<1.0	ug/l
1,2 Dichlorobenzene	<1.000	ug/l
1,2,4-Trichlorobenzene	<1.000	ug/l
1,3 Dichlorobenzene	<1.000	ug/l
1,4 Dichlorobenzene	<1.000	ug/l
2,4,6-Tribromophenol	85.000	% Recovery
2,4-Dinitrotoluene	<1.000	ug/l
2,6-Dinitrotoluene	<1.000	ug/l
2-Chloronaphthalene	<1.000	ug/l
2-Fluorobiphenyl	<1.000	% Recovery
2-Fluorophenol	89.300	% Recovery
2-Methylnaphthalene	<1.000	ug/l
2-Methylphenol	<1.000	ug/l
3&4-Methylphenol	<1.000	ug/l
bis(2-chloroethoxy)methane	<1.000	ug/l
Dibenzofuran	<1.000	ug/l
Diphenylamine	<1.000	ug/l
Hexachlorobenzene	<1.000	ug/l
Hexachlorobutadiene	<1.000	ug/l
Hexachloroethane	<1.000	ug/l
Isophorone	<1.000	ug/l
N-nitrosodi-n-propylamine	<1.000	ug/l
Nitrobenzene	<1.000	ug/l
Nitrobenzene-d5	93.800	% Recovery
Phenol	<1.000	ug/l
Phenol-d6	85.700	% Recovery
SVOC	<1.000	ug/l
Terphenyl-d14	70.400	% Recovery
Diethylphthalate	<1.000	ug/l
SVOC + TICS	<1.000	ug/l

Note: Unable to analyse for Demeton-S-Methyl and Disulphoton due to AQC failure.

Leachate Quarterly Results – Mohill

Sampled Time: 14/06/10

Time: 10:00

Depth (m): Approx 20cm

Odour: No unusual odour

Weather/Visual Observation: Dry

City Analysts Ref: 83962

Analysis	Results	Units
Coliform	20.9	MPN/100ml
Feacal coliform	0	Cfu/100ml
Ammonia	17.43	Mg/l
Conductivity	3370	µs/cm
pH	6.63	pH units
TOC	13.1	Mg/l
Temperature	13.1	°C
Boron	326	µg/l
Cadmium	<0.2	mg/l
Chloride	887	Mg/l
Chromium	<0.2	mg/l
Copper	<0.2	mg/l
Fluoride	0.2	Mg/l
Iron	32.3	mg/l
Lead	<0.2	mg/l
Alkalinity as HCO ₃	199	Mg/l
Magnesium	41.1	Mg/l
Manganese	2.9	mg/l
Total Phosphorous	<1	mg/l
Potassium	41.9	Mg/l
Sodium	283	Mg/l
Sulphate	76.7	Mg/l
TON as N	<5	Mg/l
Zinc	<0.2	µg/l
Calcium	377	Mg/l
Residue on Ignition	<0.1	%

List 1 and 2 Organics - Leachate Quarterly Results – Mohill

Analysis	Results	Units
Barium, Total as Ba	0.029	ug/l
Beryllium	<0.01	mg/l
Cobalt	0.005	mg/l
Mercury, Total as Hg	<0.0001	mg/l
Molybdenum	<0.002	mg/l
Nickel, Total	0.013	mg/l
Silver	0.002	mg/l
Tellurium	<0.110	ug/l
Thallium	0.009	mg/l
Tin	<0.01	mg/l
Uranium	1.1	ug/l
Vanadium	0.004	mg/l
Nitrate as N	0.90	mg/l
Cyanide, Total	<0.1	mg/l
2,3,6 TBA	<0.50	ug/l
2,4 D	<0.50	ug/l
2,4 Db	<0.50	ug/l
2,4,5-T	<0.50	ug/l
Bentazone	<0.50	ug/l
Bromoxynil	<0.50	ug/l
Clopyralid	<0.50	ug/l
Dicamba	<0.50	ug/l
Dichlorprop	<0.50	ug/l
Fluroxypyr	<0.50	ug/l
loxynil	<0.50	ug/l
MCPA	<0.50	ug/l
MCPB	<0.50	ug/l
Mecoprop (Total)	0.27	ug/l
Triclopyr	<0.50	ug/l
Benazolin	<0.60	ug/l
Fenoprop	<0.50	ug/l
124 TCB	<20.00	ng/l
Aldrin	<8.00	ng/l
Alpha HCH	<6.00	ng/l
Beta HCH	<6.00	ng/l
Dichlobenil	<4.00	ng/l
Dieldrin	<8.00	ng/l
EndosulfanA (alpha-Endosulfan)	<8.00	ng/l
EndosulfanB (beta-Endosulfan)	<8.00	ng/l
Endrin	<8.00	ng/l
Hexachlorobenzene	<1.00	ng/l
Hexachlorobutadiene	<1.00	ng/l
Gamma-HCH (Lindane)	<4.00	ng/l

