SOUTH TIPPERARY COUNTY COUNCIL



WALLER'S LOT RECYCLING CENTRE & WASTE TRANSFER STATION ANNUAL ENVIRONMENTAL REPORT

2009

Waste Licence Register No. W0200-01

Prepared by:

South Tipperary County Council Emmet Street Clonmel

March 2010

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1. INTRODUCTION

This Annual Environmental Report (AER) is required for submission to the Environmental Protection Agency in accordance with Condition 12.4 of Waste Licence W0200–01 for the Waller's Lot Site. This report presents the all the environmental data and other relevant information regarding the operation of the Waller's Lot Site for 2009

1.1. Scope and Purpose of the Report

South Tipperary County Council holds a waste licence (Register No W0200-01) for the operation of the Waller's Lot Site. The aim of this Annual Environmental Report (AER) is to provide a review of activities at the Waller's Lot Site during 2009.

This is the third AER to be submitted under Condition 12.4 of the licence. The Content of this AER is as defined in Schedule G of the waste licence.

1.2. Site Location

Waller's Lot is located on the edge of Cashel town.

The location of the site is shown on Figure 1.1.

The National Grid Reference for the site is: 208538969 139873395

1.2.1. Site Contacts

Name: Mr. Pat Walsh
Job Title: Site Manager
Telephone No: (062) 64150
Fax No: (062) 64157

Name: Mr. Pat O' Dwyer

Job Title: Deputy Site Manager:

Telephone No: (052) 34882 **Fax No:** (052) 34391

Name: Ms. Ann Peters

Job Title: Executive Engineer

Telephone No: (052) 34397 **Fax No:** (052) 34391

1.3. Environmental Policy

South Tipperary County Council is committed to conducting all activities such that they have a minimal effect on the environment.

South Tipperary County Councils main objectives are:

- 1. To comply with the Waste Licence (Licence Reg. W0200-01) and all relevant environmental legislation
- 2. To ensure that all facility infrastructure, as required in Condition 3 of the Waste Licence, is established
- 3. To ensure that all site personnel are familiar with:
 - a. the Conditions of the Waste Licence
 - b. the content of the Environmental Management System
 - c. all operational procedures
- 4. To reduce the potential for negative environmental impacts by a programme of continuous development on-site and appropriate mitigation measures.
- 5. To carry out all environmental monitoring, as required by Condition 9 of the Waste Licence.6. To provide adequate training and awareness to all employees with regard to minimising environmental risks.

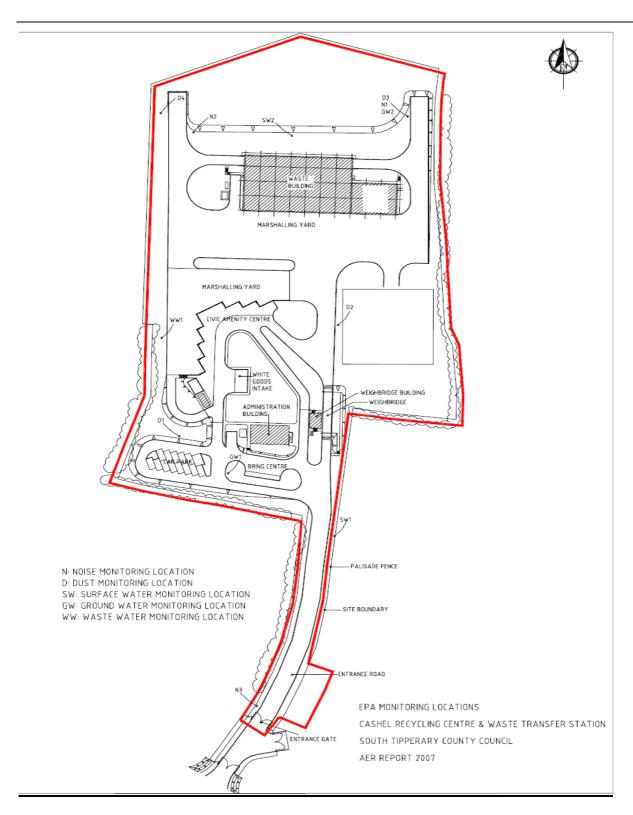


FIGURE 1.1: SITE LOCATION MAP

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2 WASTE ACTIVITIES

The licensed waste disposal activities of the facility, in accordance with the Third Schedule of the Waste Management Act 1996 to 2003are:

- Class 12. Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule
- Class 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.

The licensed waste disposal activities of the facility, in accordance with the Third Schedule of the Waste Management Act 1996 to 2003 are:

- Class 2 Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
- Class 3. Recycling or reclamation of metals and metal compounds
- Class 4. Recycling or reclamation of other inorganic materials
- Class 11 Use of waste obtained from any activity referred to in a preceding paragraph pf this Schedule.
- Class 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 the waste concerned is produced.

The main activity at the site is as a Civic Amenity Centre and as a Waste Transfer Station.

Schedule A of the waste licence outlines the types and volumes of waste that can be accepted at the site. They are shown in Table 2.1 below.

Table 2.1: Licensed Categories and Quantities of Waste for Disposal

Waste Category	Maximum Quantity (Tonnes per annum)
Household and Commercial Waste	21,000
Household Hazardous Waste	100
Total	21,100

2.1 Waste Quantity and Composition

The quantity of waste removed from Waller's Lot in 2009 is outlined in Table 2.2.

