

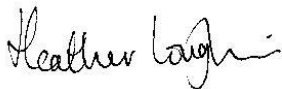
# Molaisín

Compost Limited

## Annual Environmental Report

**Name:** Molaisín Compost Limited  
**Address:** Kilmolash, Cappoquin, Co Waterford  
**Waste Licence:** W0245-01  
**Reporting Period:** January 1<sup>st</sup> 2015 – December 31<sup>st</sup> 2015

**Signed:**



**Heather Loughlin**  
Environmental Manager

## **1.0 REPORTING PERIOD**

This report covers the period 1<sup>st</sup> January 2015 – 31<sup>st</sup> December 2015.

## **2.0 WASTE ACTIVITIES CARRIED OUT AT THE FACILITY**

Molaisín Compost Limited (Molaisín) commenced waste activities at the facility at Kilmolash, Cappoquin, Co Waterford in 2005. Molaisín operated under a Waterford County Council waste permit up to August 2010. Since August 10<sup>th</sup> Molaisín has operated under EPA Waste Licence W0245-01.

Molaisín specializes in the composting of non-hazardous industrial and sewage sludges using a controlled static pile, forced aeration system. Molaisín operate the industrial composting facilities using a. The process takes place completely indoors. The incoming wastes are mixed with dry finished compost and other dry amendments. The Molaisín method is based on a scientific enhancement of the natural composting process that creates and maintains an environment conducive to the proliferation of specific microbial populations. These microbes are responsible for biodegradation and, when provided with the right balance of moisture, temperature, and oxygen are able to affect the rapid decay of organic material.

The composting of non-hazardous industrial sludges and biosolids produces a very valuable end product from material that was previously considered a waste. The finished product adds an important micronutrient and humus-rich stable material to soil. The compost produced by Molaisín is a class 1 compost. All compost produced on site is sent for Agricultural and Horticultural use.

## 2.0 QUANTITY/COMPOSITION OF WASTE RECEIVED, DISPOSED OF AND RECOVERED DURING THE REPORTING PERIOD

### 2.1 Waste received

The following wastes were received for composting during the reporting period:

Description of Incoming Waste	List of Waste Code	Tonnes
Sludges from onsite effluent treatment (food)	02 02 04	522.00
Sludges from onsite effluent treatment (dairy)	02 05 02	34.56
Materials unsuitable for consumption or processing (beverages)	02 07 04	3.24
De-inking sludges from paper recycling	03 03 05	4.34
Sludges from onsite effluent treatment (pharm)	07 05 12	340.06
Hawthorn leaves	07 05 14	135.64
Leaves & lipids	07 05 99	2,125.60
Cosmetics industry	07 06 99	96.26
Sludges from treatment of urban waste water	19 08 05	4,615.16
Sludges from biological treatment of industrial waste water	19 08 12	9.12
Sludges from water clarification	19 09 02	101.56
Edible oils and fats	20 01 25	23.96
Septic tank sludge	20 03 04	70.10
	<b>TOTAL</b>	<b>8081.60</b>

The following amendment material were used in the composting process:

Amendment Materials	Tonnes
Peat	58.72
Sawdust	755.98
Woodchip	201.08
<b>TOTAL</b>	<b>1015.78</b>

## **2.2 Compost Removed from Site**

The compost produced at the facility is used as an agricultural fertilizer, for landscaping works and as a peat replacement in horticultural products.

<b>Use</b>	<b>Quantity</b>
Agriculture/Horticulture	3203.00
<b>TOTAL</b>	<b>3203.00</b>

## **3.0 EMISSIONS FROM THE FACILITY**

There were no emissions from the facility during the reporting period. Air is extracted from the facility through a biofiltration system. The biofilter was monitored during the reporting period both independently and by Molaisín Compost Limited and there were no emissions noted.

**See Attachment 1**

## **4.0 RESOURCE CONSUMPTION SUMMARY**

**Diesel Usage:** 30,052 litres of diesel was used during the reporting period to operate equipment in the facility.

**Electricity Usage:** From Electricity Bills McGill have used approximately 451,000 kWh of electricity at the facility during the reporting period.

## 4.0 COMPLAINT SUMMARY

There were no complaints during the reporting period.

