Access Waste Recycling, Unit 28 JFK Industrial Estate, Nass Road, Dublin 12 T. (+353) 01.450 0830 F.(+353) 01.450 0835 E. info@accesswaste.ie W .www.accesswaste.ie

Annual Environmental Report 2010

for

Lawlor Brothers (Waste Disposal) Ltd. T/a Access Waste Recycling
Unit 28 JFK Industrial Estate, Naas Road, Dublin 12.

W0227-01

March 2011

Prepared By: Robert Kane

Checked By: Niall Lawlor

Contents

1.0 Introduction

Under Condition 11, Section 11.8 of our waste licence W0227-01, an Annual Environmental Report (AER) must be prepared by Lawlor Brothers (Waste Disposal) Ltd. (hereafter referred to as LBWD) and submitted to the EPA for their agreement.

This AER details the activities carried out at the facility at Unit 28, JFK Industrial Estate, Dublin 12, in the period January 1st 2010 to December 31st 2010.

2.0 Waste Activities

The LBWD facility is licenced to handle a maximum of 95,000 tonnes of waste per annum(tpa). The company is licenced to carry out the following activities on-site:

- Shred, crush, bale and repackage waste;
- Non-hazardous construction and demolition waste recovery including crushing, screening, sorting and blending;
- Store waste;
- Recover dry recyclables;
- Store waste electrical and electronic equipment (WEEE)

2.1 Waste Types

Commercial and Industrial (EWC codes 15 01, 20 01 and 20 03)

Both mixed and segregated non hazardous commercial and industrial waste is collected from commercial outlets throughout Dublin, Wicklow and Kildare regions. Commercial waste is delivered to the facility by third party hauliers and LBWD vehicles. Recyclable material is segregated where possible from the waste stream and the remaining residual waste is transferred to licensed landfills.

Construction and Demolition Waste (EWC 17 09 and 17 05)

Construction and demolition material arrives on-site in skips of varying sizes and comprises mixed construction and demolition wastes, soil and stone. Deliveries are made by third party hauliers and LBWD vehicles. The waste loads are inspected, segregated and recyclable materials are extracted from the waste for re-use or recycling prior to the transfer of residual materials to licensed landfill.

Household Waste (EWC 15 01, 20 01 and 20 03)

Household kerbside waste collections are offered throughout the Wicklow and South Dublin areas, where two wheelie bins are provided to the customer, one for mixed dry recyclables and one for residual waste. Dry recyclables accepted for collection are newspaper, magazines, clean steal or tin cans, aluminium drinks cans, clean tetrapak, plastic bottles and cardboard packaging. Dry recyclables are transferred directly to a third party facility for sorting. Skip hire is offered for larger, bulkier items.

2.2 Processes

Waste Sorting:
Mixed waste delivered on-site is tipped in the waste processing building. Waste is inspected and then it is first pre-sorted by two Fuchs 360 grabs, removing metals, bulky items etc. The rest of the waste is loaded into the waste processing machinery which consists of a trommel, wind shifters, magnetic separators and screens. The final stream

passes through a sorting shed where materials are manually sorted. The following waste streams are segregated;

- Ferrous and non-ferrous metals
- Soils/minerals (Fines)
- Concrete/bricks/stone
- Wood
- Light materials

The soils/minerals are further screened to separate it into size fractions. These segregated waste streams are transferred for further recycling process. The residual waste is transferred to licensed landfill.

3.0 Waste Quantities and Composition

3.1 Waste report

The facility is licensed to handle up to 95,000 tonnes of waste per annum. The quantities of material handled in the period 1st January 2010 to 31st December 2010 are presented in the Waste Quantities Table 3.1. AER/PRTR waste transfer data is included in Appendix A.

Table 3.1 Waste quantities handled in 2010

EWC CODE	WASTE TYPE	WASTE IN (Tonnes)	WASTE OUT (Tonnes)	DESTINATION	ACTIVITY
150101	Paper/Cardboard	97.280	62.880	Thorntons Recycling, Killeen Road, Dublin 10, W0044-02	Recycling
			72.340	Irish Packaging Recycling(Panda), Ballymount Road, Walkinstown, D12. WPR021/2	Recycling
150103	Wood Packaging	164.140			
150106	Mixed Packaging	896.000	18.460	Thorntons Recycling, Killeen Road, Dublin 10, W0044-02	Recycling
			2.460	Irish Packaging Recycling(Panda), Ballymount Road, Walkinstown, D12. WPR021/2	Recycling
160103	End of life Tyres	15.400	24.020	Crumbrubber, Mooretown, Dromiskin, Dundalk, Co.Louth. WP2007/01	Recycling
160505	Gas Bottles		5.400	Calor Gas c/o Eurohaul, Greenhills Road, Tallaght, D24	Re-use
			0.400	Air Products. Unit 950, Western Industrial Estate, Killeen Road,Dublin 12	Re-use
170107	Bricks and Concrete	100.700			
170201	C+D Wood	41.380			
170202	Glass	18.820	1.320	Glassco, Unit 4 Osberstown Ind. Park, Caragh Road, Naas, Co. Kildare. WP 247/2006	Recycling
170401	Copper		0.200	National Recycling, Station Road, Clondalkin, D22. WFP-DS-10-0005-01	Recycling
170402	Aluminium		2.020	National Recycling, Station Road, Clondalkin, D22. WFP-DS-10-0005-01	Recycling

170405	Iron and Steel	15.440	9.840	National Recycling, Station Road, Clondalkin, D22. WFP-DS-10-0005-01	Recycling
170504	Soil and Stone	1,151.220			
170904	Mixed C+D	21,191.830			
180104	Non-infectious HC	66.160			
191202	Ferrous Metal		328.300	Multimetals Recycling Ltd., Bollarney The Murrough,Wicklow, Co. Wicklow. WFP-WW-09-0014-01	Recycling
			1,114.560	National Recycling, Station Road, Clondalkin, D22. WFP-DS-10-0005-01	Recycling
191203	Non-ferrous metal		50.900	National Recycling, Station Road, Clondalkin, D22. WFP-DS-10-0005-01	Recycling
191204	Plastic and Rubber		0.620	Thorntons Recycling, Killeen Road, Dublin 10, W0044-02	Recycling
			13.220	Polymer Recovery Ltd, East Canal road, Portarlington Business Park, Portarlington, Co. Laois. WFP-LS-09-0007-01	Recycling
191207	Wood		3,046.520	Ballynagran Landfill, Coolbeg Cross, Co. WicklowW0165-01	Landfill Engineering
			231.960	Thorntons Recycling, Killeen Road, Dublin 10. W0044-02	Recycling
			87.380	Ray Gough,Private Land Owner, Suncroft ,Co. Kildare.	Re-use
			556.380	Knockharley Landfill, Kentstown, Co. Meath. W0146-01	Landfill Engineering
191209	Minerals		78.100	National Recycling, Station Road, Clondalkin, D22. WFP-DS-10-0005-01	Site Engineering
			1,279.160	Ballynagran Landfill, Coolbeg Cross, Co. Wicklow. W0165-01	Landfill

					Engineering
			2,700.980	Knockharley Landfill, Kentstown, Co. Meath. W0146-01	Landfill Engineering
			26.080	Glassco, Unit 4 Osberstown Ind. Park, Caragh Road, Naas, Co. Kildare. WP 247/2006	Engineering
			9,364.020	Roadstone Recycling, Belgard, Tallaght, D24. WPR 025/3	Recycling
			10,780.140	KTK Landfill, Brownstown, Kilcullen, Co. Kildare. W0081-03	Landfill Engineering
191212	Mixed dry general waste		3,617.500	Thorntons Recycling, Killeen Road, Dublin 10, W0044-02	Recycling
			20.780	Scotch Corner Landfill. Annyalla, Castleblaney, Co. Monaghan. W0020-01	Landfill
			2522.740	Ballynagran Landfill, Coolbeg Cross, Co. WicklowW0165-01	Landfill
			15.100	C&D Recycling. Tinakilly,Rathnew Co.Wicklow. WFP-WW-09-0009-02	Recycling
200101	Paper and Cardboard	1.300			
200123	Fridge Freezer	0.280	16.680	Rehab Recycle, Unit 77 Broomhill Road, Tallaght, Dublin 24. WFP-DS-10-0008-01	Recycling
			1.620	Electrical Waste Management Ltd. Jordanstown Drive, Greenogue Industrial Estate, Rathcoole Co. Dublin. WFP-DS-09-0012-01	Recycling
200133	Batteries		0.500	Enva Ireland. Clonminam Ind. Est., Portlaoise, Co. Laois. W0184-01	
200135	WEEE	6.220	14.200	Rehab Recycle, Unit 77 Broomhill Road, Tallaght, Dublin 24. WFP-DS-10-0008-01	Recycling
200139	Plastics		0.620	Thorntons Recycling, Killeen Road, Dublin 10, W0044-02	Recycling
200201	Green Park Waste	111.100			

200301	Mixed Municipal	4242.910	91.680	Thorntons Recycling, Killeen Road, Dublin 10, W0044-02	Landfill
			637.340	Ballynagran Landfill, Coolbeg Cross, Co. WicklowW0165-01	Landfill
200303	Street Cleaning Residue	142.840			
200307	Bulky Waste	10036.270			
	TOTAL	38,299.29	36,785.320	% of total	
	TOTAL DISPOSED		6,895.140	18.7	
	TOTAL RECYCLED/RE-USED		29,890.180	81.3	

3.2 Discussion

In 2009, there was a discrepancy between the quantities of waste accepted at the facility and that transferred off-site. This discrepancy was reduced in 2010 after measures were taken, although an insignificant discrepancy (<5%) of approximately 1,500 tonnes still remains.