Table 2.2: Detailed Quantities of Waste removed from Waller's Lot 2009

Waste Type	EWC Code	Quantity of Waste
waste Type	EWC Code	(Tonnes)
Batteries	16 06 01*	0.42
Cardboard	15 01 01	29.2
C + D	17 09 04	119.12
Cooking Oil	20 01 25	0.14
Aluminium Cans	19 08 14	0.62
Dry Recyclables	20 03 01	2,152.58
Fluorescent tubes	20 01 21	0.26
Glass	20 01 02	29.76
Household Hazardous	20 01 27 / 20 01 37	4.06
Lead Acid Batteries	16 06 01	8.82
Mattresses	20 03 07	14.94
Metal	20 01 40	155.00
Oil Filters	16 01 07	0.14
Tyres	16 01 03	16.64
Household Waste	20 03 01	5,640.62
Newsprint	20 01 01	50.62
Steel Food Cans	15 01 04	3.2
Timber	20 01 37* / 20 01 38	324.56
WEEE	20 01 35*/ 20 01 36	145.50
Waste Oil	13 08 99	2.64
Textiles	20 01 10 / 20 01 11	36.62
Plaster Board\Gypsum	17 08 02	27.04
Plate Glass	17 02 02	14.62
Plastic Bottles	15 01 02	0
Farm Plastic	15 01 02	107.30
Gas Cylinders	15 01 11	1.00
	Total	8885.42

3 MONITORING AND EMISSIONS

The monitoring carried out during 2009 is detailed below. All environmental monitoring locations are illustrated in Figure 3.1.

3.1 Dust Monitoring

Condition 9 and Schedule D.2.1 of the licence requires that the licensee conducts the following dust monitoring:

• Three times a year (two of which must occur between May and September) using the Standard Methods VDI2119 at onsite 4 locations.

3.1.1 Dust Monitoring Results

Dust Deposition Monitoring

Dust deposition monitoring was carried out in July, September and November. The results are shown in Table 3.1 below.

Dust Monitoring Point	Emission Limit	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Median
D1 (mg/m2/day)	350	12	83	74	N/A	74
D2 (mg/m2/day)	350	31	58	88	N/A	58
D3 (mg/m2/day)	350	65	74	49	N/A	69.5
D4 (mg/m2/day)	350	12	83	74	N/a	78.5

Dust levels on site were well below limit value of 350 mg/m²/day at each of the monitoring stations during the monitoring period.

The fourth dust monitoring location was installed in January 2009.

WALLERS LOT WASTE TRANSFER STATION AND CIVIC AMENITY

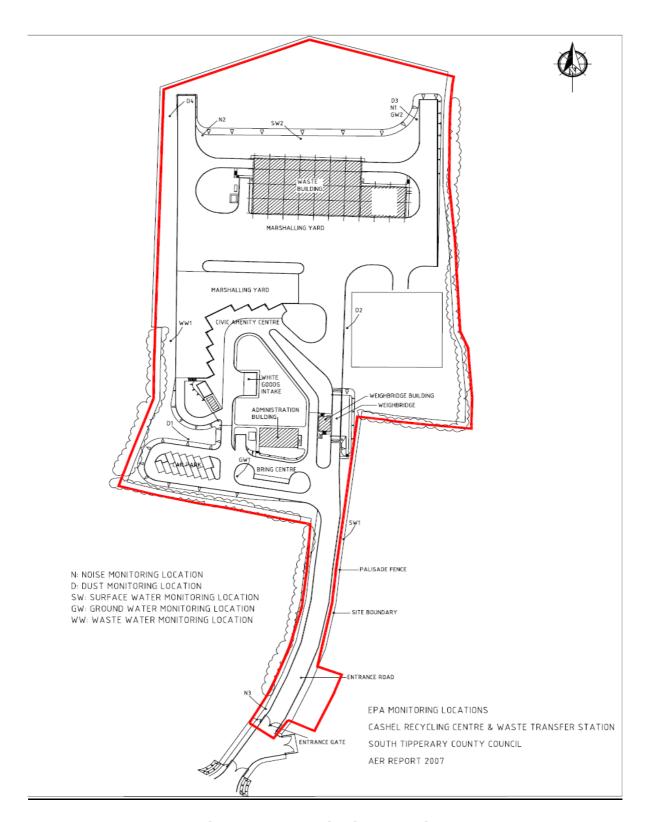


Figure 3.1: Monitoring Locations

3.2 Noise Monitoring

Condition 9 and Schedule D.3.1 of the licence require the licensee to conduct annual monitoring on noise emissions. A full noise survey was carried out on the 16th November 2009. A summary of the results can be seen in Table 3.2 below. A full copy of the results of these tests is included in Appendix 1.

Table 3.2 Noise Monitoring Results Summary

Table 3.2 Noise Monitoring Results Summary					
Monitoring Point	L(A) _{EQ}	Comments			
N1	51	Main source of noise at this location were produced by reverse beeping sirens, engine noise from plant on site and a lorry unloading waste.			
N2	55	Main source of noise at this location were produced by reverse beeping sirens, engine noise vehicles entering and exiting the recycling area an excavator operating in the transfer station loading a trailer. Interferences included birds singing; a helicopter flying overhead and traffic movements on nearby road.			
N3	56	Main source of noise was produced by cars and trucks driving to and from the site (3cars + 1 HGV) no noise audible from recycling facility. Interference noise included traffic movements on adjacent road and roundabout.			