Heptachlor Epoxide	<4.00	ng/l
Isodrin	<8.00	ng/l
op`-DDE	<4.00	ng/l
op`-DDT	<4.00	ng/l
op`-DDD (TDE)	<4.00	ng/l
pp`-DDE	<4.00	ng/l
pp`-DDD (TDE)	<4.00	ng/l
pp`-DDT	<4.00	ng/l
1,3,5 Trichlorobenzene	<20.00	ng/l
Tecnazene	<20.00	ng/l
Triallate	<20.00	ng/l
1,2,3 Trichlorobenzene	<20.00	ng/l
Trifluralin	<60.00	ng/l
alpha - Chlordane	<8.00	ng/l
gamma - Chlordane	<4.00	ng/l
Azinphos methyl	<0.004	ug/l
Carbophenothion	<0.006	ug/l
Chlorfenvinphos	<0.004	ug/l
Demeton-S-Methyl	See Note	ug/l
Diazinon	<0.006	ug/l
Dichlorvos	<0.004	ug/l
Dimethoate	<0.040	ug/l
Fenithroton	<0.004	ug/l
Malathion	<0.008	ug/l
Mevinphos	<0.040	ug/l
Phorate	<0.008	ug/l
Phosalone	<0.008	ug/l
Pirimiphos methyl	<0.010	ug/l
Propetamphos	<0.006	ug/l
Triazophos	<0.004	ug/l
Azinphos ethyl	<0.008	ug/l
Chloropyriphos	<0.004	ug/l
Fenithion	<0.004	ug/l
Disulphoton	See Note	ug/l
Parathion - ethyl	<0.01	ug/l
Parathion - methyl	<0.006	ug/l
Chlortoluron	<0.05	ng/l
Diuron	<0.05	ng/l
Isoproturon	<0.05	ng/l
Linuron	<0.05	ng/l
Monuron	<0.05	ng/l
Methabenzthiazuron	<0.05	ng/l
Monolinuron	<0.05	ng/l
TPH >C6 - C8	<10	ug/l
TPH >C8 - C10	<10	ug/l
TPH >C10 - C16	40	ug/l
TPH >C16 - C24	28	ug/l
TPH >C24 - C40	45	ug/l