This can be most likely explained by

- the inclusion of driver and passenger weights in third party loads
- high moisture content in some wastes being lost when on site
- inaccuracies in weighbridge on small loads coming into facility are more significant than those on bulk loads leaving the facility

A decrease in the percentage of waste going to landfill can also be noted compared to 2009. This decrease is due to the redirection of collected kerbside waste away from our facility to a third party facility for processing. The remaining waste going to landfill from our facility is residual waste from the processing of construction/demolition, industrial and bulky household waste.

4.0 Environmental Monitoring and Emission data

Monitoring of surface water, foul water and noise was carried out in accordance with criteria set out in W0227-01 during 2010. Ambient dust monitoring was also carried out during three intervals during 2010.
Original laboratory results for water, dust and noise are presented in Appendices B, C and D respectively.

Monitoring locations for water sampling, dust monitoring and noise monitoring locations are provided in Appendix E.

4.1 Surface and Foul Water Monitoring

4.1.1 Description of monitoring

Quarterly samples were taken from sampling points FW9 and SW1 and transferred to Alcontrol Laboratories, Blanchardstown, Co. Dublin for analysis. One sample was taken at FW9 – the foul or sewer emissions point, and another sample was taken at SW1 – the storm water emissions point. The location of these sampling points is contained in Appendix E.

The FW9 water quality results have been compared with Emission Limit Values (ELV) as set out in Schedule B3 'Emissions to Sewer' and both FW9 and SW1 have been compared with the Environmental Quality Standard (EQS) values for surface water as outlined in the EPA Document *'Environmental Quality and Environmental Quality Standards: The Aquatic Environment – A Discussion Document'* (1996b).

Table 4.1 Sampling Points

Sample Point	Location
SW1	Northwest corner of site, immediately before the line joins South Dublin County Council storm water drain running across the north end of the site.
FW1	North end of the site, before the foul sewer connects with the South Dublin County Council foul water line.

As required by Schedule C.2.3, samples from SW1 were taken weekly, if possible to do so given flow rates, and monitored for pH, conductivity and suspended solids. In cases of unusual levels, the site was inspected for possible sources and the yard swept by the roadsweeper to remove any excess mud/dust.

4.1.2 Results

Results for quarterly water monitoring are presented in Table 4.2

Parameter	Units	W0227-01 ELV*	EQS Values^	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
				FW9	SW1	FW9	SW1	FW9	SW1	FW9	SW1
Temperature	℃	42		-	-	-	-	-	-	-	-
pH	pH units	6-10		7.1	6.7	7.2	7.3	7.2	7.5	7.3	6.6
Conductivity	µS/cm		1000	1490	330	1220	930	520	1150	940	1080
COD	mg/L	3000		824	28.6	216	107	632	136	41.2	294
BOD	mg/L	1000		157	N/A	38.5	N/A	229	N/A	3.33	N/A
SS	mg/L	1000		94	17	25	151	113	135	4.55	341
Mineral Oils	mg/L	10	0.01	5.52	31.2	0.435	0.673	2.23	<1	0.417	0.871
Phosphates	mg/L	100		0.133	N/A	0.148	N/A	<0.05	N/A	0.078	N/A
Detergents as MBAS	mg/L	100		<0.05	N/A	0.741	N/A	1.09	N/A	0.344	N/A
Oils, Fats Grease	mg/L	100		4	N/A	9.49	N/A	3.91	N/A	3.08	N/A
Total Ammonia as NH3*	mg/L		0.02	N/A	0.733	N/A	0.505	N/A	0.778	N/A	0.232

* Emmission Limit Values for foul water effluent as stipulated in EPA waste licence W0227-01

^ Environmental Quality Standard values for surface water as outlined in the EPA document "Environmental Quality and Environmental Quality Standards: The Aquatic Environment - A Discussion Document"

Results:
During the year 2010, there were no breaches of licence ELV from quarterly samples from foul water discharge.

On five occasions, weekly conductivity measurements of storm water samples were measured above EQS value. Subsequent to these readings, the yard was thoroughly swept with the road sweeper to remove excess dust or mud. Readings returned to normal levels.

4.2 Dust monitoring

4.2.1 Description
Under licence W0227-01, Lawlor Brothers (Waste Disposal) Ltd. are required to carry out dust monitoring during three intervals during each calendar year. Dust monitoring was carried out at three locations around the site as shown in Appendix E.

Dust jars were exposed for 30 days and subsequently analysed to determine total dust deposition per day per square meter.

Testing was carried out by LBWDL with samples sent to Alcontrol Laboratories, 18a Rosemount Business Park, Ballycoolin, Dublin 11.

4.2.2 Sampling periods
Dust monitoring was carried initially during the following periods:

- 14th June to 14th July
- 18th August to 17th September
- 16th November to 16th December

The dust jar at point DS1 shattered over the last monitoring period due to the extremely cold weather. This jar was replaced 17th December and taken down 17th January.

4.2.3 Results

All dust results are presented below in Table 4.3.

Monitoring Period	DS1	DS2	DS3
30 Days	mg/m2/d	mg/m2/d	mg/m2/d
14/06/2010	231	51.2	108
14/07/2010			

Monitoring Period	DS1	DS2	DS3
30 Days	mg/m2/d	mg/m2/d	mg/m2/d
18/08/2010	737	46	86
17/09/2010			

Monitoring Period	DS1	DS2	DS3
30 Days	mg/m2/d	mg/m2/d	mg/m2/d
16/11/2010	198*	56.7	46.7
16/12/2010			

*DS1 had shattered in position due to cold conditions. Replacement jar posted on 17/12/10

4.2.4 Discussion

As can be seen from the results, high levels of dust were measured at point D1 during the August/September monitoring period. This period saw particularly high winds. This breach of emission limit value was reported to the EPA as an incident. All other results were below the emission limit value of 350mg/m^2/day

Particular attention is being paid to dust levels in 2011, with plans to effectively reduce the level of dust generation at the point of waste tipping with improved dust suppression systems on the processing building doors.

It is envisaged that all dust deposition levels will be reduced to below emission limit values in 2011.

4.3 Noise Monitoring

4.3.1 Details

Noise monitoring was carried out to comply with Condition 8 and Schedule D of waste licence W0227-01. Day-time surveys were carried out on behalf of LBWDL by City Analysts Ltd. of Pigeon House Road, Ringsend, Dublin 4, over 9th/10th December, 2010. A full copy of their report can be found in Appendix D.

Noise monitoring was carried out at a single location, designated N4, on the nearby Killeen Road, as stipulated in licence W0227-01 and described in Table 4.4.

SITE ID	DESCRIPTION	CLASSIFICATION
N4	Outside a number of bungalows on the Killeen Road.	Private Residence

4.3.2 Results

Noise monitoring results are given in Table 4.5

Location Reference	Sampling Interval	Duration (minutes)	L_{Aeq}	L_{A90}	L_{A10}	Comments
N4 (NSL)	DAY					
	15:17 – 15:47	30	71	68	73	Road Traffic continuous. No audible impact from the site.
N4 (NSL)	NIGHT					
	23:22 – 23:52	30	66	52	69	Road Traffic continuous. Site not in operation.