3.3 Surface water Monitoring

Condition 9 and Schedule D.4 of the licence require the licensee to conduct surface water monitoring at points prior to discharge to soak away at locations to be agreed with the Agency on a quarterly basis. The results can be seen in Table 3.3 and Table 3.4 below. All the results are very low.

Table 3.3 SW1 Surface Water Monitoring Results

Surface Water 1	Emission Limit	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Median
BOD (mg/l)	10	No Discharge	N/A	2.7	4.3	3.5
рН	6.0 - 9.0	N/A	N/A	6.98	7.19	7.085
S.Solids (mg/l)	25	N/A	N/A	13	30	22.67
Mineral Oil (mg/l)	5	N/A	N/A	<10	0.57	0.57

Table 3.4 SW2 Surface Water Monitoring Results

Surface Water 2	Emission Limit	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Median
BOD (mg/l)	10	No Discharge	2.41	4.75	5.02	4.06
pН	6.0 - 9.0	N/A	7.45	7.68	7.03	7.38
S.Solids (mg/l)	25	N/A	4	168	130	100.7
Mineral Oil (mg/l)	5	N/A	<10	<10	0.11	0.11

3.4 Wastewater Monitoring

Condition 9 and Schedule D.5 of the licence require the licensee to conduct waste water monitoring at a point prior to discharge to sewer at a location to be agreed with the Agency on a quarterly basis. The results can be seen in Table 3.5 below.

Table 3.5 Waste Water Monitoring Results

Wastewater	Emission Limit	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Median
рН	6.0 - 10.0	7.73	6.98	7.13	7.14	7.135
Temperature (C)	25	9.1	14	16	Nt	14
BOD (mg/l)	500	8.0	8.7	4.1	21.2	8.35
Suspended Solids (mg/l)	500	10	44	4	25	20.75
Fats, Oils, Grease (mg/l)	100	20	<1	0.3	31	17.1
Ammoniacial Nitrogen						
(mg/l)	50	13.5	3.5	2.43	9.2	11.35

3.5 Groundwater Monitoring

Condition 9 and Schedule D.6 of the licence require the licensee to conduct groundwater monitoring at two groundwater wells located onsite on a quarterly basis. The results can be seen in Table 3.6 and Table 3.7 below.

Table 3.6 GW1 Groundwater Monitoring Results

	Emission					
Ground Water 1	Limit	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Median
Visual Inspection/Odour	No abnormal	No Odour detected	No Odour Detected	No Odour Detected	No Odour Detected	
Groundwater Level (mts)		5.5	3.8	4.4	Nm	4.4
Conductivity (us/cm)	1500	953	745	751	NT	751
pН	6.0 - 9.0	7.26	6.99	7.23	6.95	7.11
Temperature (C)	25	10.0	11.0	11.2		11
Mineral Oil (mg/l)	5	<50	<10	<10	0.027	0.027

Table 3.7 GW2 Groundwater Monitoring Results

Ground Water 2	Emission Limit	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Median
Visual Inspection/Odour	No abnormal	No Odour detected	No Odour detected	No Odour detected	No Odour detected	TYTOGRAFI
Groundwater Level (mts)		3.4	2.4	2.8	Nm	2.8
Conductivity (us/cm)	1500	689	688	701	Nt	689
рН	6.0 - 9.0	7.29	6.86	7.18	6.87	7.025
Temperature (C)	25	9.9	11.0	11.3	Nt	11
Mineral Oil (mg/l)	5	<50	<10	<10	0.027	0.027

3.6 Tank and pipeline Testing

Bund Tests Table 3.8 and 3.9

CON	CRETE BUND INSP	ECTION & TEST				
	Bund Waste C	-				
Contractor:	South Tipperary C	o.Co.				
Date:	14 th and 15 th January	14 th and 15 th January 2010				
Drawing Reference: (incl revision)	2003-024-03-035 Rev	2003-024-03-035 Rev 0				
Location:	Civic Amenity Area					
Dimensions:	5.5m x 2.6m x 0.5m d	eep with 300mm sq sump	300mm deep			
Concrete Mix:	C35N20	Reinforcement:	T8 & T12			
Date of Test:	January 2010	Weather:	Dry			

deterioration.

The bund was clean and clear of debris.

There were no defects noted at the time of testing.

Bund Test:

The test was carried out in accordance with CIRIA Report 163 Construction of Bunds for Oil Storage Tanks Section 5.5.2.

No drop in water level was noted at the end of the test period, indicating the bund was found to be watertight.

Signed:			
Datada			
Dated:	Anne	Peters	Executive
	Engine	er	
	15/01/	2010 - 12 -	

Cashel Recycling Centre & Waste Transfer Station						
CC	CONCRETE BUND INSPECTION & TEST					
	Bund No.2 Diesel Tank Bund					
Contractor:	South Tipperary Co	o.Co				
Date:	14 th and 15 th January 2010					
Drawing Reference: (incl revision)	2003-024-03-034 Rev 0					
Location:	Waste Transfer Station Area					
Dimensions:	3.5m x 2.5m x 0.5m deep with 300mm sq sump 300mm deep					
Concrete Mix:	C35N20	Reinforcement:	T8 & T12			
Date of Test:	January 2010	Weather:	Dry			

1.5. Bund Inspection:

The bund was visually inspected and it was found that there was no sign of damage or deterioration.

