

# SOUTH TIPPERARY COUNTY COUNCIL



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

**2010**

Waste Licence Register No. W0200-01

**Prepared by:**

South Tipperary County Council  
Emmet Street  
Clonmel

**March 2011**

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## 1. INTRODUCTION

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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 2010

### 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 2010.

This is the fifth 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

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

<b>Name:</b>	Mr. Pat O' Dwyer
<b>Job Title:</b>	Deputy Site Manager:
<b>Telephone No:</b>	(052) 34882
<b>Fax No:</b>	(052) 34391

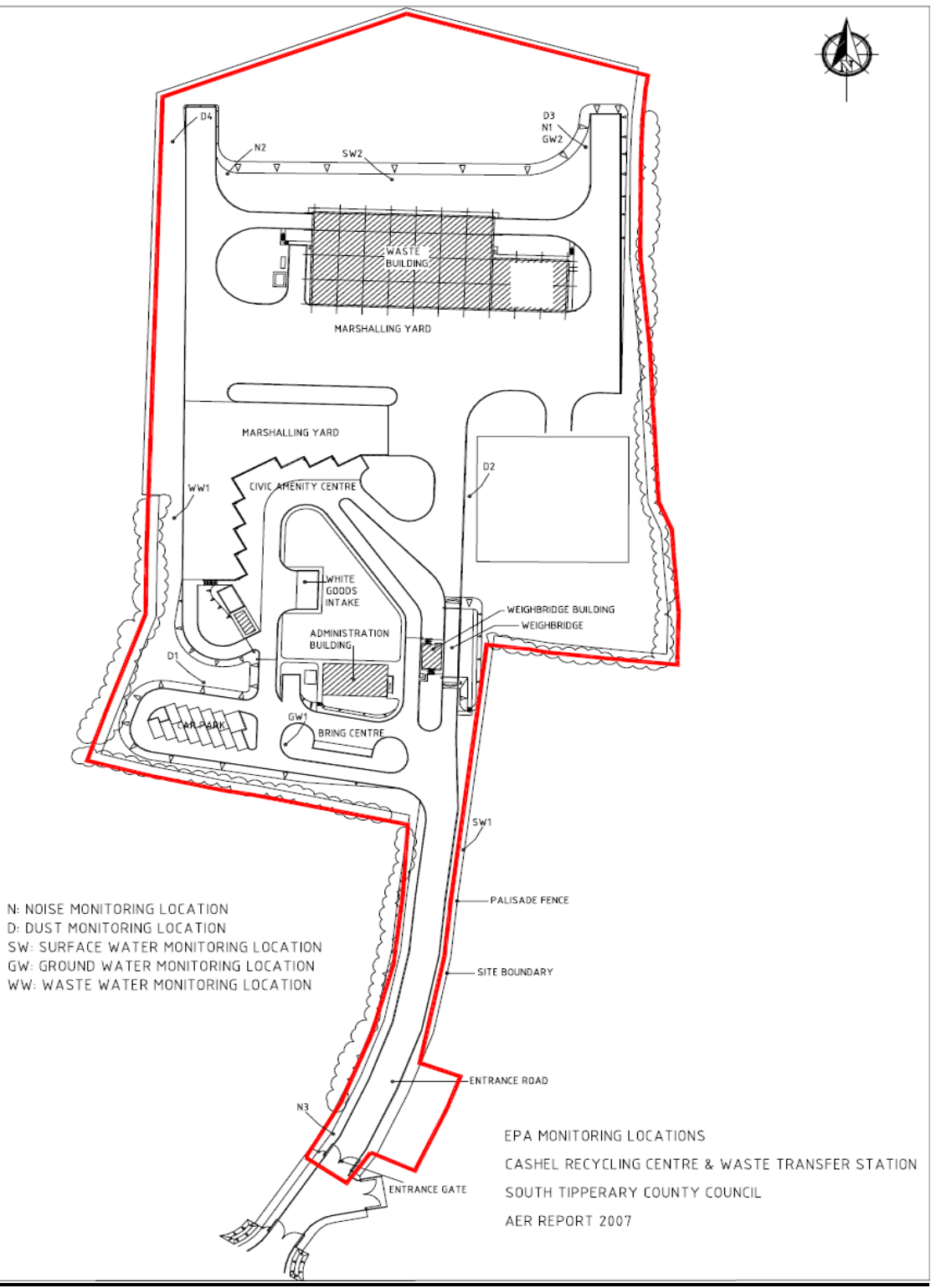
<b>Name:</b>	Ms. Ann Peters
<b>Job Title:</b>	Executive Engineer
<b>Telephone No:</b>	(052) 34397
<b>Fax No:</b>	(052) 34391

### **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

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

- 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 of 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**

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

## 2.1 Waste Quantity and Composition

The quantity of waste removed from Waller's Lot in 2010 is outlined in Table 2.2.