4.3.3 Summary

Overall it can be concluded that the recorded noise levels indicate a breach of the limits as set-out in the waste permit conditions. However, the site does not exceed limits due to on-site activities but rather as a result of the existing noise climate at the sensitive location. It must also be noted that the site is located within a busy industrial estate and the existing ambient noise climate is already above the specified threshold limits.
It was the analysts opinion that the site is compliant with the limit values as set out in Waste Licence No. W0227-01

5.0 Resources and Energy Consumption

Details of major resources and products used in 2010 are detailed below in Table 5.1:

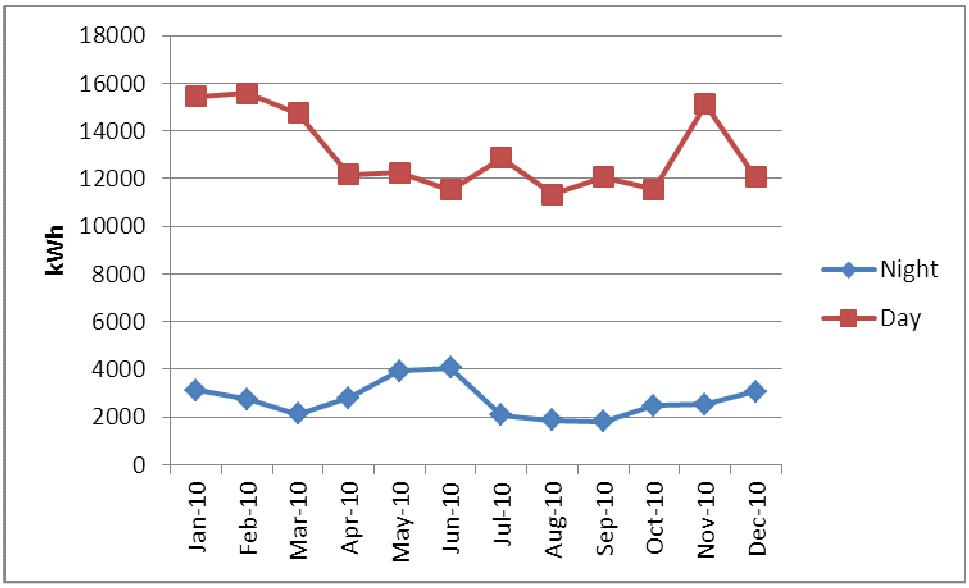
Resources:

Resource	Amount consumed in 2009 (Litre)	Amount consumed in 2010 (Litre)
Green Diesel	71,359	70,508
Red Diesel	280,944	258,400
Kerosene	4793	7396

A decrease in fuel usage has been achieved in comparison with 2009. This is partly due to a reduction in our fleet numbers and the amount of waste collected, attributable to a down-turn in business. However changes in on-site processing procedures allowed for a reduction in on-site machinery and thus lower levels of green diesel usage.
A large increase in kerosene usage was seen due to the very cold weather in February and over the winter period.

Electricity:
The total electricity used in 2010 amounted to 189,396 kWh. This figure shows a significant reduction in electricity usage compared to 2009 (207,145 kWh). This reduction is due to reduced operating hours of the waste processing plant, in turn due to a reduction in the amount of waste accepted on-site.

Figure 1. Day and night electricity usage January to December, 2010



In 2010, LBWDL used the electricity supply company Airtricity as their supplier due to the level of the renewable energy sources used by this company.

6.0 2010 and 2011 Environmental Objectives and targets and Environmental Management Plans

The schedule of Environmental Objectives and Targets for the year 2010 is presented below in Table 6.1

The report on the Environmental Management Programme for the year 2010 is presented afterwards.

Table 6.1 - Schedule of Environmental Objectives and Targets for the year 2010

Objectives	No.	Targets	Responsibility	Timescale
Comply with WEEE Regulations	1	Cover in fridge storage area	Brian King	Continuous
To improve waste processing rates and reduction to landfill	2	To develop building 1 to increase performance and variety of waste streams	Niall Lawlor, Michael Lawlor, Gemma Crennan	2009-2011
	3	Reduce waste to landfill. Investigate alternative destinations for waste	Niall Lawlor/John Crennan	Continuous
To reduce environmental impact	4	Install further dust reduction measures surrounding woodchipping	Brian King	May-2010
	5	Increase litter netting around boundary	Brian King	May-2010
	6	Prioritise use of vehicles with higher fuel efficiency	Michael Lawlor/Robert Kane	June-2010
	7	Install Spill-kits on all vehicle	John Crennan	May-2010
Improve efficiency of raw materials	8	Reduction in water usage - Develop rainwater collection system	Brian King	Dec-2010
	9	Investigate installing own road diesel tank on-site	Michael Lawlor	June-2010
Improve energy efficiency	10	Investigate further energy reduction measures in office building	Robert Kane	July-2010

1. Cover Fridge Storage Area

Storage area for WEEE is to be covered in line with storage requirements of WEEE regulations. Brian King will be responsible for implementing this. The target date for this is June 2010.

Required Steps:

- Collect/Source materials for construction
- Construct cover

Progress at end of 2010:

- Construction complete.

2. Development of Building 1

The development of building 1 will be the responsibility of Niall Lawlor, Michael Lawlor and Gemma Crennan.
Building 1 will be developed over the next few years to improve the efficiency and capacity of the company including expanding the variety of waste streams to be collected and recovered on-site. Through this development, increased levels of waste can be diverted from landfill. It is hoped that this development could be completed by end of 2011.

Required Steps: -

Progress at end of 2010: -

3. Alternative Destinations for Waste to Reduce Waste to Landfill

In order to reduce the level of waste being sent to landfill, alternative destinations including transfer stations will be investigated. Niall Lawlor and John Crennan will be responsible for this initiative.

Required Steps:

- Investigate other possible waste destination
- Determine gate fees and economic feasibility

Progress at end of 2010:

- Mixed municipal waste is currently being tipped in Thorntons Recycling rather than going direct to landfill. Thorntons are also taking windshifter residual material.

4. Further Dust Reduction Measures at Woodchip

Further dust suppression measures will be investigated and implemented around wood chipping activities. Brian King will be responsible for this activity.

Required Steps:

- Investigate/Design suitable dust suppression options.
- Collect/Source materials for construction where applicable
- Construct system

Progress at end of 2010:

- Yard sprinklers in place.

5. Increase Litter Netting

Litter netting around the boundary will be repaired and further netting will be installed along the south wall of the site. This will be the responsibility of Brian King.

Required Steps:

- Repair current litter netting
- Collect/Source materials for construction
- Construct barrier

Progress at end of 2010:

- Progress hindered by lack of man-power and funding

6. Prioritise More Fuel Efficient Vehicles

Based on fuel efficiencies from 2009, vehicles with lower fuel consumption will be prioritised where possible. Robert and Michael will investigate this.

Required Steps:

- Complete fuel efficiency calculations for 2009
- Determine the possibility of switching larger workloads to more fuel efficient vehicles

Progress at end of 2010:

- Fleet has been reduced and so there is no spare capacity to allow prioritization
- Maintaining fuel records for individual vehicles proved too time-consuming without electronic records being available from fuel card suppliers.

7. Install Spill-kits on Vehicles

Spill-kits will be provided to all active vehicles. Robert will be responsible for implementing this.

Required Steps:

- Purchase kits
- Organise reporting procedure for incidents

Progress at end of 2010:

- Spill kits provided in each vehicle. Kits will need to be checked regularly.

8. Develop Rainwater Collection System

Installation of a rainwater collection system will be investigated for Building 3. Resources permitting, this system can be designed and installed by end of 2010. This system will be the responsibility of Brian King.

Required Steps:

- Investigate/Design suitable collection system.
- Collect/Source materials for construction where applicable.
- Construct system

Progress at end of 2010:

- Suitable storage tanks have been collected. No system has been built yet due to lack of manpower.

9. Investigate Installing Own Diesel Tank

The possibility of storing a diesel tank for collection vehicles onsite will be investigated. This would reduce diesel costs, and additives may be investigated to improve fuel efficiency.

Required Steps:

- Investigate possible source of tank.
- Investigate cost/benefit

Progress at end of 2010:

- Tank yet to be delivered and installed.
- Due for delivery March 2011

10. Investigate Further Energy Saving Measures for Office

An energy awareness campaign will be introduced in the office to highlight energy saving opportunities. Robert will be responsible for this initiative.

Required Steps:

- Identify possible sources of energy saving
- Introduce energy awareness education
- Measure, if possible, potential energy savings

Progress at end of 2010:

- Target will be carried over to 2011 due to staff time constraints.

The schedule of Environmental Objectives and Targets for the year 2011 is presented below in Table 6.2

Objectives	No.	Targets	Responsibility	Timescale
Comply with Emergency procedure	1	Repair fire alarm	Brian King	March 2011
To improve waste processing rates and reduction to landfill	2	To develop building 1 to increase performance and variety of waste streams	Niall Lawlor, Michael Lawlor, Gemma Crennan	Continuous
	3	Reduce waste to landfill. Investigate alternative MBT destinations for waste	Niall Lawlor/John Crennan	Continuous
	4	Investigate soils and wood chip testing for use as topsoil and fuel sources respectively	Robert Kane, John Crennan	July 2011
To reduce environmental impact	5	Install further dust reduction measures surrounding building 3 entrances	Brian King	August 2011
	6	Repair and increase litter netting around boundary	Brian King	June/December 2011
	7	Repair current dust suppression	Michael Lawlor/Robert Kane	May 2011
Improve efficiency of raw materials	8	Reduction in water usage - Develop rainwater collection system	Brian King	Dec-2011
	9	Install own road diesel tank on-site	Michael Lawlor	June-2011
Improve energy efficiency	10	Investigate further energy reduction measures in office building	Robert Kane	July-2011
Improve EMS	11	Change Internal audit structure and remove excess documentation	Robert Kane	July-2011

7.0 Incidents and Complaints

In the license period of 2010, there was one incident reported to the EPA which is summarised below;

Incidents:

- 16/11/10 – Dust monitoring returned results which exceeded licence limits for the periods 18/07/10 to 17/09/10. EPA were notified by fax and post.