The bund was clean and clear of debris.

There were no defects noted at the time of testing.

Bund Test:

The test was carried out in accordance with CIRIA Report 163 Construction of Bunds for Oil Storage Tanks Section 5.5.2.

No drop in water level was noted at the end of the test period, indicating the bund was found to be watertight.

Signed:				
Dated:	 Anne	Peters	Executive	
	Engineer			
	15/01/	2010		

3.7 Resource and Energy Consumption

Electricity and diesel usage are shown in Tables 4.0 and 4.1 below.

Table 4.0 Electricity Use 2009

Date	Consumption in kWh
Mar09	11810
Apr 09	4250
Aug 09	19433
Sept 09	4650
Oct 09	3850
Average p\month	3666

Table 4.1 Diesel Usage 2009

Jan 07	546
Feb 07	780
Mar 07	440
Apr 07	700
May 07	560
June 07	560
July 07	600
Aug 07	340
Sept 07	607
Oct 07	580
Nov 07	600
Dec 07	560
Average p\month	572.75

4 SITE DEVELOPMENT / INFRASTRUCTURAL WORKS

Site development works initiated or completed during the report period are described hereunder.

4.1

It is planned to install a concrete slab to facilitate the bulking up of items in 2010

5 ENVIRONMENTAL INCIDENTS AND COMPLAINTS

5.1 Incidents Summary

Condition 12.3 of the waste licence requires that the licensee shall make written records of environmental incidents. No incidents were recorded during this reporting period

5.2. Complaints Summary

There were no complaints received during the reporting period.

5.3 Review of Nuisance Controls.

All nuisance control systems are monitored weekly to ensure that they are working effectively. The findings of these inspections are recorded on Nuisance Check Sheets, which are held on record in the facility. Environmental nuisances include:

- 1. Litter
- 2. Vermin
- 3. Dust

5.3.1 Litter Control

There are regular checks for litter onsite.

5.3.2 Vermin & Insects Control

The initial vermin control system on site is prompt waste disposal and reducing access to material. Additional vermin control work, is contracted to Pest Patrol (Pest control and Environmental Services). They use bait boxes the following systems to control vermin on site.

Pest Patrol carries out eight to ten site inspections annually to ensure that the site is free of vermin. Waller's Lot is not considered to have a vermin problem. The findings of these inspections are recorded and are held on record in the facility.

5.3.3 Dust Control

Dust control on-site is controlled using the following systems:

- 1. Reduced vehicle speed on site to control dust rising
- 2. Roads sprayed with water to keep dust down, done in dry weather

No complaints were received at the as regards dust raised by operational activities.

6 ENVIRONMENTAL MANAGEMENT SYSTEM

6.1 SUMMARY OF PROCEDURES ASSOCIATED WITH THE FACILITY

Documented procedures governing the operation of the facility are outlined below. Complete copies of all procedures are included in the facility's EMS.

Procedure Title Summary

Emergency Response Procedure

The purpose of this procedure is to propose appropriate actions to ensure the safety & health of all site personnel and visitors, minimise damage to property and risk to the environment

This procedure describes the action to be used in the event of an emergency where an emergency can be described as but is not limited to any of the following incidences:

- significant spillage
- major fire/explosion
- flooding / structural damage

• major injury or dangerous

occurrence

Revision Date & No.

November 2007 Rev. 2

Procedure Title Summary

Corrective Action Procedure

To ensure that the appropriate corrective action is taken in the event of an incident on-site, where an incident can be defined as:

- an emergency
- any emission which does not comply with the requirements of this licence (W0200-01)
- any trigger level specified in this licence which is attained or exceeded
- any indication that environmental pollution has, or may have, taken place

Revision Date & No.

February 2007 Rev. 1

Procedure Title Summary

Awareness and Training Procedure

To ensure that training needs are identified and appropriate training is provided for facility personnel.

Revision Date & No. February 2007 Rev. 1

Procedure Title Summary

On-Site Communication Procedure

To ensure that members of the public can access, at the facility, information on the sites environmental performance, in compliance with

Condition 2.4 of the waste licence

Revision Date & No. February 2007 Rev. 1

Procedure Title Summary

External Communication Procedure

To ensure that all communications regarding the facility are correctly

directed to be addressed by the correct personnel.

Revision Date & No. July 2007 Rev. 2

Procedure Title

Complaints Procedure

Summary

To ensure that all complaints that activities are creating a nuisance are recorded and dealt with, in compliance with Condition 11.4 of the waste

licence

Revision Date & No.

February 2007 Rev. 1

Procedure Title

Waste Characterisation and Testing Procedure

Summary

To provide a system of checking to ensure that waste collected at Waller's

Lot complies with Schedule A of the Waste Licence.

Revision Date & No.

February 2007 Rev. 1

Procedure Title

Waste Acceptance Procedure

Summary

To formalise the system of receiving and recording the delivery and

acceptance of waste.