## 5.0 SCHEDULE OF ENVIRONMENTAL OBJECTIVES AND TARGETS

Objective	Target
Biofilter Maintenance	1. Biofilter to be monitored on a weekly basis, and dug and reseeded as required
Develop written procedures	1. Standard operating procedures are in place, these need to be upgraded to include every aspect of the process
Training	1. On-going training required for all staff in updated health and safety and operational issues
Monitoring	1. Follow schedule based on licence requirements
Staff	1. Adequate cover if an employee is on holidays or away from the facility 2. Training in advance notification of absence
Raw Material Usage	1. Monitor Raw Material usage and analyse results 2. Put procedures in place to maximise efficiency of raw material usage
Energy Audit	1. Reduce Energy consumption on site

## 6.0 ENVIRONMENTAL MANAGEMENT PROGRAMME

### 6.1 Report for 2015

Target	Responsibility	Target Date	Status	Last review date
Onsite training of operators	Niall Carroll	Ongoing	Ongoing	04.01.2016
Carry out review of EMS and identify areas for improvement	Heather Loughlin	Jul-15	Ongoing - New procedures currently being drafted for discussion with Factory Manager.	04.01.2016
Investigate potential for reducing monitoring requirements due to proven track record	Heather Loughlin	Dec-15	Ongoing - document being prepared for submission to EPA	04.01.2016
Monitor energy usage and identify opportunities for reductions	Heather Loughlin	Dec-15	Ongoing. Nothing identified in 2015.	04.01.2016

### 6.2 Proposal for 2016

Target	Responsibility	Target Date
Carry out refresher training for staff	Heather Loughlin	End July 2016
Continue with the revision of the Environmental Management System and streamline procedures wherever possible.	Heather Loughlin	End August 2016
Monitor energy usage and identify opportunities for reductions.	Heather Loughlin/Niall Carroll	End December 2016
Prepare case for reducing monitoring frequency for noise/dust/odour/water, where appropriate.	Heather Loughlin	End April 2016

## **7.0 NOISE MONITORING REPORT SUMMARY**

Noise monitoring was conducted on site by KD Environmental on 17th September 2015.

Daytime noise levels were within the permitted noise limit of 55 dB(A) at all four noise measurement locations – N1, N2, N3 and N4.

Evening time noise levels were within the permitted noise limit of 50 dB(A) at three noise measurement locations – N1, N2, N3 and N4.

There was no significant tonal or impulsive noise from site activities during daytime and evening noise monitoring.

The full noise monitoring report is available.

## **8.0 AMBIENT MONITORING SUMMARY**

All monitoring conducted during the year is reported in Attachment 1.

## **9.0 EMISSIONS AND RESULTS OF ENVIRONMENTAL MONITORING.**

- Compost Analysis summary reports for metals and pathogens are attached. The facility produced a “Class 1” compost during 2015.
- Sludge Analysis Report is attached. All sludges were analysed on a quarterly basis.
- McGill conducted dust monitoring on site for four different 30 day periods during 2015. The results of these are attached. The results were within the emission limit values on all occasions.

- Odour Monitoring Ireland (OMI) conducted quarterly Odour Monitoring on site. Bioaerosol and PM10 monitoring was conducted on two occasions in 2015. The results of these visits showed that there were no significant odours or bioaerosol impacts in the vicinity of the facility and the ambient air concentration levels of PM10 were below the statutory 24-hour average ambient air concentration level of 50ug m<sup>3</sup>.
- Biofilter sampling was conducted as per the licence requirement and summary results are attached. There were no environmental concerns with the results.
- Groundwater sampling was conducted as per the licence requirement and a summary sheet is attached. There were no environmental concerns with the results.
- Surface water sampling was conducted as per the licence requirement and a summary sheet is attached. There were no environmental concerns with the results.

***See Attachment 1***

## **10.0 TANK AND PIPELINE TESTING AND INSPECTION REPORT**

A report on pipeline testing showing that there are no leaks or spills, was submitted to the Agency in 2014. The next test is due in 2017.

## **11.0 REPORTED INCIDENTS SUMMARY**

There were no reportable incidents during the reporting year.



## **12.0 ENERGY EFFICIENCY AUDIT REPORT SUMMARY**

In 2015 Molaisín Compost used an average of 55KwH electricity and 3.72 litres of diesel per tonne of biosolids accepted at the facility. This is a decrease in the usage of diesel when compared to 2014.

There was a small increase in the amount of electricity used from 2014 to 2015.