Complaints:

There were no complaints of an environmental nature made against the facility during 2010. It is hoped to maintain this record throughout 2011.

8.0 Management and Staffing Structure

The current management structure at LBWDL is detailed below in Figure 2 and Table 8.1.

Figure 2. Management structure of Lawlor Brothers (Waste Disposal) Ltd.

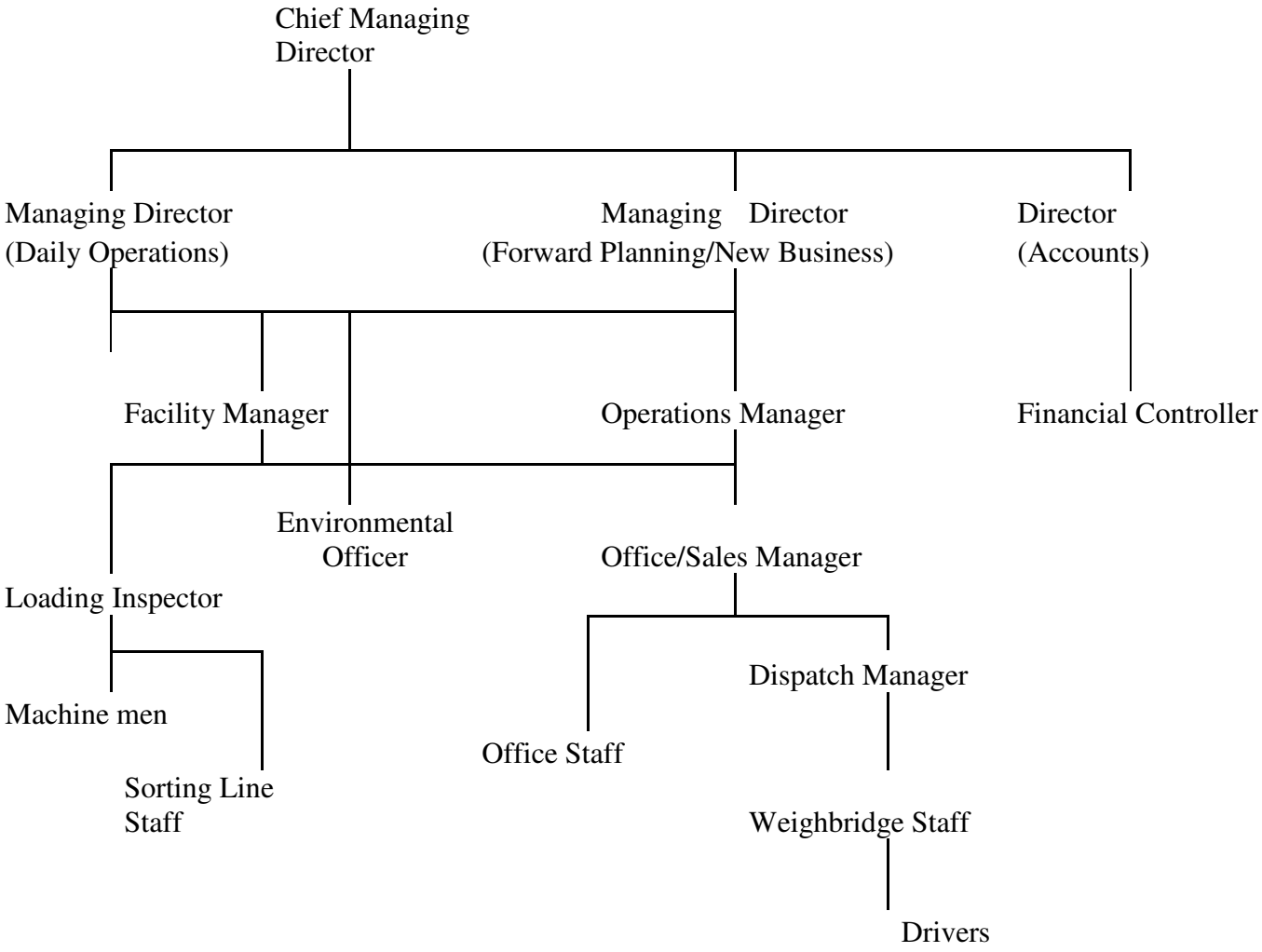


Table 8.1. Management Personnel at LBWDL.

Name	Position	Responsibilities	Experience	Alternative Contact
Michael Lawlor Snr.	Managing Director	Consultant	42 Years Waste Management	Francis Lawlor
Francis Lawlor	Director	Consultant	42 Years Waste Management	Michael Lawlor Snr.
Michael Lawlor Jnr.	General Manager	Overall Site Management, Drivers, Radios, Staff, Weighbridge	21 Years Waste Management, National Certificate of Competence in Road Haulage	Niall Lawlor
Niall Lawlor	New Business Manager	Overall Site Management, New Accounts, New Business, IT infrastructure	17 Years Waste Management, FAS Waste Management Certificate	Michael Lawlor Jnr.
Gemma Lawlor-Crennan	Admin Manager	Administration, Accounts Management	11 Years Waste Management, FAS Waste Management Certificate	Renata Zenevic
John Crennan	Operations Manager	Yard Staff, Machinery, Picking Line, Domestic Services	12 Years Waste Management	Brian King
Brian King	Site Manager	Ward Staff, Machinery, Picking Line, Site Infrastructure	18 Years Waste Management, FAS Waste Management Certificate, Health and Safety Certificate	Piotr Szkola
Andrius Staponkus	Weighbridge Operator	Weighbridge, Weight Records		Noel Hendrick
Robert Kane	Environmental Officer	Environmental records, EPA and Local authority liaising and compliance	3 Years Waste Management, BSc Environmental Science and Health	Niall Lawlor
Hugh Hannigan	Financial Controller	Payroll, Yearly Accounts	4 years audit practice with PKF O'Connor, Leady and Holmes Accountants	Gemma Lawlor

9.0 Financial Provision

As demonstrated by the annual turnover and profits for the company for the last three years, and given the extensive assets owned by the company, LBWDL is in very healthy financial situation, and would be capable of meeting any possible environmental liabilities. Given the extensive environmental protection measures in place on-site, and the non-hazardous nature of the waste processed on site, the extent of any possible environmental impact, and accompanying liability, is envisaged as being quite low.

The company insurance policy, covers the company for environmental/pollution liability of up to 6.5 million euro in respect of any one accident/any one period.

In the event of closure of the facility, the CRAMP for the facility will be followed and details of the financial provisions are contained within.

10.0 Program for Public Information

All information and correspondence supplied to the EPA (other than commercially sensitive information) and received from the EPA, is available to the public to view at the facility. This includes a copy of the waste licence, collection permits, all reports, monitoring results and interpretations required by the licence and other correspondence between the EPA and the facility. Copies of our waste licence and collection permits are contained on our website. Any member of the pubic may view the information on-site, by appointment, between the hours of 10.00 and 16.00 at the facility. A copy of this AER will also be available in the foyer of our administration building.

11.0 Environmental Protection Measures & CRAMP review

Environmental Protection Measures

Those environmental protection measures stipulated in the licence and as described in the site environmental impact statement continue to be carried out and implemented. These measures address the potential environmental impacts to air, water and ground media. Staff on-site are vigilant in identifying potential sources of environmental pollution and any issues raised will be addressed.

CRAMP Review

The CRAMP for the facility was drafted by environmental consultants White Young Green. The CRAMP was issued in March 2008 and was not reviewed during 2010. The plan at this time does not require updating. The plan will be reviewed during 2011.

12.0 Review of Nuisance Controls

No changes to nuisance controls were deemed to be required during 2010. LBWDL use a third party contractor for maintenance of rodent control measures. As part of daily inspections the facility is inspected for evidence of nuisances. If present these will be dealt within immediately. In the event of nuisances regularly occurring, control measures will be re-evaluated.