Revision Date & No.

November 2007 Rev. 2

Procedure Title

Vehicle Movement Procedure

Summary

Ensure that all vehicles using the site enter, travel and operate safely

Revision Date & No.

November 2007 Rev. 2

Procedure Title

Waste Quarantine Procedure

Summary

To ensure that quarantine waste is stored and processed correctly

Revision Date & No.

February 2007 Rev. 1

Procedure Title

Waste Rejection Procedure

Summary

To ensure that rejected waste is dealt with in a safe manner and that the

appropriate notification is made

Revision Date & No.

February 2007 Rev. 1

Procedure Title

Summary

Metal Recovery – Waste Acceptance Procedure

To formalise the system of receiving, recording the delivery and

acceptance of waste metal for recovery at Waller's Lot.

Revision Date & No. February 2007Rev. 1

Procedure Title

WEEE Acceptance (incl Fridges and freezers) Procedure

Summary

To formalise the system of receiving, recording the delivery and

acceptance of white goods for recovery at Waller's Lot.

Revision Date & No. November 2007 Rev. 2

Procedure Title

Recyclable Waste - Acceptance Procedure

Summary

To formalise the system of receiving, recording the delivery and

acceptance of recyclable materials for recovery at Waller's Lot.

Revision Date & No.

February 2007 Rev. 1

Procedure Title Summary

Environmental Monitoring Procedure

To formalise the system of environmental monitoring on-site for:

Surfacewater

Groundwater

Wastewater

Dust

Noise

Revision Date & No. November 2007 Rev.2

Procedure Title Site Inspection Procedure

Summary To ensure that the site is inspected on a weekly basis to ensure that there

is nothing of note occurring on site that is being missed.

Revision Date & No. February 2007 Rev. 1

Procedure Title Nuisance Inspection Procedure

Summary To ensure that the site is inspected on a weekly basis to ensure that there

is no nuisance being caused by dust, litter and odours.

Revision Date & No. February 2007 Rev. 1

Procedure Title Self Compacting Trailer Operating Procedure

Summary To ensure the safe operation of the waste compacting trailer

Revision Date & No. January 2009 Rev. 1

Procedure Title Waste Conveyor Operation Procedure

Summary To ensure the safe operation of the waste conveyor

Revision Date & No. January 2009 Rev. 1

6.2 OBJECTIVES AND TARTGETS

Objective 1	Continue Advertising campaign	
Target	I	
	Tasks	Timeframe
	Advertise facilities in local paper. Ongoing	March 2011
Responsibility	Facility manager & PAO	
Resources\Comm		
ents		

Review all aspects of Health and Safety in relation to the facility		
To carry out a review in relation to all aspects of health and safety concerning this facility		
Tasks	Timeframe	
Review Site specific safety statement	July 2010	
Carry out any recommendations for reduction of risk outlined in Safety Statement.	July 2010	
Facility manager & RE		
	To carry out a review in relation to all aspects of health and safety of facility Tasks 1. Review Site specific safety statement 2. Carry out any recommendations for reduction of risk outlined in Safety Statement.	

Objective 3	Improve energy efficiency on site		
Target	In compliance with Condition 8.1 STCC will carry out an audit of the energy efficiency of the site to identify opportunities for energy use reduction and better resource use.		
	Tasks	Timeframe	
	 Carry out energy audit in accordance with guidance published by the Agency – 'Guidance note on energy efficiency auditing'. 	March 2011	
	Implement audit findings and review. Ongoing	January 2011	
Responsibility	Facility manager & E.E		
Resources\Comments	Audit Completed		

Objective 4	Improve site security	
Target		
	Tasks	Timeframe
	Maintain fence	Ongoing
	Reduce scavengers / trespassers	
Responsibility	Facility manager	
Resources\Comments	Worked with local Gardai / New Security cameras fitted	

Objective 5	Implementation of a management and reporting system		
Target	In compliance with Condition 2.4 STCC will maintain a system whereby all environmental information is available to members of the public during opening hours		
	Tasks	Timeframe	
	1. Review and update the EMS 2009	March2010	
	2. Review and update the schedule of objectives and targets 2010		
	Implement reviewed EMP		
	4. Review and update the Corrective Action Procedure	March 2010	
	5. Review and update the Awareness and Training Programme See Chapter 6	March 2010	
	6. Prepare an AER		
Responsibility	Facility Manager		
Resources\Comments	Completed		

Objective 6	Expand the range of products accepted for recycling	
Target	Expand the range pf products accepted	
	Tasks	Timeframe
	Investigate other materials	Ongoing
	2. Hard Plastics	December
		2010
Responsibility	Facility Manager	
Resources\Comments		

Objective 7	Site Inspections	
Target	To ensure that all appropriate site inspections are carried out and documented as per the Licence requirements	
	Tasks	Timeframe
	1.Training of Staff in Inspection procedures	Ongoing
	2. Maintaining Inspection records	Ongoing
Responsibility	Facility manager	
Resources\Comments	Ongoing	

Objective 8	Staff Training							
Target	To ensure that all site personnel are appropriately qualified for the position they hold on site.							
Tasks Timefo								
	Implement regular in-house training for on-site personnel including First Aid and Spill Kit Training	Ongoing						
Responsibility	Facility manager							
Resources\Comments	Ongoing							

Objective 9	Environmental Education			
Target	To encourage all interested parties to visit the site and learn about re	cycling		
	Tasks	Timeframe		
	Use building to run courses regarding all forms of recycling	Ongoing		
2. Encourage school visits				
Responsibility	Facility manager, Environmental Engineer, Public Awareness Officer.	•		
Resources\Comments	Ongoing			

Objective 10	Reduction in Resourse usage						
Target	To reduce usage of water and power on site						
_	Tasks	Timeframe					
	Carry out Energy audit	March 2011					
	2. Implement recommendations of energy audit	Ongoing					
Responsibility	Facility manager						
Resources\Comments	Regular monitoring of site water meter .						