## **13.0 REPORT ON THE ASSESSMENT OF THE EFFICIENCY OF THE USE OF RAW MATERIALS IN PROCESSES AND THE REDUCTION IN WASTE GENERATED**

Amendments for the composting process are the only raw materials used on site at Molaisín Compost Limited. The ratio of amendments to waste used during the reporting period was 0.13 tonnes amendment: 1 tonne waste, this less than in 2015 and continues to show a general downward trend.

There was a 35% reduction in the volume of waste and amendment accepted versus compost produced.

## **14.0 REPORT ON PROGRESS MADE AND PROPOSALS BEING DEVELOPED TO MINIMISE WATER DEMAND AND THE VOLUME OF TRADE EFFLUENT DISCHARGES**

There are no effluent discharges from the process or facility at Molaisín Compost. Water is not added to the process, the only water used is for the cleaning of delivery trucks and equipment to ensure that no waste is carried from the facility out onto the site. The amount of water used

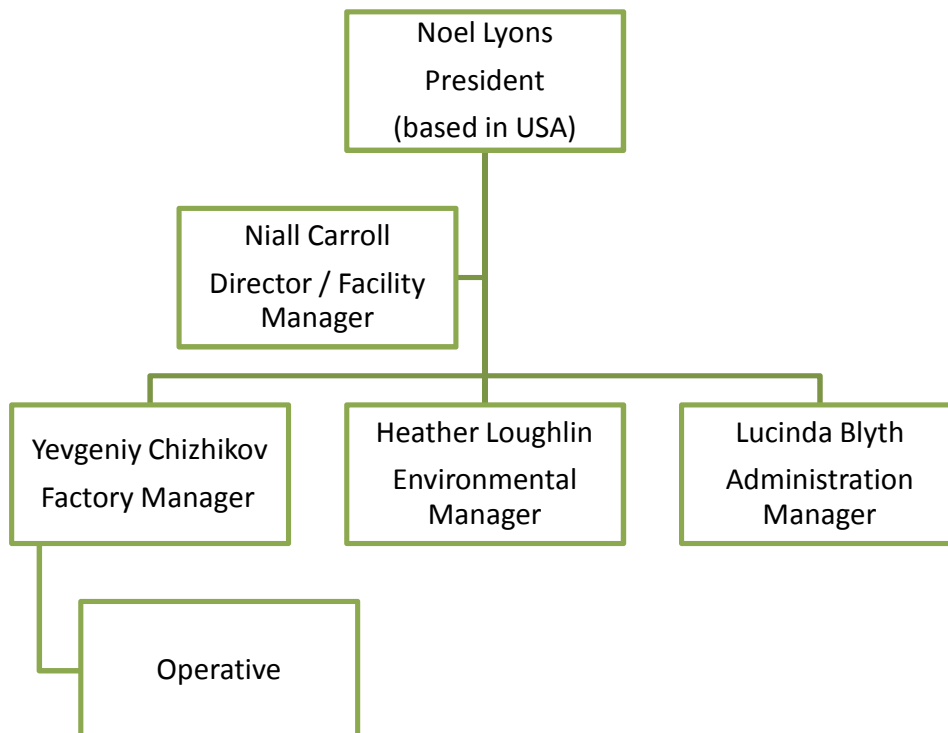
cannot be reduced without compromising the cleanliness of the vehicles, equipment, and the site.

## 15.0 DEVELOPMENT/INFRASTRUCTURAL WORKS SUMMARY

There were no development works carried out in 2015.

## 16.0 MANAGEMENT AND STAFFING STRUCTURE

During the reporting period, the management and staffing structure was as follows:



## **17.0 PUBLIC INFORMATION PROGRAMME**

A procedure is in place to ensure that the public can obtain information concerning the environmental performance of the facility at all reasonable times.

There were no requests for information during 2015.

## **18.0 REVIEW OF DECOMMISSIONING MANAGEMENT PLAN / CLOSURE, RESTORATION AND AFTERCARE MANAGEMENT PLAN AND STATEMENT OF MEASURES IN RELATION TO PREVENTION OF ENVIRONMENTAL DAMAGE AND REMEDIAL ACTIONS (ENVIRONMENTAL LIABILITIES)**

The Environmental Liabilities Risk Assessment and Decommissioning Plan was reviewed and submitted to the Agency in January 2014.

## **19.0 REVIEW OF NUISANCE CONTROLS**

A daily check takes place for Vermin, Birds, Flies, Mud, Dust, Odour, Surface Water, and Biofilter Odour. Checklists are maintained on site for inspection.