TPH >C6 - C40	113	ug/l
Tributyltin	<0.020	ug/l
Antimony	<0.004	mg/l
Arsenic, Total as As	0.001	mg/l
Selenium, Total as Se	0.0050	mg/l
Titanium	0.010	mg/l
Dichlorodifluoromethane	3.5	ug/l
Chloromethane	<1.0	ug/l
Bromomethane	<1.0	ug/l
Vinyl Chloride	<1.0	ug/l
Chloroethane	<1.0	ug/l
Trichlorofluoromethane	2.3	ug/l
1,2-Dichloroethane	<1.0	ug/l
Cis-1,2-dichloroethene	<1.0	ug/l
2,2-Dichloropropane	<1.0	ug/l
Chloroform	<1.0	ug/l
1,1-Dichloroethene	<1.0	ug/l
1,1,1-Trichloroethane	<1.0	ug/l
1,1-Dichloropropene	<1.0	ug/l
Benzene	<1.0	ug/l
Carbon Tetrachloride	<1.0	ug/l
1,2-Dichloropropane	<1.0	ug/l
Trichloroethene	<1.0	ug/l
Dibromomethane	<1.0	ug/l
Bromodichloromethane	<1.0	ug/l
Trans-1,3-dichloropropene	<1.0	ug/l
Cis-1,3-dichloropropene	<1.0	ug/l
Toluene	<1.0	ug/l
1,1,2-trichloroethane	<1.0	ug/l
Dibromochloromethane	<1.0	ug/l
1,2-dibromoethane	<1.0	ug/l
Tetrachloroethene	<1.0	ug/l
Chlorobenzene	<1.0	ug/l
1,1,1,2-tetrachloroethane	<1.0	ug/l
Ethyl Benzene	<1.0	ug/l
m,p-xylene	<1.0	ug/l
Bromoform	<1.0	ug/l
Stryrene	<1.0	ug/l
1,1,2,2-tetrachloroethane	<1.0	ug/l
o-xylene	<1.0	ug/l
1,2,3-trichloropropane	<1.0	ug/l
Isopropylbenzene	<1.0	ug/l
2-chlorotoluene	<1.0	ug/l
n-propylbenzene	<1.0	ug/l
4-chlorotoluene	<1.0	ug/l
1,3,5-trimethylbenzene	<1.0	ug/l
tert-butylbenzene	<1.0	ug/l
sec-butylbenzene	<1.0	ug/l

p-isopropyltoluene	<1.0	ug/l
1,2,4-trimethylbenzene	<1.0	ug/l
1,3-dichlorobenzene	<1.0	ug/l
1,4-dichlorobenzene	<1.0	ug/l
1,2-dichlorobenzene	<1.0	ug/l
n-butylbenzene	<1.0	ug/l
1,2-dibromo-3-chloropropane	<2.0	ug/l
Bromochloromethane	<1.0	ug/l
1,3-dichloropropane	<1.0	ug/l
Bromobenzene	<1.0	ug/l
1,2,3-trichlorobenzene	<1.0	ug/l
1,2,4-trichlorobenzene	<1.0	ug/l
Dichloromethane	<1.000	ug/l
Hexachlorobutadiene	<1.0	ug/l
MTBE	<1.0	ug/l
Naphthalene	<2.0	ug/l
Trans-1,2-dichloroethene	<1.0	ug/l
1,1-Dichloroethane	<1.0	ug/l
VOC + TICS	<1.000	ug/l
Acenaphthene	<1.0	ug/l
Acenaphthylene	<1.0	ug/l
Anthracene	<1.0	ug/l
Benzo (a) anthracene	<1.0	ug/l
Benzo (a) pyrene	<1.0	ug/l
Benzo (b) flouranthene	<1.0	ug/l
Benzo (ghi) perylene	<1.0	ug/l
Benzo (k) fluoranthene	<1.0	ug/l
Chrysene	<1.0	ug/l
Dibenz(a,h) anthracene	<1.0	ug/l
Fluorene	<1.0	ug/l
Fluoranthene	<1.0	ug/l
Indeno(1,2,3-cd)pyrene	<1.0	ug/l
Naphthalene	<1.0	ug/l
Phenanthrene	<1.0	ug/l
Pyrene	<1.0	ug/l
2-Chlorophenol	<1.0	ug/l
4-Chloro-3-methylPhenol	<1.0	ug/l
2,4-Dichlorophenol	<1.0	ug/l
2,4-Dimethylphenol	<1.0	ug/l
2 Nitrophenol	<1.0	ug/l
Pentachlorophenol	<1.0	ug/l
2,4,5-Trichlorophenol	<1.0	ug/l
2,4,6-Trichlorophenol	<1.0	ug/l
4-Nitrophenol	<5.0	ug/l
Bis(2-chloroisopropyl)ether	<1.0	ug/l
Bis(2-chloroethyl)ether	<1.0	ug/l
4-Chlorophenyl-phenylether	<1.0	ug/l
4-Bromophenyl-phenylether	<1.0	ug/l