**Table 2.2: Detailed Quantities of Waste removed from Waller's Lot 2010**

Waste Type	EWC Code	Quantity of Waste (Tonnes)
Batteries	16 06 01*	1.06
Cardboard	15 01 01	20.90
C + D	17 09 04	125.86
Cooking Oil	20 01 25	0.38
Aluminium Cans	19 08 14	0.84
Dry Recyclables	20 03 01	1631.46
Fluorescent tubes	20 01 21	0.46
Glass	20 01 02	33.56
Household Hazardous	20 01 27 / 20 01 37	1.66
Lead Acid Batteries	16 06 01	5.26
Mattresses	20 03 07	24.58
Metal	20 01 40	141.56
Oil Filters	16 01 07	0
Tyres	16 01 03	15.36
Household Waste	20 03 01	6308.32
Newsprint	20 01 01	41.84
Steel Food Cans	15 01 04	2.90
Timber	20 01 37* / 20 01 38	353.18
WEEE	20 01 35* / 20 01 36	125.86
Waste Oil	13 08 99	2.80
Textiles	20 01 10 / 20 01 11	34.76
Plaster Board\Gypsum	17 08 02	48.66
Plate Glass	17 02 02	15.92
Plastic Bottles	15 01 02	0
Farm Plastic	15 01 02	127.60
Gas Cylinders	15 01 11	0
	<b>Total</b>	<b>9064.78</b>



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### 3 MONITORING AND EMISSIONS

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The monitoring carried out during 2010 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*

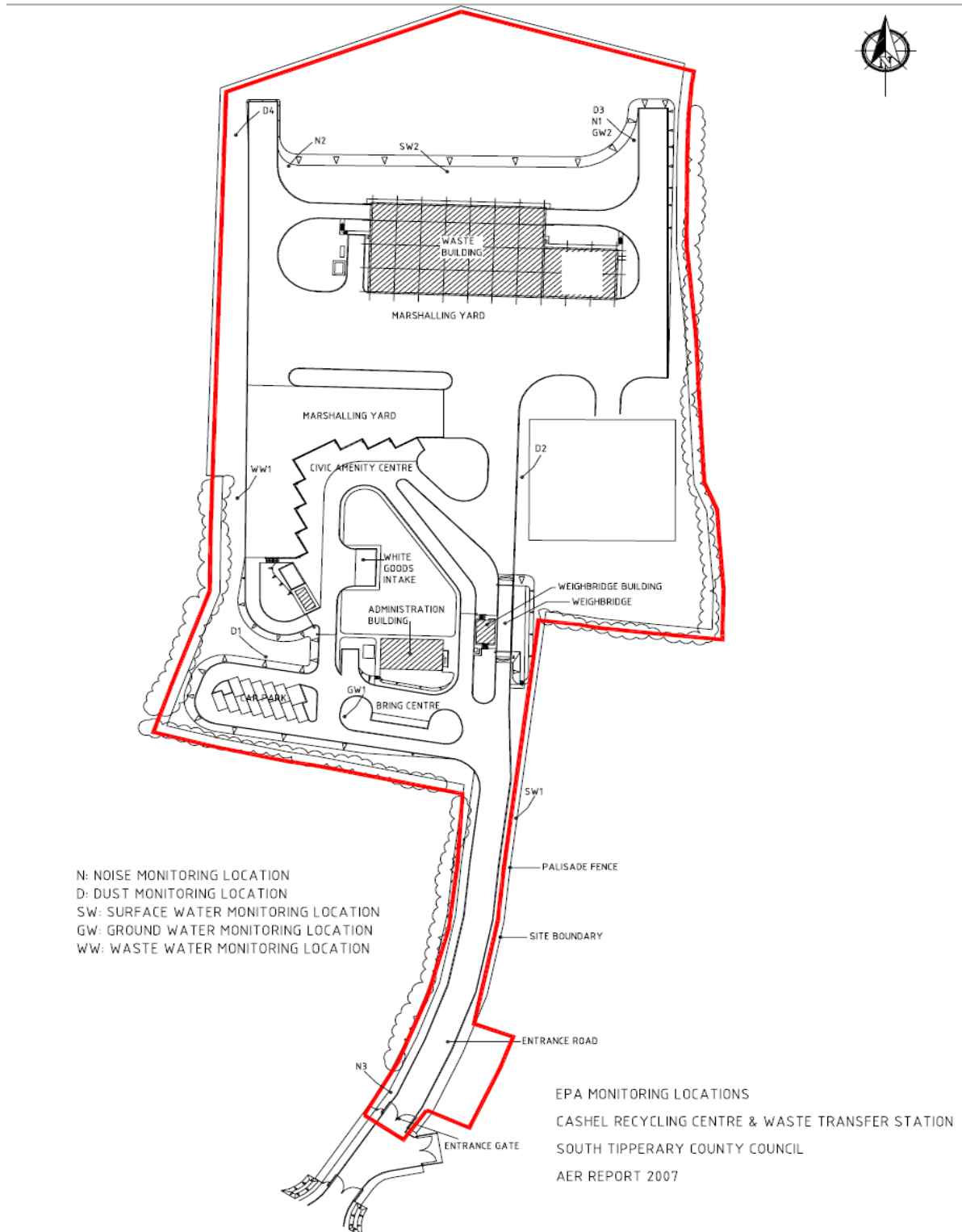
Dust deposition monitoring was carried out in July and August. The results are shown in Table 3.1 below.