## **20.0 VOLUME OF TRADE EFFLUENT / LEACHATE PRODUCED AND TRANSPORTED OFF SITE**

There was no trade effluent or leachate produced on site during the reporting period.

## **Attachment 1**

### **Lab Analysis**

### Compost Metal Results

		% Organic matter		Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Impurities >2mm	Gravel & stones >5mm
<i>Compost Quality standards: mg/kg, normalised to 30% organic matter</i>												
Class I Standard	0.7		100	100	100	0.5	50	200	<0.5%	<5%		
Class II Standard	1.5	150	150	150	1	75	400	<0.5%	<5%			
<b>Molaisin Reference</b>	<b>Lab Reference</b>		<b>Units</b>									
MCL Q1-15	0360/409/01	89.05	µg/kg	56.42	3174.48	45537.6	10188.8	78.16	2715	90880		
			mg/kg	0.05642	3.17448	45.5376	10.1888	0.07816	2.715	90.88		
Normalised to 30% organic matter			mg/kg	<b>0.019</b>	<b>1.069</b>	<b>15.341</b>	<b>3.432</b>	<b>0.026</b>	<b>0.915</b>	<b>30.617</b>	<b>&lt;0.5%</b>	<b>&lt;0.5%</b>
MCL Q2-15		86.77	µg/kg	167.79	3349.24	67662.2	12623.4	198.78	3994.1	147403		
			mg/kg	0.16779	3.34924	67.6622	12.6234	0.19878	3.9941	147.4		
Normalised to 30% organic matter			mg/kg	<b>0.058</b>	<b>1.158</b>	<b>23.394</b>	<b>4.364</b>	<b>0.069</b>	<b>1.381</b>	<b>50.963</b>	<b>&lt;0.5%</b>	<b>&lt;0.5%</b>
MCL Q3-15	0360/417/08	86.94	µg/kg	<10	2526.21	40377.4	36978.4	42.0558	2134.2	90627		
			mg/kg	0.01	2.52621	40.3774	36.9784	0.042056	2.1342	90.627		
Normalised to 30% organic matter			mg/kg	<b>&lt;0.003</b>	<b>0.872</b>	<b>13.933</b>	<b>12.760</b>	<b>0.015</b>	<b>0.736</b>	<b>31.272</b>	<b>&lt;0.5%</b>	<b>&lt;0.5%</b>
MCL Q4-15	0360/420/12	69.51	µg/kg	105.074	7707.68	55244.8	93683.3	101.53	20415	220389		
			mg/kg	0.105074	7.70768	55.2448	93.6833	0.10153	20.415	220.39		
Normalised to 30% organic matter			mg/kg	<b>0.045</b>	<b>3.327</b>	<b>23.843</b>	<b>40.433</b>	<b>0.044</b>	<b>8.811</b>	<b>95.118</b>	<b>&lt;0.5%</b>	<b>&lt;0.5%</b>

### **Compost Pathogen Results**

<b>Molaisin Reference:</b>	<b>Lab Ref:</b>	<b>Result Faecal Coliforms no/100ml</b>	<b>Result Salmonella per 25g</b>
1. MCL Q1 2015	MCGI-399040315	<10	Not detected
2. MCL Q1 2015	MCGI-399040315	<10	Not detected
3. MCL Q1 2015	MCGI-399040315	<10	Not detected
4. MCL Q1 2015	MCGI-399040315	<10	Not detected
5. MCL Q1 2015	MCGI-399040315	<10	Not detected
MCL Q2 2015 sample 1	MCGI-343020615	10	Not detected
MCL Q2 2015 sample 2	MCGI-343020616	<10	Not detected
MCL Q2 2015 sample 3	MCGI-343020617	<10	Not detected
MCL Q2 2015 sample 4	MCGI-343020618	<10	Not detected
MCL Q2 2015 sample 5	MCGI-343020619	40	Not detected
MCL Q3 2015 sample 1	MCGI-394220915	<10	Not detected
MCL Q3 2015 sample 2	MCGI-394220915	<10	Not detected
MCL Q3 2015 sample 3	MCGI-394220915	<10	Not detected
MCL Q3 2015 sample 4	MCGI-394220915	<10	Not detected
MCL Q3 2015 sample 5	MCGI-394220915	<10	Not detected
1. MCL Q4 2015	MCGI-32010115	<10	Not detected
2. MCL Q4 2015	MCGI-32010115	<10	Not detected
3. MCL Q4 2015	MCGI-32010115	<10	Not detected
4. MCL Q4 2015	MCGI-32010115	<10	Not detected
5. MCL Q4 2015	MCGI-32010115	<10	Not detected