Appendix A

Environmental Protection Agency

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.11

REFERENCE YEAR	2010

1. FACILITY IDENTIFICATION

Parent Company Name	Lawlor Brothers Waste Disposal Ltd t/a Access Skip Hire
Facility Name	Lawlor Brothers Waste Disposal Ltd t/a Access Skip Hire
PRTR Identification Number	W0227
Licence Number	W0227-01

Waste or IPPC Classes of Activity

No.	class_name
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
Address 1	Unit 28
Address 2	John F Kennedy Road
Address 3	JFK Industrial Estate, Naas Road
Address 4	Dublin 12
Country	Ireland
Coordinates of Location	-6.35672 53.3273
River Basin District	IEEA
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Robert Kane
AER Returns Contact Email Address	environmental@accesswaste.ie
AER Returns Contact Position	Environmental Officer
AER Returns Contact Telephone Number	014277709
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	014500835
Production Volume	0.0
Production Volume Units	

Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General
5(c) 50.1	Installations for the disposal of non-hazardous waste General

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	No
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Please enter all quantities on this sheet in Tonnes

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	15 01 01	No	62.88	paper and cardboard packaging	R12	M	Weighed	Onsite in Ireland	Thorntons Recycling,W0044-02	Killeen Road,-,Dublin 10,Dublin 10,Ireland		
Within the Country	15 01 01	No	72.34	paper and cardboard packaging	R12	M	Weighed	Onsite in Ireland	Irish Packaging Recycling(Panda),WPR021/1	Ballymount Road Walkinstown ,-,Dublin 12,D12,Ireland		
Within the Country	15 01 06	No	18.46	mixed packaging	R12	M	Weighed	Onsite in Ireland	Thorntons Recycling,W0044-02	Killeen Road,-,Dublin 10,Dublin 10,Ireland		
Within the Country	15 01 06	No	2.46	mixed packaging	R12	M	Weighed	Onsite in Ireland	Irish Packaging Recycling(Panda),WPR021/1	Ballymount Road Walkinstown ,-,Dublin 12,D12,Ireland		
Within the Country	16 01 03	No	24.02	end-of-life tyres	R5	M	Weighed	Onsite in Ireland	Crumbrubber,WFP-LH-10-0005-01	Mooretown Dromiskin,-,Dundalk Co.Louth,-,Ireland		
Within the Country	16 05 05	No	5.4	gases in pressure containers other than those mentioned in 16 05 04	R13	M	Weighed	Onsite in Ireland	Calor Gas c/o Eurohaul,N/A	Greenhills Road ,-,Tallaght Dublin 24,D24,Ireland		
Within the Country	16 05 05	No	0.4	gases in pressure containers other than those mentioned in 16 05 04	R13	M	Weighed	Onsite in Ireland	Air Products,N/A	Western Industrial Estate Killeen Road,Unit 950 ,Dublin 12,D12,Ireland		
Within the Country	17 02 02	No	1.32	glass	R5	M	Weighed	Onsite in Ireland	Glassco,WFP-KE-08-0357-01	Osberstown Ind. Park Caragh Road,Unit 4 ,Naas Co. Kildare,-,Ireland		
Within the Country	17 04 01	No	0.2	copper, bronze, brass	R4	M	Weighed	Onsite in Ireland	National Recycling,WFP-DS-10-0005-01	Station Road ,-,Clondalkin Dublin22,D22,Ireland		
Within the Country	17 04 02	No	2.02	aluminium	R4	M	Weighed	Onsite in Ireland	National Recycling,WFP-DS-10-0005-01	Station Road ,-,Clondalkin Dublin22,D22,Ireland		
Within the Country	17 04 05	No	9.84	iron and steel	R4	M	Weighed	Onsite in Ireland	National Recycling,WFP-DS-10-0005-01	Station Road ,-,Clondalkin Dublin22,D22,Ireland		
Within the Country	17 09 04	No	70.9	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R5	M	Weighed	Onsite in Ireland	Thorntons Recycling,W0044-02	Killeen Road,-,Dublin 10,Dublin 10,Ireland		
Within the Country	19 12 02	No	1114.56	ferrous metal	R4	M	Weighed	Onsite in Ireland	National Recycling,WFP-DS-10-0005-01	Station Road ,-,Clondalkin Dublin22,D22,Ireland		
Within the Country	19 12 02	No	328.3	ferrous metal	R4	M	Weighed	Onsite in Ireland	Multimetals,WFP-WW-09-0014-01	Bollarney The Murrough,-,Wicklow Co. Wicklow,-,Ireland		
Within the Country	19 12 03	No	50.9	non-ferrous metal	R4	M	Weighed	Onsite in Ireland	National Recycling,WFP-DS-10-0005-01	Station Road ,-,Clondalkin Dublin22,D22,Ireland		
Within the Country	19 12 04	No	13.22	plastic and rubber	R12	M	Weighed	Onsite in Ireland	Polymer Recovery Ltd,WFP-LS-09-0007-01	East Canal road Portarlington Business Park,-,Portarlington Co. Laois,-,Ireland		
Within the Country	19 12 04	No	0.62	plastic and rubber	R12	M	Weighed	Onsite in Ireland	Thorntons Recycling,W0044-02	Killeen Road,-,Dublin 10,Dublin 10,Ireland		
Within the Country	19 12 07	No	231.96	wood other than that mentioned in 19 12 06	R12	M	Weighed	Onsite in Ireland	Thorntons Recycling,W0044-02	Killeen Road,-,Dublin 10,Dublin 10,Ireland		
Within the Country	19 12 07	No	3046.52	wood other than that mentioned in 19 12 06	D1	M	Weighed	Onsite in Ireland	Ballynagran Landfill,W0165-01	Ballynagran Coolbeg Cross,-,Co. Wicklow,-,Ireland		
Within the Country	19 12 07	No	87.38	wood other than that mentioned in 19 12 06	D2	M	Weighed	Onsite in Ireland	Ray Gough,Private Land Owner	Suncroft ,-,Co. Kildare,-,Ireland		
Within the Country	19 12 09	No	9364.02	minerals (for example sand, stones)	R5	M	Weighed	Onsite in Ireland	Roadstone Recycling,WPR025-3	Belgard,-,Tallaght Dublin 24,D24,Ireland		
Within the Country	19 12 09	No	78.1	minerals (for example sand, stones)	R13	M	Weighed	Onsite in Ireland	National Recycling,WFP-DS-10-0005-01	Station Road ,-,Clondalkin Dublin22,D22,Ireland		
Within the Country	19 12 09	No	1279.16	minerals (for example sand, stones)	D1	M	Weighed	Onsite in Ireland	Ballynagran Landfill,W0165-01	Ballynagran Coolbeg Cross,-,Co. Wicklow,-,Ireland		
Within the Country	19 12 09	No	26.08	minerals (for example sand, stones)	R13	M	Weighed	Onsite in Ireland	Glassco,WFP-KE-08-0357-01	Osberstown Ind. Park Caragh Road,Unit 4 ,Naas Co. Kildare,-,Ireland		
Within the Country	19 12 12	No	2522.74	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighed	Onsite in Ireland	Ballynagran Landfill,W0165-01	Ballynagran Coolbeg Cross,-,Co. Wicklow,-,Ireland		

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	19 12 12	No	3617.5	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R12	M	Weighed	Onsite in Ireland	Thorntons Recycling,W0044-02	Killeen Road,-,Dublin 10,Dublin 10,Ireland		
Within the Country	19 12 12	No	20.78	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighed	Onsite in Ireland	Scotch Corner Landfill,W0020-01	Annyalla,-,Castleblaney Co. Monaghan,-,Ireland		
Within the Country	19 12 12	No	15.1	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R12	M	Weighed	Onsite in Ireland	C&D Recycling,WFP-WW-09-0009-02	Tinakilly,-,Rathnew Co. Wicklow,-,Ireland		
Within the Country	20 01 23	Yes	16.68	discarded equipment containing chlorofluorocarbons	R4	M	Weighed	Onsite in Ireland	Rehab Recycling,WFP-DS-10-0008-01	Broomhill Road,Unit 77,Tallaght Dublin 24,D24,Ireland	Rehab Recycling,WFP-DS-10-0008-01,Broomhill Road,Unit 77,Tallaght Dublin 24,D24,Ireland	Broomhill Road,Unit 77,Tallaght Dublin 24,D24,Ireland
Within the Country	20 01 23	Yes	1.62	discarded equipment containing chlorofluorocarbons	R4	M	Weighed	Onsite in Ireland	Electrical Waste Management Ltd.,WFP-DS-09-0012-01	Jordanstown Drive Greenogue Industrial Estate,-,Rathcoole Co. Dublin,-,Ireland	Electrical Waste Management Ltd.,WFP-DS-09-0012-01,Jordanstown Drive Greenogue Industrial Estate,.,Rathcoole Co. Dublin,.,Ireland	Jordanstown Drive Greenogue Industrial Estate,.,Rathcoole Co. Dublin,.,Ireland
Within the Country	20 01 33	Yes	0.5	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries	R4	M	Weighed	Onsite in Ireland	Enva Ireland,W0184-01	Clonminam Ind. Est.,-,Portlaoise Co. Laois,-,Ireland	Enva Ireland,W0184-01,Clonminam Ind. Est.,.,Portlaoise Co. Laois,.,Ireland	Clonminam Ind. Est.,.,Portlaoise Co. Laois,.,Ireland
Within the Country	20 01 36	No	14.2	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R4	M	Weighed	Onsite in Ireland	Rehab Recycling,WFP-DS-10-0008-01	Broomhill Road,Unit 77,Tallaght Dublin 24,D24,Ireland		
Within the Country	20 01 39	No	0.62	plastics	R12	M	Weighed	Onsite in Ireland	Thorntons Recycling,W0044-02	Killeen Road,-,Dublin 10,Dublin 10,Ireland		
Within the Country	20 03 01	No	637.34	mixed municipal waste	D1	M	Weighed	Onsite in Ireland	Ballynagran Landfill,W0165-01	Ballynagran Coolbeg Cross,-,Co. Wicklow,-,Ireland		
Within the Country	20 03 01	No	81.68	mixed municipal waste	R12	M	Weighed	Onsite in Ireland	Thorntons Recycling,W0044-02	Killeen Road,-,Dublin 10,Dublin 10,Ireland		
Within the Country	19 12 07	No	556.38	wood other than that mentioned in 19 12 06	D1	M	Weighed	Onsite in Ireland	Knockharley Landfill,W0146-01	Kentstown,-,Co. Meath,-,Ireland		
Within the Country	19 12 09	No	2700.98	minerals (for example sand, stones)	D1	M	Weighed	Onsite in Ireland	Knockharley Landfill,W0146-01	Kentstown,-,Co. Meath,-,Ireland		
Within the Country	19 12 09	No	10708.14	minerals (for example sand, stones)	R12	M	Weighed	Onsite in Ireland	KTK Landfill,W0081-03	Brownstown,.,Kilcullen Co. Kildare,.,Ireland		