Objective 11	Site Development						
Target	To Increase the Size and Scope of the Site.						
	Tasks	Timeframe					
	March 2012						
Responsibility	Facility manager\Site Engineer						
Resources\Comments							

7 FACILITY RECOURCES

7.1 Management and Staff Structure

There are six operational staff at the site: a Facility Manager, responsible for the day-to-day site activities, a deputy manager, environmental chemist, a weighbridge operator and two general operatives.

A staffing structure for site operations is presented in Figure 7.1. Their qualifications and responsibilities are outlined below:

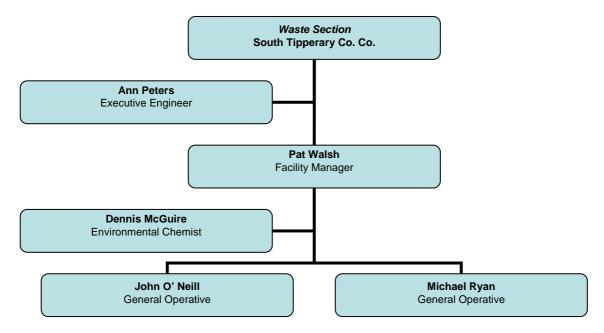


Figure 7.1: Management Structure

Facility Manager:	Pat Walsh
Qualifications:	FAS Waste Management Training Course
	FAS SafePass Course
Responsibilities:	Day-to-Day Operations
	Waste Acceptance
	Environmental Protection

Executive Engineer:	Anne Peters
Qualifications:	B.E. (Chem.)
	FAS Waste Management Training Course
	FAS SafePass Course
Responsibilities:	Oversee infrastructure development and management on site

Deputy Manager:	Dennis McGuire
Qualifications:	B.Sc.
Responsibilities:	Responsible for analytical analysis of monitoring on site

Deputy Manager:	Pat O' Dwyer					
Qualifications:	FAS Waste Management Training Course					
	FAS SafePass Course					
Responsibilities:	Deputy for the Facility Manager, has the same responsibilities					
	Day-to-day operations					
	Waste acceptance					
	Environmental protection					

General Operators	John O' Neill and Michael Ryan
Qualifications:	FAS Waste Management Training Course In –house Training Weighbridge operation Telescopic handler Safe Pass Manual handling Instruction on the implication of the waste licence on site staff
Responsibilities:	Weighing Waste Acceptance Records Cash Duty General house keeping

Staff will be present on site during operational hours to supervise the waste disposal, deal with any emergency that arises and to prevent unauthorised entry into the site. The Facility Manager, or appointed deputy, must be on site during opening hours.

The primary goal of all training is to ensure that there is awareness at all levels of:

- the importance of compliance with conditions of the licence
- the potential environmental effects of work activities
- individual roles and responsibilities in achieving compliance with the waste licence
- the environmental benefits of improved performance
- the Health, Safety & Welfare at Work Act.

7.1.1 Training of Personnel

It will be the responsibility of the Manager to ensure that all staff receives training in relevant areas/tasks, including:

- instruction and operation of the machinery
- operation of the weighbridge and computer system
- training for specific functions

The Manager shall also ensure that all staff receives general training, including:

- instruction in manual handling
- the use of fire extinguishers
- FAS SafePass Course
- First Aid training

It is also the responsibility of the Manager to ensure that site staff are aware of the terms of the waste licence at the facility and the responsibility of each staff member to maintain specific terms of the waste licence. It is the responsibility of the facility manager to ensure that each staff member is aware of his or her specific function.

The Health and Safety Officer makes regular visits to the site, to promote awareness of safety issues and to audit the site. Any suggested improvements are implemented as soon as possible.

7.1.2 Records for the Training and Awareness Programme

- A training records file is kept at the site office
- All relevant operational procedures and documentation relevant to the licence shall be kept at the facility office and updated regularly
- All staff shall be made aware of the existence of such documents.

7.2 Financial Provisions

The county council have the funds available to them to complete the aftercare and restoration of the site in the event of the site closure.

The aftercare and restoration plan was submitted to the Agency in attachment G.1 of the Waste Licence application.