Dust Monitoring Point	Emission Limit	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Median
D1 (mg/m <sup>2</sup> /day)	350		2	14	N/A	8
D2 (mg/m <sup>2</sup> /day)	350		2	8	N/A	5
D3 (mg/m <sup>2</sup> /day)	350		2	5	N/A	3.5

Dust levels on site were well below limit value of 350 mg/m<sup>2</sup>/day at each of the monitoring stations during the monitoring period.

During the last quarter all of our dust pots were vandalised and we are unable to provide the third result. These pots and holders will be replaced.

## 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 25<sup>th</sup> June 2010. 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**

<b>Monitoring Point</b>	<b>L(A)<sub>EQ</sub></b>	<b>Comments</b>
N1	43.8	Main source of noise at this location were produced by reverse beeping sirens, engine noise from plant on site and an excavator operating approx 80mtrs from monitoring location. Interference noise came from birds singing and music being played in the distance.
N2	42	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 waste and people talking. Interferences included birds singing; and music being played in the distance.
N3	52.1	Main source of noise was produced by cars and trucks driving to and from the site (10cars) Vehicles idling at the weighbridge and trolleys being unloaded in the recycling centre.. Interference noise included traffic movements on adjacent road and roundabout and music being played very loudly from a neighbouring house.

### 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 2010	Q2 2010	Q3 2010	Q4 2010	Median
BOD (mg/l)	10	2.37	n/a	n/a	2.25	2.31
pH	6.0 – 9.0	7.28	n/a	n/a	7.49	7.385
S.Solids (mg/l)	25	10	n/a	n/a	5	7.5
Mineral Oil (mg/l)	5	0.01	n/a	n/a	<0.01	0.01

∴ No flow at SW1 on Sample Dates: 24/6/2010 therefore no sample taken

**Table 3.4 SW2 Surface Water Monitoring Results**

No flow at SW2 on Sample Dates: 24/6/2010 therefore no sample taken

No flow at SW2 on 27/7/2010 therefore no sample taken

Surface Water 2	Emission Limit	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Median
BOD (mg/l)	10	22	n/a	n/a	2.46	12.23
pH	6.0 – 9.0	9.02	n/a	n/a	7.53	8.275
S.Solids (mg/l)	25	902	n/a	n/a	9	455.5
Mineral Oil (mg/l)	5	0.01	n/a	n/a	0.19	0.1

No flow at SW1 on 27/7/2010 therefore no sample taken

### 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 2010	Q2 2010	Q3 2010	Q4 2010	Median
pH	6.0 - 10.0	7.05	7.1	n/a	7.28	7.1
Temperature ( C )	25	-	19	n/a	8.9	13.95
BOD (mg/l)	500	80.8	65.2	n/a	24.7	65.2
Suspended Solids (mg/l)	500	60.0	44	n/a	17	44
Fats, Oils, Grease (mg/l)	100	3	n/a	n/a	4	3.5
Ammoniacial Nitrogen (mg/l)	50	22.17	57	n/a	44.9	44.9

### 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**

Ground Water 1	Emission Limit	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Median
Visual Inspection/Odour	No abnormal	No Odour Detected	No Odour detected Light brown colour (sediment)	n\	No Odour Detected	
Groundwater Level (mts)		Nm	8	n\	Nm	8
Conductivity (us/cm)	1500	698	738	n\	749	738
pH	6.0 – 9.0	7.06	7.76	n\	7.22	7.22
Temperature ( C )	25	-	17.7	n\	10.7	14.2
Mineral Oil (mg/l)	5	0.01	<0.01	n\	<0.010	0.01

**GW 1 Sample Date: 27/7/2010 borehole dry after purge.**

**Table 3.7 GW2 Groundwater Monitoring Results**

Ground Water 2	Emission Limit	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Median
Visual Inspection/Odour	No abnormal	No Odour detected	No Odour detected brown colour (sediment)	n\	No Odour detected	
Groundwater Level (mts)		Nm	3	n\	Nm	3
Conductivity (us/cm)	1500	666	708	n\	561	666
pH	6.0 – 9.0	6.89	7.2	n\	7.15	7.2
Temperature ( C )	25	Nt	12.8	n\	10.7	11.75
Mineral Oil (mg/l)	5	0.01	<0.01	n\	<0.01	0.01

**GW 2 Sample Date: 27/7/2010 borehole dry after purge.**

**3.6 Tank and pipeline Testing**

**Bund Tests Table 3.8 and 3.9**

**Cashel Recycling Centre & Waste Transfer Station**

**CONCRETE BUND INSPECTION & TEST**

**Bund No.1  
Waste Oil Bund**

<b>Contractor:</b>	South Tipperary Co.Co.		
<b>Date:</b>	14 <sup>th</sup> and 15 <sup>th</sup> January 2010		
<b>Drawing Reference: (incl revision)</b>	2003-024-03-035 Rev 0		
<b>Location:</b>	Civic Amenity Area		
<b>Dimensions:</b>	5.5m x 2.6m x 0.5m deep with 300mm sq sump 300mm deep		
<b>Concrete Mix:</b>	C35N20	<b>Reinforcement:</b>	T8 & T12
<b>Date of Test:</b>	January 2010	<b>Weather:</b>	Dry