Bis(2-ethylhexyl)phthalate	<1.0	ug/l
Benzylbutylphthalate	<1.0	ug/l
Dimethylphthalate	<1.0	ug/l
Di-n-butylphthalate	<1.0	ug/l
Di-n-octylphthalate	<1.0	ug/l
1,2 Dichlorobenzene	<1.000	ug/l
1,2,4-Trichlorobenzene	<1.000	ug/l
1,3 Dichlorobenzene	<1.000	ug/l
1,4 Dichlorobenzene	<1.000	ug/l
2,4,6-Tribromophenol	96.000	% Recovery
2,4-Dinitrotoluene	<1.000	ug/l
2,6-Dinitrotoluene	<1.000	ug/l
2-Chloronaphthalene	<1.000	ug/l
2-Fluorobiphenyl	<1.000	% Recovery
2-Fluorophenol	92.100	% Recovery
2-Methylnaphthalene	<1.000	ug/l
2-Methylphenol	<1.000	ug/l
3&4-Methylphenol	<1.000	ug/l
bis(2-chloroethoxy)methane	<1.000	ug/l
Dibenzofuran	<1.000	ug/l
Diphenylamine	<1.000	ug/l
Hexachlorobenzene	<1.000	ug/l
Hexachlorobutadiene	<1.000	ug/l
Hexachloroethane	<1.000	ug/l
Isophorone	<1.000	ug/l
N-nitrosodi-n-propylamine	<1.000	ug/l
Nitrobenzene	<1.000	ug/l
Nitrobenzene-d5	96.000	% Recovery
Phenol	<1.000	ug/l
Phenol-d6	88.100	% Recovery
SVOC	<1.000	ug/l
Terphenyl-d14	93.000	% Recovery
Diethylphthalate	<1.000	ug/l
SVOC + TICS	<1.000	ug/l

Note: Unable to analyse for Demeton-S-Methyl and Disulphoton due to AQC failure.



LEITRIM COUNTY COUNCIL

QUARTERLY MONITORING REPORT

Carrick on Shannon LANDFILL

Landfill Licence from the EPA – W-0064

3rd QUARTER 2010

For the Attention of:

**Mr Sean Scott
Leitrim Co Co
Aras an Chontae
Carrick On Shannon
Co Leitrim**

Prepared by:


Jenny Pender

City Analysts Ltd

RESULTS:

Groundwater Quarterly Results – Carrick on Shannon

Sample Ref: MW09

Sampled Date: 30/07/10

Sampled Time: 10:00

City Analysts Ref: 87085

Analysis	Results	Units
Conductivity	678	µs/cm
pH	7.12	pH units
Ammonia	1.00	Mg/l
Temperature	12.5	°C

Sample Ref: MW10

Sampled Date: 30/07/10

Sampled Time: 10:00

City Analysts Ref: 87086

Analysis	Results	Units
Conductivity	519	µs/cm
pH	7.49	pH units
Ammonia	7.52	Mg/l
Temp	12.3	°C

Sample Ref: MW9

Sampled Date: 30/08/10

Sampled Time: 10:30am

City Analysts Ref: 88687

Analysis	Results	Units
Conductivity	856	µs/cm
pH	7.04	pH units
Ammonia	1.14	Mg/l
Temp	10.9	°C

Sample Ref: MW10

Sampled Date: 30/08/10

Sampled Time: 10:30am

City Analysts Ref: 88688

Analysis	Results	Units
Conductivity	939	µs/cm
pH	7.35	pH units
Ammonia	1.45	Mg/l
Temp	11.8	°C

Sample Ref: SW9

Sampled Date: 30/09/10

Sampled Time: 11:30am

City Analysts Ref: 90823

Analysis	Results	Units
Chloride	33	Mg/l
Conductivity	606	µs/cm
DO	6.8	mg/l O2
pH	7.3	pH units
Temperature	13.4	°C
Turbidity	11.30	NTU
COD	42	Mg/l
BOD	<4	Mg/l