Appendix 1 Noise Monitoring Results

South Tipperary County Council

Cashel Civic Amenity and Waste Transfer Station Waller's Lot, Cashel, County Tipperary

Annual Environmental Noise Survey

Report Date:

16th November 2009

EURO environmental services
Unit 35A, Boyne Business Park, Drogheda, Co Louth

Report No. 4190/M06

1.0 Introduction

EURO environmental services were commissioned by Louise Ryan of South Tipperary County Council to conduct an environmental noise survey at the Cashel Civic Amenity and Waste Transfer Station, Waller's Lot, Cashel, Co. Tipperary. The noise survey was carried out on three pre-determined perimeter-monitoring points on the 29th October 2009 by Victor Olmos of EURO environmental services as per requirement of Schedule D.3 of Waste Licence No. W0200-01.

2.0 Duration and Measurements of Surveying

The survey was carried out between 9:28 to 11:05 on Thursday the 29th of October 2009. The following measurements were carried out at each site:

- Daytime Broadband measurements L(A)_{eq}, L(A)₁₀, L(A)₉₀, L(A)₅₀, L(A)₁ and L(A)₉₉ over a 30 minute period.
- Daytime 1/3 Octave Band measurements over a 30 minute period in the range 25Hz to 16kHz.

3.0 Weather Conditions

Weather conditions were overcast and calm with a slight breeze. Temperatures ranged between 13-14 $^{\circ}$ C during the monitoring.

4.0 Location of Monitoring Points

N1 was located on hard ground along the north eastern corner of the site; 30 metres away from waste building and 1 metre away from boundary fence.

N2 was located on hard ground along the north western corner of the site; 35 metres away from waste building and 2 metres away from boundary fence.

N3 was located on hard ground at the entrance to the site, adjacent to residential dwelling and approximately 25m from the main Cashel Road and 40m from to closest neighbour's house.

5.0 Activities on Site

Activities on site continued as normal during the daytime survey. Vehicles entered and left the site, waste being unloaded in the recycling area and compactor lorry being loaded.

6.0 Methodology

The noise survey was carried out in accordance with ISO 1996/1/2/3 – Acoustics – Description and Measurement of Environmental Noise and The Environmental Noise Survey Guidance Document issued by the EPA.

Reference was also made to the guidance note issued by the Environmental Protection Agency for the assessment of noise from licensed facilities.

7.0 Equipment

The equipment used was a Bruel & Kjaer 2250 serial No. 2463166 integrating sound pressure meter, with selective 1:1 or 1:3 octave band measurements.

The meter was fixed to a tripod 1.3 meters above ground level and the microphone was protected using a windshield. The microphone cartridge type was BK4189, serial number 2457949 with open circuit sensitivity level of 53.2 mV per Pa.

8.0 Calibration

Calibration was carried out on site using an acoustic calibrator at 94dBA. The meter was calibrated before and after the monitoring round.

Day Time Measurements 9.0

Monitoring Point	Location	Date/ Time Sampling Interval	Sampling Interval	L(A)eq L(A) ₁₀ L(A) ₉₀	L(A)10	L(A) ₉₀	Comments
			minutes				
Z	North eastern corner	29/10/2009	30	51	53	47	Main sources of noise at this location were produced by reverse beeping sirens, engine noise from plant on site and a lorry unloading waste. Interference noise included birds singing and traffic movements on nearby road.
Z	North western corner	29/10/2009 9:28	30	55	28	51	Main noise sources at this location were produced by reverse beeping sirens, engine noise, vehicles entering and exiting the recycling area, an excavator in operation within the waste building loading a compactor trailer. Interferences included birds singing; a helicopter flying overhead and traffic movements on nearby road.
N3	At entrance to site, adjacent to residential dwelling and main Cashel Rd.	29/10/2009 10:35	30	20	28	51	Main source of noise was produced by vehicles entering and exiting site (3 cars + 1 HGV). No noise audible from recycling facility. Interference noise included traffic movements on adjacent road and roundabout.

10.0 Third Octave Noise Measurements

Third octave noise monitoring results are attached in the Appendix and are used to identify prominent tonal components in noise. Tonal noise components were detected at monitoring location N1 at frequency of 25Hz (67.8 dB). This tonal noise component may be attributable to plant operating in close vicinity to this monitoring location.

11.0 Interference

Traffic had an influence on monitoring location N3 which was located close to the main Cashel Rd and the N8. 72 Cars and 11 HGV's passed while the monitoring was being conducted at monitoring location N3.

12.0 Summary and Conclusions

Noise levels were determined at three monitoring points around the Cashel Civic Amenity and Waste Transfer site. The EPA recommend a day time noise limit of 55 dB(A).

Monitoring location N3 was above the 55 dB(A) limit, with reading of 56 dB(A). Elevated noise levels at this location are due to frequent traffic movements in the vicinity of this monitoring location.