**1.4. 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.

<b>Signed:</b>	<p align="center">-----</p> <p align="center"><i>Anne Peters Executive Engineer</i></p> <p align="center"><i>15/01/2010</i></p>
<b>Dated:</b>	



**Cashel Recycling Centre & Waste Transfer Station**

**CONCRETE BUND INSPECTION & TEST**

**Bund No.2  
Diesel Tank Bund**

<b>Contractor:</b>	South Tipperary Co.Co		
<b>Date:</b>	14 <sup>th</sup> and 15 <sup>th</sup> January 2010		
<b>Drawing Reference: (incl revision)</b>	2003-024-03-034 Rev 0		
<b>Location:</b>	Waste Transfer Station Area		
<b>Dimensions:</b>	3.5m x 2.5m x 0.5m deep with 300mm sq sump 300mm deep		
<b>Concrete Mix:</b>	C35N20	<b>Reinforcement:</b>	T8 & T12
<b>Date of Test:</b>	January 2010	<b>Weather:</b>	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 2010**

Date 15/1/10- 15/1/11	Consumption in kWh
<b>Jan-10</b>	<b>3700</b>
<b>Feb-10</b>	<b>3050</b>
<b>March-10</b>	<b>3300</b>
<b>Apr-10</b>	<b>21450</b>
<b>May-10</b>	<b>3525</b>
<b>Jun-10</b>	<b>3525</b>
<b>July-10</b>	<b>4200</b>
<b>Aug-10</b>	<b>4300</b>
<b>Sept-10</b>	<b>4300</b>
<b>Oct-10</b>	<b>3150</b>
<b>Nov-10</b>	<b>4200</b>
<b>Dec-10</b>	<b>4600</b>
<b>Total</b>	<b>63300</b>

**Table 4.1 Diesel Usage 2010 Ltrs**

Jan 10	420
Feb 10	440
Mar 10	540
Apr 10	595
May 10	300
June 10	520
July 10	400
Aug 10	532
Sept 10	593
Oct 10	400
Nov 10	400
Dec 10	400
Average p\month	462

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## **4 SITE DEVELOPMENT / INFRASTRUCTURAL WORKS**

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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 and to build a Shed for the storage of WEEE in 2011.

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## **5 ENVIRONMENTAL INCIDENTS AND COMPLAINTS**

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### **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.

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## 6 ENVIRONMENTAL MANAGEMENT SYSTEM

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### 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	<b>Emergency Response Procedure</b> 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: <ul style="list-style-type: none"><li>• significant spillage</li><li>• major fire/explosion</li><li>• flooding / structural damage</li><li>• major injury or dangerous occurrence</li></ul>
Revision Date & No.	April 2010 Rev. 3
Procedure Title Summary	<b>Corrective Action Procedure</b> To ensure that the appropriate corrective action is taken in the event of an incident on-site, where an incident can be defined as: <ul style="list-style-type: none"><li>• an emergency</li><li>• any emission which does not comply with the requirements of this licence (W0200-01)</li><li>• any trigger level specified in this licence which is attained or exceeded</li><li>• any indication that environmental pollution has, or may have, taken place</li></ul>
Revision Date & No.	April 2010 Rev. 2
Procedure Title Summary	<b>Awareness and Training Procedure</b> 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	<b>On-Site Communication Procedure</b> 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	<b>External Communication Procedure</b> To ensure that all communications regarding the facility are correctly directed to be addressed by the correct personnel.
Revision Date & No.	April 2010 Rev. 3

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 **Metal Recovery – Waste Acceptance Procedure**  
Summary To formalise the system of receiving, recording the delivery and acceptance of waste metal for recovery at Waller's Lot.

Revision Date & No. February 2007 Rev. 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	<b>Environmental Monitoring Procedure</b> To formalise the system of environmental monitoring on-site for: <ul style="list-style-type: none"> <li>• Surfacewater</li> <li>• Groundwater</li> <li>• Wastewater</li> <li>• Dust</li> <li>• Noise</li> </ul>
Revision Date & No.	November 2007 Rev.2
Procedure Title Summary	<b>Site Inspection Procedure</b> 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 Summary	<b>Nuisance Inspection Procedure</b> 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 Summary Revision Date & No.	<b>Self Compacting Trailer Operating Procedure</b> To ensure the safe operation of the waste compacting trailer January 2010 Rev. 1
Procedure Title Summary Revision Date & No.	<b>Waste Conveyor Operation Procedure</b> To ensure the safe operation of the waste conveyor January 2010 Rev. 1
Procedure Title Summary Revision Date & No.	<b>Compaction Skip Procedure</b> To ensure the safe operation of the Compactor November 2010 Rev. 0
Procedure Title Summary Revision Date & No.	<b>Telescopic Handler Procedure</b> To ensure the safe operation of the Telescopic Handler November 2010 Rev. 0