Sample Ref: SW6

Sampled Date: 30/09/10

Sampled Time: 11:30am

City Analysts Ref: 90824

Analysis	Results	Units
Chloride	15	Mg/l
Conductivity	433	µs/cm
DO	2.6	mg/l O2
pH	7.4	pH units
Temperature	12.6	°C
Turbidity	40.00	NTU
COD	295	Mg/l
BOD	8	Mg/l

Sample Ref: SW7

Sampled Date: 30/09/10

Sampled Time: 11:30am

City Analysts Ref: 90825

Analysis	Results	Units
Chloride	19	Mg/l
Conductivity	419	µs/cm
DO	2.5	mg/l O2
pH	7.5	pH units
Temperature	12.8	°C
Turbidity	13.20	NTU
COD	84	Mg/l
BOD	<4	Mg/l

Sample Ref: SW8

Sampled Date: 30/09/10

Sampled Time: 11:30am

City Analysts Ref: 90826

Analysis	Results	Units
Chloride	12	Mg/l
Conductivity	441	µs/cm
DO	2.4	mg/l O2
pH	7.5	pH units
Temperature	13.0	°C
Turbidity	91.00	NTU
COD	994	Mg/l
BOD	18	Mg/l

Sample Ref: SW1B

Sampled Date: 30/09/10

Sampled Time: 12:00

City Analysts Ref: 90827

Analysis	Results	Units
Chloride	13	Mg/l
Conductivity	435	µs/cm
DO	3.5	mg/l O2
pH	7.5	pH units
Temperature	12.4	°C
Turbidity	5.50	NTU
COD	98	Mg/l
BOD	5	Mg/l

Sample Ref: MW9

Sampled Date: 30/09/10

Sampled Time: 12:00

City Analysts Ref: 90828

Analysis	Results	Units
Ammonia as N	3.83	Mg/l
Chloride	35	Mg/l
Conductivity	734	µs/cm
pH	7.2	pH units
Temperature	12.5	°C
TOC	6.99	Mg/l
TON as N	<5	Mg/l
Sodium	47.260	Mg/l
Phenol	<5	Mg/l
Potassium	5.8	Mg/l

Sample Ref: MW10

Sampled Date: 30/09/10

Sampled Time: 12:00

City Analysts Ref: 90829

Analysis	Results	Units
Ammonia as N	15.86	Mg/l
Chloride	19	Mg/l
Conductivity	732	µs/cm
pH	7.2	pH units
Temperature	12.4	°C
TOC	5.66	Mg/l
TON as N	<5	Mg/l
Sodium	37.42	Mg/l
Phenol	<5	Mg/l
Potassium	12.1	Mg/l

Sample Ref: MW10

Sampled Date: 30/09/10

Sampled Time: 12:00

City Analysts Ref: 90830

Analysis	Results	Units
Chloride	79	Mg/l
Conductivity	1174	µs/cm
pH	7.2	pH units
Temperature	14.7	°C
BOD	4	Mg/l O2
TON as N	<5	Mg/l
Sodium	66.97	Mg/l
Iron	0.7	Mg/l
COD	33	Mg/l



LEITRIM COUNTY COUNCIL

QUARTERLY MONITORING REPORT

Carrick on Shannon LANDFILL

Landfill Licence from the EPA – W-0064

4th QUARTER 2010

For the Attention of:

**Mr Sean Scott
Leitrim Co Co
Aras an Chontae
Carrick On Shannon
Co Leitrim**

Prepared by:


Jenny Pender

City Analysts Ltd

RESULTS:

Groundwater Quarterly Results – Carrick on Shannon

Sample Ref: MW09

Sampled Date: 19/10/2010

Sampled Time: 10:00

City Analysts Ref: 92082

Analysis	Results	Units
Conductivity	787	µs/cm
pH	7.4	pH units
Ammonia	10.71	Mg/l
Temperature	11.1	°C
DO Onsite	5.7	Mg/l O2