* Select a row by double-clicking the Description of Waste then click the delete button

Appendix B

Validated

ALcontrol Laboratories Analytical Services

SDG:	100325-130	**Customer:**	Access Waste Recycling
Job:	D_ACCESSWR_DUB-5	**Attention:**	Robert Kane
Client Reference:	QUATERLY	**Order No.:**	
Location:	QUATERLY	**Report No:**	79217

Results Legend	
#	ISO17025 accredited.
M	mCERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.

Component	LOD/Units	Method	Customer Sample Ref.	FW1	SW1 18/03/-10	SW1 23/03/-10
			Depth (m)			
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)
			Date Sampled	25/03/2010	18/03/2010	23/03/2010
			Date Received	25/03/2010	25/03/2010	25/03/2010
			SDG Ref	100325-130	100325-130	100325-130
			Lab Sample No.(s)	1291602	1291623	1291624
Suspended solids, Total	<2 mg/l	TM022		94 #	61 #	17 #
BOD, unfiltered	<1 mg/l O	TM045		157 #		
Ammoniacal Nitrogen as N	<0.2 mg/l as N	TM099				0.733 #
COD, unfiltered	7 mg/l	TM107		824 #		28.6 #
Mineral oil >C10 C40 (aq)	<10 µg/l	TM172		5520		31200
Phosphate (ortho) as P	<0.03 mg/l	TM184		0.133 #		
TPH / Oil & Greases	<1 mg/l	TM235		40.8 #		
Surfactants, Anionic (MBAS)	<0.05 mg/l	TM249		<0.05		

Validated

ALcontrol Laboratories Analytical Services

SDG:	100702-93	**Customer:**	Access Waste Recycling
Job:	D_ACCESSWR_DUB-7	**Attention:**	Robert Kane
Client Reference:	QTR 2-2010	**Order No.:**	
Location:	QTR 2-2010	**Report No:**	89951

Results Legend	
#	ISO17025 accredited.
M	mCERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.

Component	LOD/Units	Method	Customer Sample Ref.	FW9	SW1
			Depth (m)		
			Sample Type	Water(GW/SW)	Water(GW/SW)
			Date Sampled	02/07/2010	01/07/2010
			Date Received	02/07/2010	02/07/2010
			SDG Ref	100702-93	100702-93
			Lab Sample No.(s)	1773352	1773348
Suspended solids, Total	<2 mg/l	TM022		26 #	151 #
BOD, unfiltered	<1 mg/l	TM045		38.5 #	
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099			0.505 #
COD, unfiltered	<7 mg/l	TM107		216 #	107 #
Mineral oil >C10 C40 (aq)	<10 µg/l	TM172		435	673
Phosphate (ortho) as P	<0.03 mg/l	TM184		0.148 #	
TPH / Oil & Greases	<1 mg/l	TM235		9.49 #	
Surfactants, Anionic (MBAS)	<0.05 mg/l	TM249		0.741	

Validated

ALcontrol Laboratories Analytical Services

SDG:	100820-69	**Customer:**	Access Waste Recycling
Job:	D_ACCESSWR_DUB-8	**Attention:**	Robert Kane
Client Reference:		**Order No.:**	
Location:	Samples 20-8-10	**Report No:**	95034

Results Legend	
#	ISO17025 accredited.
M	mCERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.

Component	LOD/Units	Method	Customer Sample Ref.	DS1	DS2	DS3	FW9	SW1	SW1
			Depth (m)						
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)
			Date Sampled	14/07/2010	14/07/2010	14/07/2010	20/08/2010	18/08/2010	21/07/2010
			Date Received	20/08/2010	20/08/2010	20/08/2010	20/08/2010	20/08/2010	20/08/2010
			SDG Ref	100820-69	100820-69	100820-69	100820-69	100820-69	100820-69
			Lab Sample No.(s)	1983143	1983147	1983157	1983121	1983103	1983131
			AGS Reference						
Suspended solids, Total	<2 mg/l	TM022					113 #	135 #	131 #
BOD, unfiltered	<1 mg/l	TM045					229 #		
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099						0.778 #	
COD, unfiltered	<7 mg/l	TM107					632 #	136 #	
Phosphate (ortho) as PO4	<0.05 mg/l	TM184					<0.05 #		
TPH / Oil & Greases	<1 mg/l	TM235					3.91 #		
Mineral Oil	<1 mg/l	TM235					2.23	<1	
Surfactants, Anionic (MBAS)	<0.05 mg/l	TM249					1.09		
Dust, Total	mg	TM253		231	51.2	108			

Validated

ALcontrol Laboratories Analytical Services

SDG:	101104-75	**Customer:**	Access Waste Recycling
Job:	D_ACCESSWR_DUB-10	**Attention:**	Robert Kane
Client Reference:	QTR 4	**Order No.:**	
Location:	QTR 4	**Report No:**	103477

Results Legend	
#	ISO17025 accredited.
M	mCERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.

Component	LOD/Units	Method	Customer Sample Ref.	FW9	SW1	SW1
			Depth (m)			
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)
			Date Sampled	04/11/2010	02/11/2010	29/10/2010
			Date Received	04/11/2010	04/11/2010	04/11/2010
			SDG Ref	101104-75	101104-75	101104-75
			Lab Sample No.(s)	2344450	2344353	2344399
			AGS Reference			
Suspended solids, Total	<2 mg/l	TM022		4.55 #	341 #	637 #
BOD, unfiltered	<1 mg/l	TM045		3.33 #		
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099				0.232 #
COD, unfiltered	<7 mg/l	TM107		41.2 #	294 #	
Mineral oil >C10 C40 (aq)	<10 µg/l	TM172		417	871	
Phosphate (ortho) as PO4	<0.05 mg/l	TM184		0.078 #		
TPH / Oil & Greases	<1 mg/l	TM235		3.08 #		
Surfactants, Anionic (MBAS)	<0.05 mg/l	TM249		0.344		

Appendix C

Validated

ALcontrol Laboratories Analytical Services

SDG:	100820-69	**Customer:**	Access Waste Recycling
Job:	D_ACCESSWR_DUB-8	**Attention:**	Robert Kane
Client Reference:		**Order No.:**	
Location:	Samples 20-8-10	**Report No:**	95034

Results Legend	
#	ISO17025 accredited.
M	mCERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.

Component	LOD/Units	Method	Customer Sample Ref.	DS1	DS2	DS3	FW9	SW1	SW1
			Depth (m)						
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)
			Date Sampled	14/07/2010	14/07/2010	14/07/2010	20/08/2010	18/08/2010	21/07/2010
			Date Received	20/08/2010	20/08/2010	20/08/2010	20/08/2010	20/08/2010	20/08/2010
			SDG Ref	100820-69	100820-69	100820-69	100820-69	100820-69	100820-69
			Lab Sample No.(s)	1983143	1983147	1983157	1983121	1983103	1983131
			AGS Reference						
Suspended solids, Total	<2 mg/l	TM022					113 #	135 #	131 #
BOD, unfiltered	<1 mg/l	TM045					229 #		
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099						0.778 #	
COD, unfiltered	<7 mg/l	TM107					632 #	136 #	
Phosphate (ortho) as PO4	<0.05 mg/l	TM184					<0.05 #		
TPH / Oil & Greases	<1 mg/l	TM235					3.91 #		
Mineral Oil	<1 mg/l	TM235					2.23	<1	
Surfactants, Anionic (MBAS)	<0.05 mg/l	TM249					1.09		
Dust, Total	mg	TM253		231	51.2	108			

Validated

ALcontrol Laboratories Analytical Services

SDG:	101022-71	**Customer:**	Access Waste Recycling
Job:	D_ACCESSWR_DUB-9	**Attention:**	Robert Kane
Client Reference:	Dust/TSS	**Order No.:**	
Location:	22-10-2010	**Report No:**	101602

Results Legend	
#	ISO17025 accredited.
M	mCERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.