## 6.2 OBJECTIVES AND TARTGETS

<b>Objective 1</b>	<b>Continue Advertising campaign</b>	
Target	I	
	<b>Tasks</b>	<b>Timeframe</b>
	1. Advertise facilities in local paper. Ongoing	March 2012
Responsibility	Facility manager & PAO	
Resources\Comments		

<b>Objective 2</b>	<b>Review all aspects of Health and Safety in relation to the facility</b>	
Target	To carry out a review in relation to all aspects of health and safety concerning this facility	
	<b>Tasks</b>	<b>Timeframe</b>
	1. Review Site specific safety statement	July 2012
	2. Carry out any recommendations for reduction of risk outlined in Safety Statement.	July 2012
Responsibility	Facility manager & RE	
Resources\Comments		

<b>Objective 3</b>	<b>Improve energy efficiency on site</b>	
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.	
	<b>Tasks</b>	<b>Timeframe</b>
	1. Carry out energy audit in accordance with guidance published by the Agency – ‘Guidance note on energy efficiency auditing’.	March 2012
	2. Implement audit findings and review. Ongoing	January 2012
Responsibility	Facility manager & E.E	
Resources\Comments	Audit Completed	

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



<b>Objective 5</b>	<b>Implementation of a management and reporting system</b>	
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	
	<b>Tasks</b>	<b>Timeframe</b>
	1. Review and update the EMS 2010	March 2012
	2. Review and update the schedule of objectives and targets 2010	March 2012
	3. Implement reviewed EMP	
	4. Review and update the Corrective Action Procedure	March 2012
	5. Review and update the Awareness and Training Programme See Chapter 6	
	6. Prepare an AER	March 2012
Responsibility	Facility Manager	
Resources\Comments	Completed	

<b>Objective 6</b>	<b>Expand the range of products accepted for recycling</b>	
Target	Expand the range of products accepted	
	<b>Tasks</b>	<b>Timeframe</b>
	1. Investigate other materials	Ongoing
	2. Hard Plastics	July 2011
Responsibility	Facility Manager	
Resources\Comments		

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

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

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

<b>Objective 10</b>	<b>Reduction in Resource usage</b>	
Target	To reduce usage of water and power on site	
	<b>Tasks</b>	<b>Timeframe</b>
	1. Carry out Energy audit	March 2012
	2. Implement recommendations of energy audit	Ongoing
Responsibility	Facility manager	
Resources\Comments	Regular monitoring of site water meter .	

<b>Objective 11</b>	<b>Site Development</b>	
Target	To Increase the Size and Scope of the Site.	
	<b>Tasks</b>	<b>Timeframe</b>
	1. To Fully concrete bulking area install new loading bays and build a warehouse for housing all WEE products.	March 2012
Responsibility	Facility manager\Site Engineer	
Resources\Comments		

## 7 FACILITY RESOURCES

### 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:

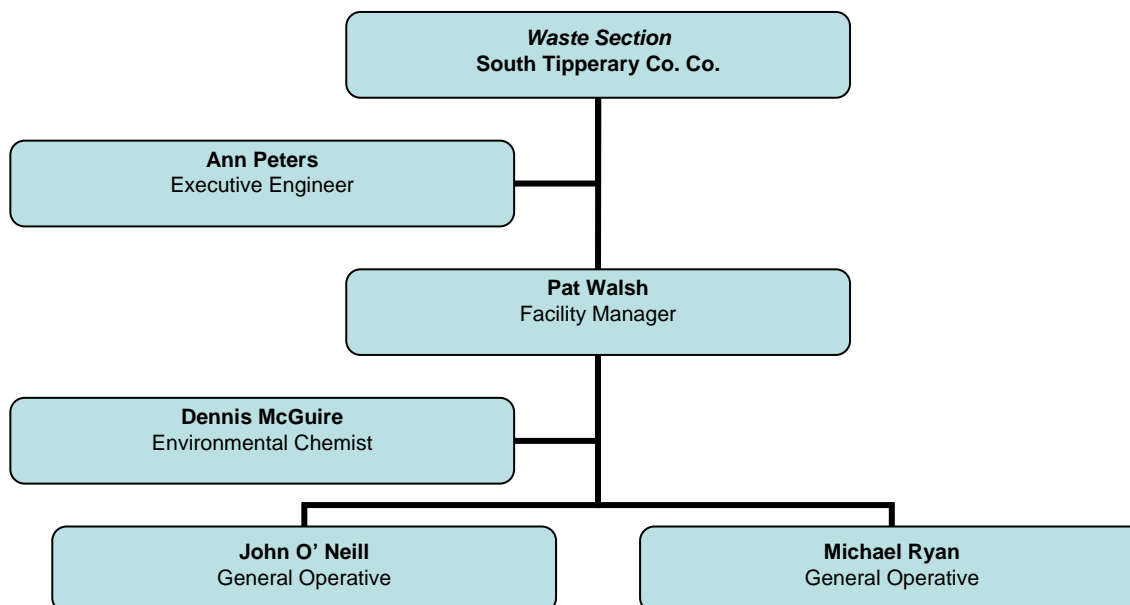


Figure 7.1: Management Structure

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

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

<b>Deputy Manager:</b>	<i>Dennis McGuire</i>
<b>Qualifications:</b>	B.Sc.
<b>Responsibilities:</b>	Responsible for analytical analysis of monitoring on site