Sample Ref: MW10

Sampled Date: 19/10/2010

Sampled Time: 10:00

City Analysts Ref: 92083

Analysis	Results	Units
Conductivity	851	µs/cm
pH	7.4	pH units
Ammonia	4.14	Mg/l
Temp	10.8	°C
Do Onsite	7.9	Mg/l O2

Sample Ref: MW9

Sampled Date: 09/12/2010

Sampled Time: 10:00am

City Analysts Ref: 94918

Analysis	Results	Units
Conductivity	739	µs/cm
pH	7.4	pH units
Ammonia	10.77	Mg/l
Temp	9.5	°C
DO Onsite	6.4	Mg/l O2

Sample Ref: MW10

Sampled Date: 09/12/10

Sampled Time: 10:15am

City Analysts Ref: 94919

Analysis	Results	Units
Conductivity	767	µs/cm
pH	7.6	pH units
Ammonia	8.37	Mg/l
Temp	9.6	°C
Do Onsite	4.5	°C

Sample Ref: SW5

Sampled Date: 14/12/2010

Sampled Time: 9:30am

City Analysts Ref: 95155

Analysis	Results	Units
Chloride	54.65	Mg/l
Conductivity	796	µs/cm
DO	6.5	mg/l O2
Turbidity	55.00	NTU
COD	133	Mg/l
BOD	11	Mg/l

Sample Ref: SW6

Sampled Date: 14/12/10

Sampled Time: 9:45 am

City Analysts Ref: 95156

Analysis	Results	Units
Chloride	55.26	Mg/l
Conductivity	795	µs/cm
DO	2.8	mg/l O2
Turbidity	15.60	NTU
COD	53	Mg/l
BOD	<2	Mg/l

Sample Ref: SW7

Sampled Date: 14/12/10

Sampled Time: 09:50am

City Analysts Ref: 95157

Analysis	Results	Units
Chloride	58.30	Mg/l
Conductivity	805	µs/cm
DO	2.6	mg/l O2
Turbidity	3.90	NTU
COD	41	Mg/l
BOD	<2	Mg/l

Sample Ref: SW8

Sampled Date: 14/12/10

Sampled Time: 10:00am

City Analysts Ref: 95158

Analysis	Results	Units
Chloride	54.65	Mg/l
Conductivity	797	µs/cm
DO	3.2	mg/l O2
Turbidity	7.10	NTU
COD	39	Mg/l
BOD	2	Mg/l

Sample Ref: SW1B

Sampled Date: 14/12/10

Sampled Time: 10:10am

City Analysts Ref: 95159

Analysis	Results	Units
Chloride	55.19	Mg/l
Conductivity	800	µs/cm
DO	3.4	mg/l O ₂
Turbidity	115	NTU
COD	287	Mg/l
BOD	27	Mg/l

Sample Ref: MW9

Sampled Date: 14/12/10

Sampled Time: 10:30am

City Analysts Ref: 95160

Analysis	Results	Units
Ammonia as N	3.72	Mg/l
Chloride	17.26	Mg/l
Conductivity	823	µs/cm
TOC	3.80	Mg/l
TON as N	<2	Mg/l
Sodium	49.83	Mg/l
Phenol	<5	Mg/l
Potassium	11.6	Mg/l

Sample Ref: MW10

Sampled Date: 14/12/10

Sampled Time: 10:40am

City Analysts Ref: 95161

Analysis	Results	Units
Ammonia as N	2.21	Mg/l
Chloride	17.87	Mg/l
Conductivity	881	µs/cm
TOC	3.30	Mg/l
TON as N	<2	Mg/l
Sodium	54.80	Mg/l
Phenol	<5	Mg/l
Potassium	11.8	Mg/l

Sample Ref: MW10

Sampled Date: 14/12/10

Sampled Time: 12:00

City Analysts Ref: 95162

Analysis	Results	Units
Chloride	122.86	Mg/l
Conductivity	1490	µs/cm
BOD	<6	Mg/l O2
TON as N	<2	Mg/l
Sodium	60.580	Mg/l
Iron	0.8	Mg/l
COD	32	Mg/l