### **Biofilter Monitoring : Colormetric Indicator Tube Testing**

<b>Date</b>	<b>Test</b>	<b>ELV</b>	<b>S1</b>	<b>S2</b>
23.03.15	Ammonia	50mg/m <sup>3</sup>	Not detected	Not detected
23.03.15	Hydrogen Sulfide	5mg/m <sup>3</sup>	Not detected	Not detected
23.03.15	Total Mercaptans	5mg/m <sup>3</sup>	Not detected	Not detected
12.10.15	Ammonia	50mg/m <sup>3</sup>	Not detected	Not detected
12.10.15	Hydrogen Sulfide	5mg/m <sup>3</sup>	Not detected	Not detected
12.10.15	Total Mercaptans	5mg/m <sup>3</sup>	Not detected	Not detected

### **Lab Analysis of Biofiltermedia**

Date	% moisture	Ammonia (mg/kg as N)	pH	TVC's @ 22°C solid (no/g)	TVC's @ 37°C solid (no/g)
02.06.15	76.89	155.55	3.3	150000	47000
23.11.15	73.62	4132.5	6.4	192000000	16700000

### **Odour Monitoring**

Date	23.03.15	18.06.15	24.08.15	26.11.15
Average Inlet Odour Conc (OuE/m <sup>3</sup> )	27,026	23,168	21,451	18,388
Exhaust Odour Conc (OuE/m <sup>3</sup> )	2,134	1,976	1,830	1,059
Average Removal Efficiency %	92	91	91	92

### **Particulate Monitoring**

Date	Statutory 24 hr average conc.	PM10 (µg/m <sup>3</sup> )
23.03.15	50 µg/m <sup>3</sup> PM10	5
24.08.15	50 µg/m <sup>3</sup> PM10	6

### **Bioaerosol Monitoring**

Date: 23.03.15			
LOCATION ID	Average Asperillus fumigatus concentration (CFU m-3) 1	Average Mesophilic Bacteria concentration (CFU m-3) 1	Sample Count
Cappo 1	<3	<450	6
Cappo 2	<3	<618	6
Cappo 3	<3	257	6

**Dust Monitoring**

Sampling End Date	McGill Reference	Monitoring point	Lab Reference	Units	ELV	Result
12.03.15	MCL DM1 Q1-2015	DM1	0360/412/04	mg/m <sup>2</sup> /day	350	4.19
12.03.15	MCL DM2 Q1-2015	DM2	0360/412/05	mg/m <sup>2</sup> /day	350	89.64
12.03.15	MCL DM3 Q1-2015	DM3	0360/412/06	mg/m <sup>2</sup> /day	350	35.65
12.03.15	MCL DM4 Q1-2015	DM4	0360/412/07	mg/m <sup>2</sup> /day	350	61.86
29.05.15	MCL DM1 Q2-2015	DM1	360/413/12	mg/m <sup>2</sup> /day	350	235.38
29.05.15	MCL DM2 Q2-2015	DM2	360/413/13	mg/m <sup>2</sup> /day	350	50.85
29.05.15	MCL DM3 Q2-2015	DM3	360/413/14	mg/m <sup>2</sup> /day	350	122.15
29.05.15	MCL DM4 Q2-2015	DM4	360/413/15	mg/m <sup>2</sup> /day	350	31.45
02.09.15	MCL DM1 Q3-2015	DM1	0360/417/10	mg/m <sup>2</sup> /day	350	27.78
02.09.15	MCL DM2 Q3-2015	DM2	0360/417/11	mg/m <sup>2</sup> /day	350	34.6
02.09.15	MCL DM3 Q3-2015	DM3	0360/417/12	mg/m <sup>2</sup> /day	350	18.87
02.09.15	MCL DM4 Q3-2015	DM4	0360/417/13	mg/m <sup>2</sup> /day	350	26.74
07.12.15	MCL DM1 Q4-2015	DM1	0360/423/01	mg/m <sup>2</sup> /day	350	111.14
07.12.15	MCL DM2 Q4-2015	DM2	0360/423/02	mg/m <sup>2</sup> /day	350	144.69
07.12.15	MCL DM3 Q4-2015	DM3	0360/423/03	mg/m <sup>2</sup> /day	350	165.13
07.12.15	MCL DM4 Q4-2015	DM4	0360/423/04	mg/m <sup>2</sup> /day	350	108.52