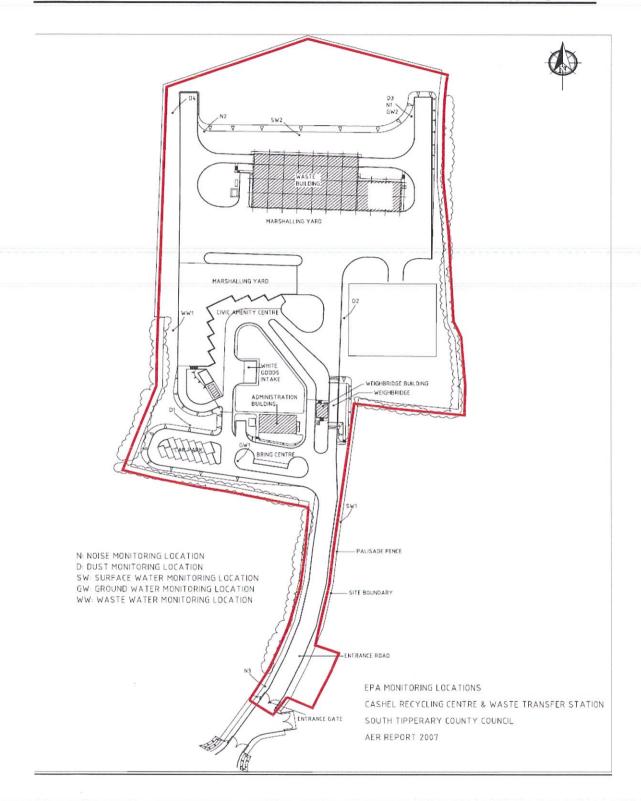
Aadil Khan

Environmental Technical Manager

16th November 2009

Victor Olmos

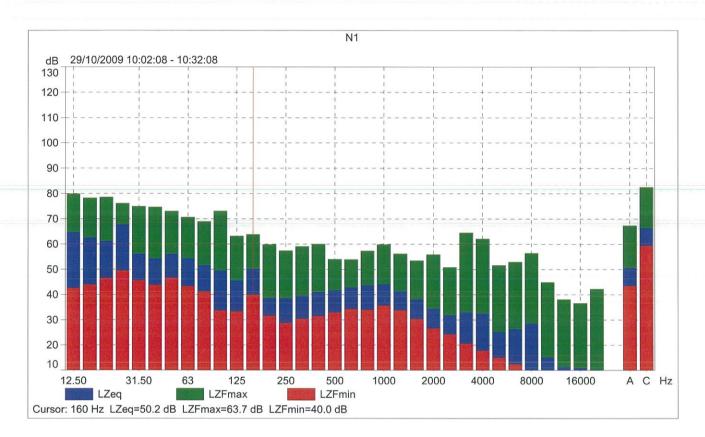
Environmental Technician



Appendix 1: Broadband and 1/3 Octave Monitoring Data

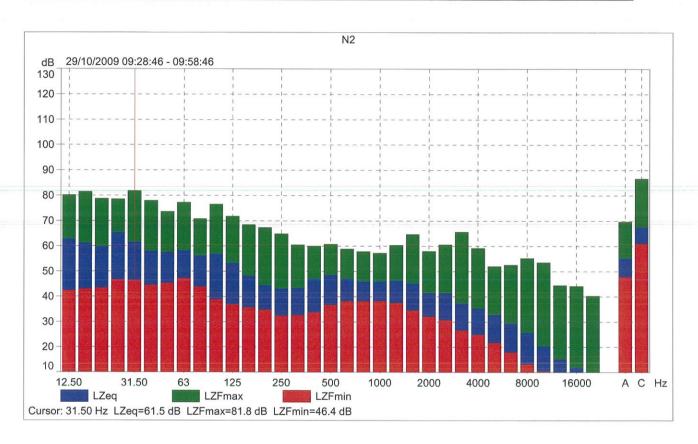


	Start time	End time	Overload [%]	LAFmax [dB]	LAFmin [dB]	LAeq [dB]	LAF10 [dB]	LAF90 [dB]	LCpeak [dB]
Value			0.00	67.3	43.5	50.7	52.9	47.3	90.9
Time	10:02:08	10:32:08							10:09:29
Date	29/10/2009	29/10/2009							29/10/2009

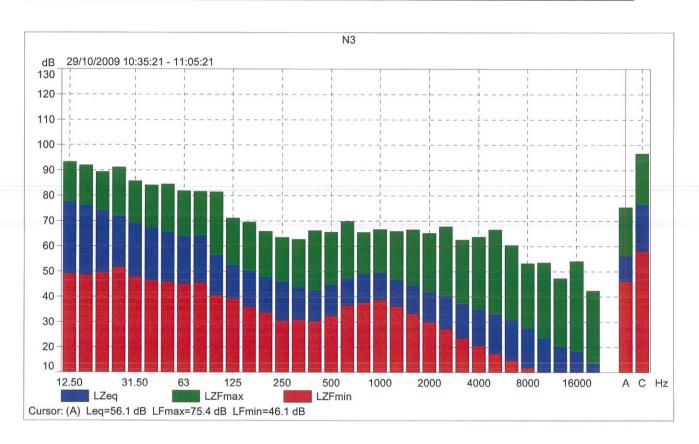


N2

	Start	End	Overload	LAFmax	LAFmin	LAeq	LAF10	LAF90	LCpeak
	time	time	[%]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
Value			0.00	69.7	47.8	55.1	57.5	50.8	97.8
Time	09:28:46	09:58:46							09:33:36
Date	29/10/2009	29/10/2009							29/10/2009



	Start	End	Overload	LAFmax	LAFmin	LAeq	LAF10	LAF90	LCpeak
	time	time	[%]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]
Value			0.00	75.4	46.1	56.1	57.8	51.1	104.3
Time	10:35:21	11:05:21							10:43:12
Date	29/10/2009	29/10/2009							29/10/2009



Appendix 2 Electronic AER



AER Returns Worksheet

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	3.13
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