<b>Deputy Manager:</b>	<i>Pat O' Dwyer</i>
<b>Qualifications:</b>	FAS Waste Management Training Course FAS SafePass Course
<b>Responsibilities:</b>	Deputy for the Facility Manager, has the same responsibilities <ul style="list-style-type: none"> <li>• Day-to-day operations</li> <li>• Waste acceptance</li> <li>• Environmental protection</li> </ul>

<b>General Operators</b>	John O' Neill and Michael Ryan
<b>Qualifications:</b>	FAS Waste Management Training Course In -house Training <ul style="list-style-type: none"> <li>• Weighbridge operation</li> <li>• Telescopic handler</li> <li>• Safe Pass</li> <li>• Manual handling</li> <li>• Instruction on the implication of the waste licence on site staff</li> </ul>
<b>Responsibilities:</b>	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 I

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

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**Annual Environmental Noise Survey**

**Report Date:**

25<sup>th</sup> June 2010

EURO environmental services

Unit 35A, Boyne Business Park, Drogheda, Co Louth

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Report No. 4190/M09

## 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 16<sup>th</sup> June 2010 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 9:56 and 11:31 on Wednesday the 16<sup>th</sup> of June 2010. 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 sunny and warm.

## 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.

## 9.0 Day Time Measurements

Monitoring Point	Location	Date/ Time	Sampling Interval minutes	L(A) <sub>eq</sub>	L(A) <sub>10</sub>	L(A) <sub>90</sub>	Comments
N1	North eastern corner	16/06/2010 10:28	30	43.8	44.2	32.7	Main sources of noise at this location were produced by reverse beeping sirens, engine noise from plant on site and an excavator operating approx. 80m from noise monitoring location. Interference noise included birds singing and music being played in the distance.
N2	North western corner	16/06/2010 9:56	30	42.0	43.2	36.7	Main noise sources at this location were produced by engine noise, vehicles entering and exiting the recycling area, an excavator dumping waste at the recycling centre, people talking at the recycling centre and reverse beeping sirens. Interferences included birds singing and music being played in the distance.
N3	At entrance to site, adjacent to residential dwelling and main Cashel Rd.	16/06/2010 11:01	30	52.1	53.3	40.7	Main source of noise was produced by vehicles entering and exiting site (10 cars). Vehicles idling at the weigh bridge and trolleys being unloaded in the recycling centre. Interference noise included traffic movements on adjacent road and roundabout and music being played loudly from neighbouring houses.

### 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. No tonal noise was detected during this monitoring interval.

### 11.0 Interference

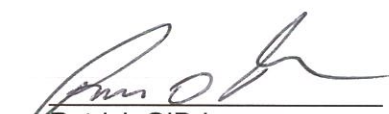
Traffic had an influence on monitoring location N3 which was located close to the main Cashel Rd and the N8. 10 Cars passed while the monitoring was being conducted at monitoring location N3.

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### 12.0 Summary and Conclusions