**Groundwater monitoring**

	Units	GW1	GW2	GW3
Ammonia Nitrogen (as N)	mg/l	0.02	6.6	<0.02
Nitrate Nitrogen (as N)	mg/l	5	48.8	5.4
Conductivity	uS/cm	249	451	278
pH Value	pH unit	6.5	5.9	6.5
Chloride	mg/l	18.9	10.2	15.2
Total Nitrogen	mg/l	5.5	55.2	5.2
Total Coliforms	MPN/100ml	0	>60	0
Faecal Coliforms	MPN/100ml	3	>18	>18

Test Description	GW1		GW2		GW3	
	Result	Units	Result	Units	Result	Units
VOC	Y	ug/l	Y	ug/l	Y	ug/l
Dichlorodifluoromethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Chloromethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Chloroethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Bromomethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Trichlorofluoromethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,1-Dichloroethene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Dichloromethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,1-Dichloroethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
cis-1,2-Dichloroethene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2,2-Dichloropropane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Chloroform	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Bromochloromethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,1,1-Trichloroethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,1-Dichloropropene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,2-Dichloroethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Benzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,2-Dichloropropane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Trichloroethene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Bromodichloromethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Dibromomethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
cis-1,3-Dichloropropene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Toluene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
trans-1,3-Dichloropropene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,1,2-Trichloroethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Carbon Tetrachloride	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Vinyl Chloride	<0.5	ug/l	<0.5	ug/l	<0.5	ug/l
1,3-Dichloropropane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Tetrachloroethene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Dibromochloromethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,2-Dibromoethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Chlorobenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l

Test Description	GW1		GW2		GW3	
	Result	Units	Result	Units	Result	Units
1,1,1,2-Tetrachloroethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Ethyl Benzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
m&p-Xylene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
o-Xylene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Styrene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Bromoform	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
trans-1,2-Dichloroethene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Isopropylbenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,1,1,2-Tetrachloroethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,2,3-Trichloropropane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
n-Propylbenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Bromobenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2-Chlorotoluene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,3,5-Trimethylbenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
4-Chlorotoluene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
tert-Butylbenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,2,4-Trimethylbenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
sec-Butylbenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
p-Isopropyltoluene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,3-Dichlorobenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,4-Dichlorobenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
n-Butylbenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,2-Dichlorobenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,2-Dibromo-3-chloropropane	<2.0	ug/l	<2.0	ug/l	<2.0	ug/l
1,2,4-Trichlorobenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Hexachlorobutadiene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Naphthalene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,2,3-Trichlorobenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
MTBE	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Dibromofluoromethane	104.1	%Recovery	102.3	%Recovery	102.2	%Recovery
Toluene-d8	99.4	%Recovery	100.0	%Recovery	100.2	%Recovery
4-Bromofluorobenzene	94.6	%Recovery	95.9	%Recovery	95.4	%Recovery
SVOC	y	ug/l	y	ug/l	y	ug/l

Test Description	GW1		GW2		GW3	
	Result	Units	Result	Units	Result	Units
Phenol	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Bis(2-chloroethyl)ether	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2-Chlorophenol	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,3-Dichlorobenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,4-Dichlorobenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2-Methylphenol	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
3&4-Methylphenol	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Dibenzofuran	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,2-Dichlorobenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Bis(2-chloroisopropyl)ether	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
n-Nitrosodi-n-propylamine	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Hexachloroethane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Nitrobenzene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Isophorone	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2,4-Dimethylphenol	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2-Nitrophenol	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Bis(2-chloroethoxy)methane	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2,4-Dichlorophenol	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
1,2,4-Trichlorobenzene	Analyst Com	ug/l	Analyst Com	ug/l	Analyst Com	ug/l
Naphthalene	<2.0	ug/l	<2.0	ug/l	<2.0	ug/l
Hexachlorobutadiene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
4-Chloro-3-methylphenol	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2-Methylnaphthalene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2,4,6-Trichlorophenol	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2,4,5-Trichlorophenol	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2-Chloronaphthalene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Dimethylphthalate	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2,6-Dinitrotoluene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Acenaphthylene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Acenaphthene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
2,4-Dinitrotoluene	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
Diethylphthalate	<1.0	ug/l	<1.0	ug/l	<1.0	ug/l
4-Nitrophenol	<5.0	ug/l	<5.0	ug/l	<5.0	ug/l