Customer Sample Ref.	DS 1	DS 2	DS 3	SW1	SW1
Depth (m)					
Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)
Date Sampled	17/09/2010	17/09/2010	17/09/2010	14/09/2010	23/08/2010
Date Received	22/10/2010	22/10/2010	22/10/2010	22/10/2010	22/10/2010
SDG Ref	101022-71	101022-71	101022-71	101022-71	101022-71
Lab Sample No.(s)	2278080	2278083	2278086	2278071	2278063
AGS Reference					

Component	LOD/Units	Method					
Suspended solids, Total	<2 mg/l	TM022				225 #	191 #
Total volume received	ml	TM253	600	10	220		
Dust, Total	<0.026 mg/m2/day	TM253	737				
Dust, Total	mg	TM253		8.83	16.4		

CERTIFICATE OF ANALYSIS

SDG:	110118-69	**Location:**	Dust + Qtr	**Order Number:**	
Job:	D_ACCESSWR_DUB-11	**Customer:**	Access Waste Recycling	**Report Number:**	113503
Client Reference:	Dust + Qtr	**Attention:**	Robert Kane	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Non-conforming work.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of the individual compounds within the samples are not corrected for this recovery.

Component	LOD/Units	Method	Customer Sample R	DS1	DS2	DS3	FW1	SW1
			Depth (m)	.	.	.	.	.
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)
			Date Sampled	17/01/2011	16/12/2011	16/12/2011	18/01/2011	22/11/2011
			Date Received	18/01/2011	18/01/2011	18/01/2011	18/01/2011	18/01/2011
			SDG Ref	110118-69	110118-69	110118-69	110118-69	110118-69
			Lab Sample No.(s)	2703241	2703242	2703243	2703244	2703239
			AGS Reference					
Suspended solids, Total	<2 mg/l	TM022					25.5 #	236 #
BOD, unfiltered	<1 mg/l	TM045					8.47 #	
COD, unfiltered	<7 mg/l	TM107					44 #	
Mineral oil >C10 C40 (aq)	<10 µg/l	TM172					258	
Phosphate (ortho) as PO4	<0.05 mg/l	TM184					0.112 #	
TPH / Oil & Greases	<1 mg/l	TM235					2.12 #	
Surfactants, Anionic (MBAS)	<0.05 mg/l	TM249					0.339	
Total volume received	ml	TM253		162	170	242		
Dust, Total	<0.026 mg/m2/da	TM253		198	56.7	46.7		

Appendix D

City Analysts Limited

CONFIDENTIAL REPORT

Access Waste Recycling Ltd.
Unit 28,
JFK Industrial Estate,
Dublin 12.

Attention: **Mr. Robert Kane**

Survey date: **9th – 10th December 2010.**

Project No.: **2010_Access**

TITLE: **Noise Emission Monitoring at Access Waste Ltd.**

Signed: _____

Sean Culhane BSc. (Hons.), AMIOA.

CONTENTS

1.0 SCOPE OF WORK

To carry out all necessary noise measurements required in compliance with EPA Waste Licence No. W0227-01.

To provide a Technical Report giving full details of all surveys and results.

2.0 SUMMARY

In accordance with Waste Licence No. W0227-01, City Analysts carried out an Environmental Noise Survey on behalf of Access Waste Ltd. at the site in Dublin.

Measurements were taken over one day and one night at a specific Noise Sensitive Location as set out in the Waste Licence No. W0227-01.

3.0 METHODOLOGY

Ambient Noise levels were sampled during both the Daytime and Night time in accordance with the relevant standards and legislation namely:-

- Waste Licence No. W0227-01.
- ISO 1996. Acoustics - description and Measurement of Environmental Noise. Parts 1, 2 & 3.
- BS 4142: Method for rating industrial noise affecting mixed residential and industrial areas

4.0 MONITORING LOCATIONS

A Noise Sensitive location has been identified by the Environmental Protection Agency (EPA) on the boundary of the Access Waste site and has been identified as follows:-

Table 1.0 :- Table of Noise Sensitive Locations on the boundary of Access Waste Ltd. site.

SITE ID	DESCRIPTION	CLASSIFICATION
N4	Outside a number of Bungalows on the Killeen Rd.	Private Residence

5.0 NOISE MEASUREMENTS

Schedule C; section C5, of the Waste Licence No. W0227-01 requires the measurement of Ambient Noise Levels at a Noise Sensitive Location in proximity to the Access Waste Ltd. site in Dublin.

5.1 Instrumentation Used During Noise Survey

- CR: 263 :- Integrating Averaging Sound Level Meter
- CR: 513A :- Cirrus Calibrator
- MK: 224 :- Type 1 Microphone
- Microtrack 24 / 96 Digital Audio recorder
- Frequency Master v3 Audio software.

5.0 NOISE MEASUREMENTS

5.2 Measurements

Schedule B; section B4, of the Waste Licence No. W0227-01 requires that Daytime and Night time measurements be taken at each Noise Sensitive Location during the course of the survey.

Daytime and Night time are defined as follows:-

Daytime	08:00 – 22:00.
Night time	22:00 – 08:00.

A number of Noise measuring scales and indices are quoted for each location within this report. They are defined below as follows:-

$L_{Aeq,\ 30mins}$. :- This is the continuous equivalent noise level, measured in dB(A) over 30 mins.

L_{A10} :- This index is used for traffic Noise evaluation. It is based on the L_{A10} scale, which gives a measure of the level of noise exceeded for 10% of the time.

L_{A90} :- This is the noise level exceeded for 90% of the time measured. It is widely used as a measure of background or ambient noise.

L_{A01} :- This is the A weighted sound pressure level that is exceeded for 1% of the time interval. This is one way of describing the noise from short duration isolated events.

L_{AMax} :- This is the maximum or *peak* level, measured, in dB(A) during the measurement period. This is an alternative to L_{A01} as a way of describing short duration noise events.

6.0 EMISSION LIMIT VALUES

All ambient Noise measurements taken during this Environmental Noise Survey have been compared to the Emission Limit Values as set out in the Waste Licence No. W0227-01. They are included in the table below:-

Table 2.0 :- Table of Emission Limit Values as per Waste Licence No. W0227-01 in dB(A)

DAYTIME dB(A) LAeq (30 minutes).	NIGHT TIME dB(A) LAeq (30 minutes).
55	45

7.0 DISCUSSION AND OBSERVATIONS

Daytime Measurements:-

N4 is located to the West of the Access waste site adjacent to the Killeen Road. The noise impact measured at this location is dominated from the continuous stream of traffic using this road. The LA90 at this location is 68dB(A) and shows the difference between background noise and the intermittent traffic noise. This is also clear from the LA10 level of 73dB(A).

Night time Measurements :-

The Night time noise levels reflect a similar overall result as the Daytime measurements. The Noise Sensitive Location is influenced by traffic on the Killeen Road. The reduced LA90 of 52dB(A) during the night time measurements reflect the fact the volume of traffic was greatly reduced and less frequent at night. The Access Waste Ltd. site does not operate during night time hours.

Tonal Characteristics

A 1/3 Octave Band analysis of noise measurements taken at N4 indicated that there was no tonal characteristic coming from the Access Waste Ltd. site and that any identifiable peaks came from passing road traffic.

Conclusion

The Noise measurements at the Noise Sensitive Location to the West of the Access Waste Ltd. site show that the traffic on the Killeen road dominates above all other potential noise sources in the area. Any difference in LAeq between the Daytime and Night time measurement clearly shows that the almost continuous stream of traffic on the road has the most significant impact on the Noise sensitive location. The Analyst's notes state that there was no audible significant tonal or impulsive noise from the Access Waste Ltd. site at the Noise Sensitive Location. Therefore it would be his opinion that the site is compliant with the limit values as set out in Waste Licence No. W0227-01.