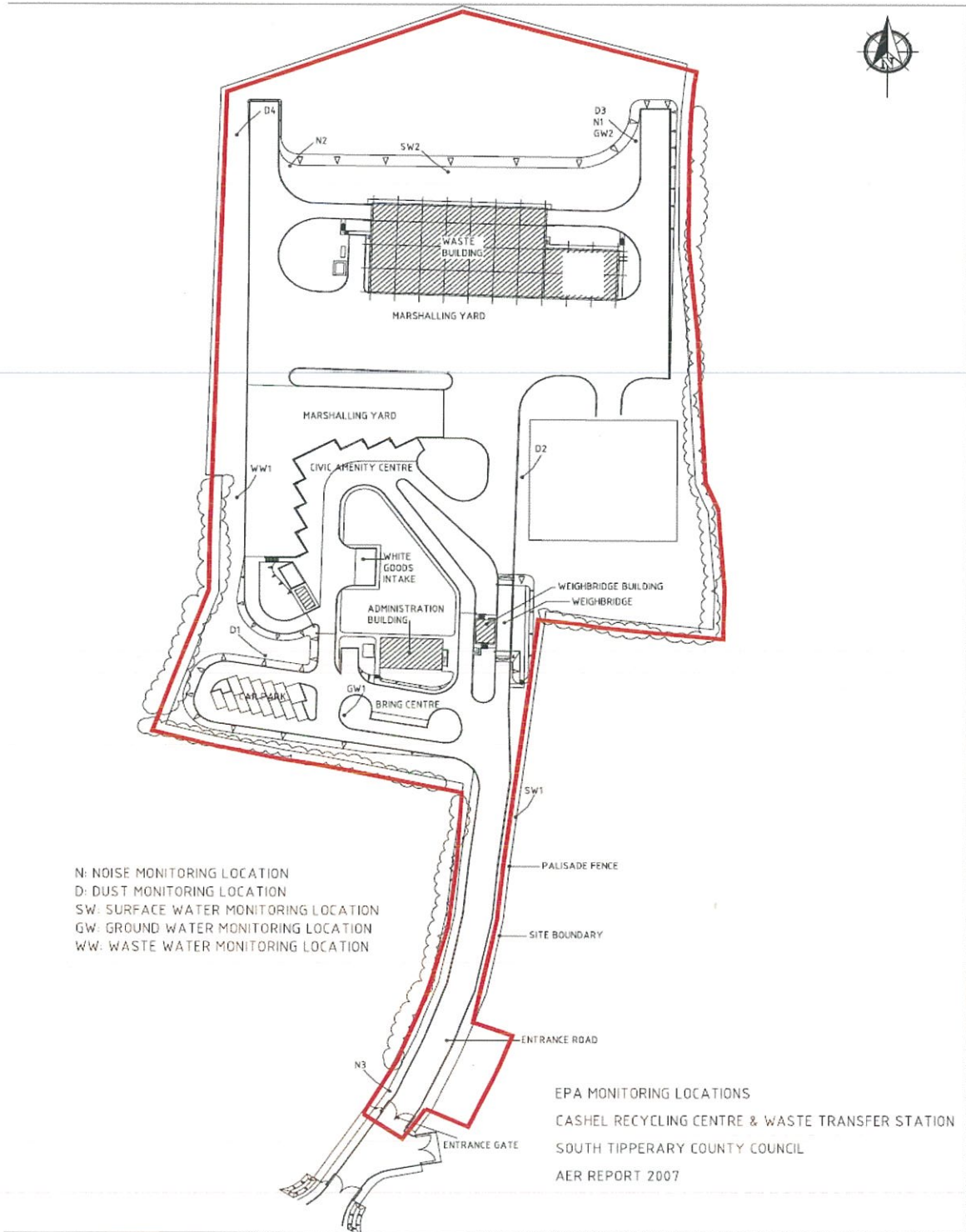
Noise levels were determined at three monitoring points around the Cashel Civic Amenity and Waste Transfer site. The EPA recommend a day time noise limit of 55 dB(A).

In conclusion the noise levels measured at points N1, N2 and N3 are all within the allowable daytime noise level of 55 dB(A).

  
Patrick O'Brien  
Environmental Technician

25<sup>th</sup> June 2010

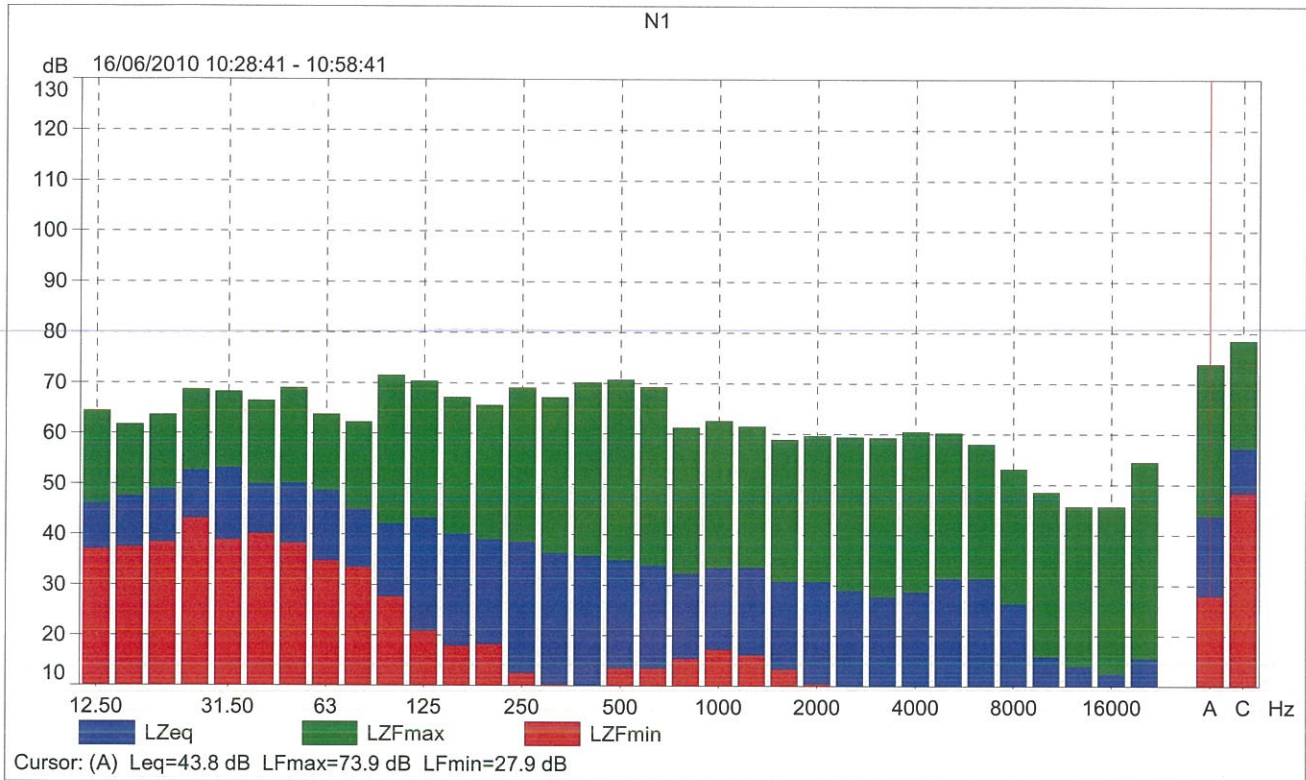
  
Aadil Khan  
Environmental Technical Manager



**Appendix 1: Broadband and 1/3 Octave Monitoring Data**

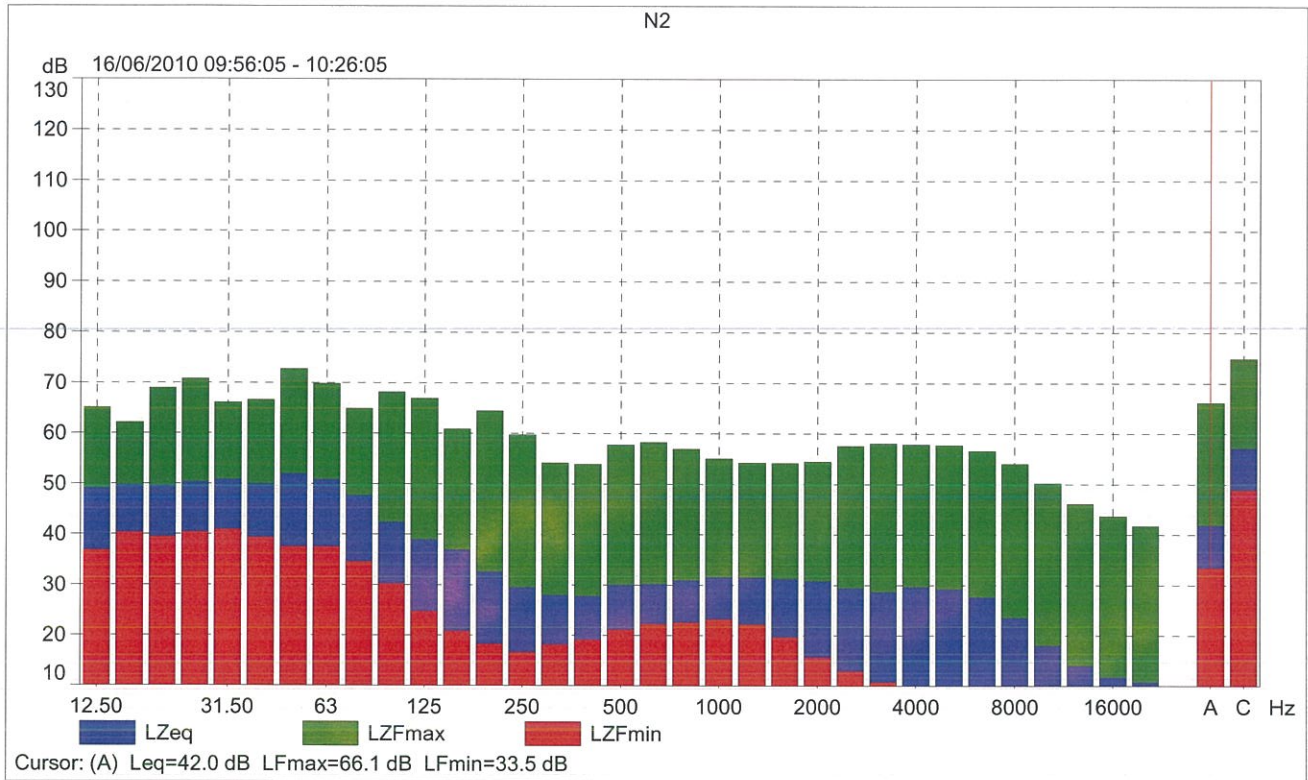
# N1

	Start time	End time	Overload [%]	LAFmax [dB]	LAFmin [dB]	LAeq [dB]	LAF10 [dB]	LAF90 [dB]	LCpeak [dB]
Value			0.00	73.9	27.9	43.8	44.2	32.7	101.0
Time	10:28:41	10:58:41							10:58:26
Date	16/06/2010	16/06/2010							16/06/2010



# N2

	Start time	End time	Overload [%]	LAFmax [dB]	LAFmin [dB]	LAeq [dB]	LAF10 [dB]	LAF90 [dB]	LCpeak [dB]
Value			0.00	66.1	33.5	42.0	43.2	36.7	85.3
Time	09:56:05	10:26:05							10:03:54
Date	16/06/2010	16/06/2010							16/06/2010



# N3

	Start time	End time	Overload [%]	LAFmax [dB]	LAFmin [dB]	LAeq [dB]	LAF10 [dB]	LAF90 [dB]	LCpeak [dB]
Value			0.00	73.8	34.9	52.1	53.3	40.7	100.6
Time	11:01:30	11:31:30							11:31:07
Date	16/06/2010	16/06/2010							16/06/2010