APPENDIX I

Table 3.0 Daytime Measurements on 10.12.10

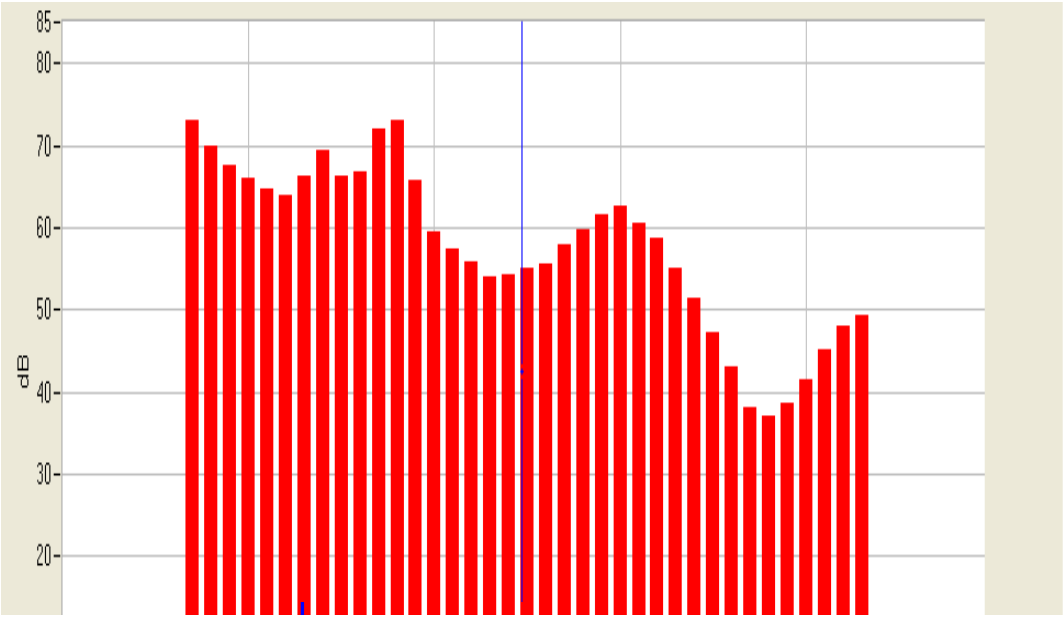
Location Reference	Sampling Interval	Duration (Minutes)	L_{Aeq}	L_{A90}	L_{A10}	L_{A01}	L_{Amax}	Comments
	DAY							
N4	15:17– 15:47	30	**71**	68	73	78	85	Road Traffic continuous. No audible impact from the site.

Table 4.0 Night time Measurements on 09.12.10

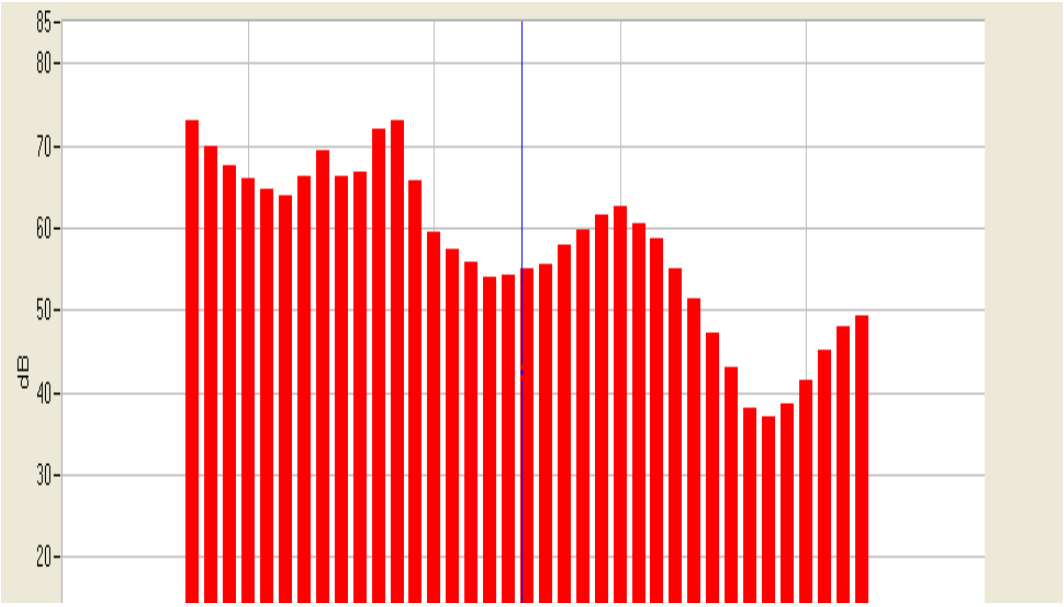
Location Reference	Sampling Interval	Duration (Minutes)	L_{Aeq}	L_{A90}	L_{A10}	L_{A01}	L_{Amax}	Comments
	NIGHT							
N4	23:22– 23:52	30	**66**	52	69	75	85	Road Traffic continuous. Site not in operation.

APPENDIX II

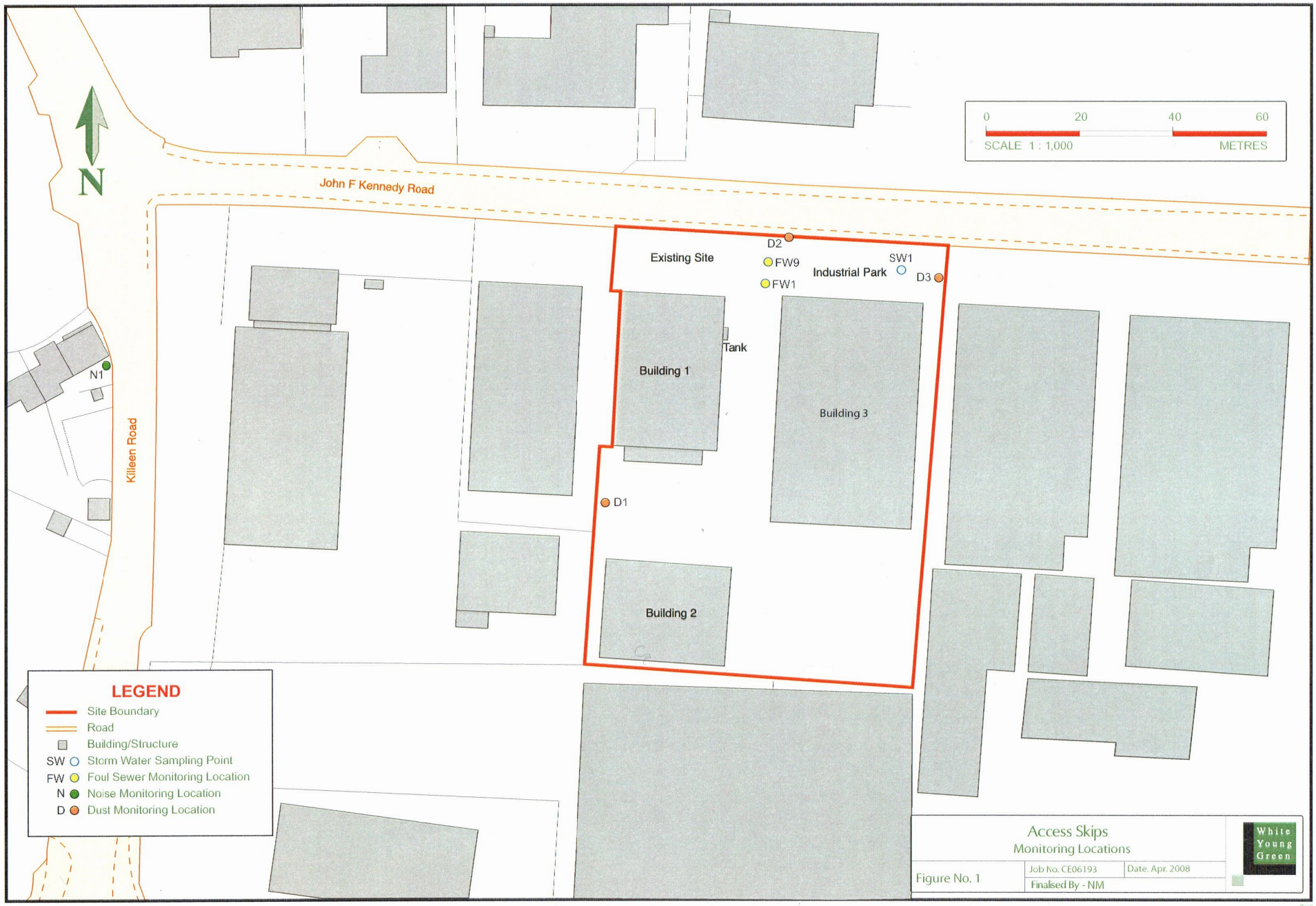
Daytime 1/3 Octave Band Analysis 10/12/10



Night time 1/3 Octave Band Analysis 09/12/10



Appendix E


N
John F Kennedy Road
0
20
40
60
SCALE 1 : 1,000
METRES
Existing Site
D2
FW9
FW1
SW1
Industrial Park
D3
Tank
Building 1
Building 3
Building 2
D1
N1
Killeen Road
LEGEND
Site Boundary
Road
Building/Structure
SW Storm Water Sampling Point
FW Foul Sewer Monitoring Location
N Noise Monitoring Location
D Dust Monitoring Location
Access Skips
Monitoring Locations
Figure No. 1
Job No. CE06193
Date. Apr. 2008
Finalised By - NM
White Young Green