

ANNUAL ENVIRONMENTAL REPORT
2009

GUARDIAN SILVER LINING ,
UNIT 61 , COOKSTOWN INDUSTRIAL ESTATE ,
TALLAGHT , DUBLIN 24 .

EPA WASTE REGISTER NUMBER W0122-01

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REPORTING PERIOD

The reporting period for this licence is from 01 January 2009 to 31st December 2009.

WASTE ACTIVITIES CARRIED OUT AT THE FACILITY.

The following are the waste activities carried out by Guardian Silver Lining in accordance with the Fourth Schedule of the Waste Management Act 1996 .

Class 3 - The Recycling or reclamation of metal compounds:

This activity is limited to the recovery of silver from waste products. The recovery plant processes photochemical waste, (from the photo processing industry and other outlets) to recover silver and the recovery operation involves both an electro-plating step and a precipitation step. The recovered silver sludge, plates and re-usable liquids are sent to Silver Lining , UK.

Class 13 - The 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 .:

This activity is limited to the storage of waste including waste for silver recovery and subsequent transfer of recovered materials.

Attached is Schedule E WASTE ACCEPTANCE AND HANDLING

These are the types and quantities of waste accepted at the facility.

The maximum tonnage of waste that can be accepted at this is 4650 tonnes per annum as stated in the licence.

The tonnage of waste accepted at this facility for the reporting period was 1569.

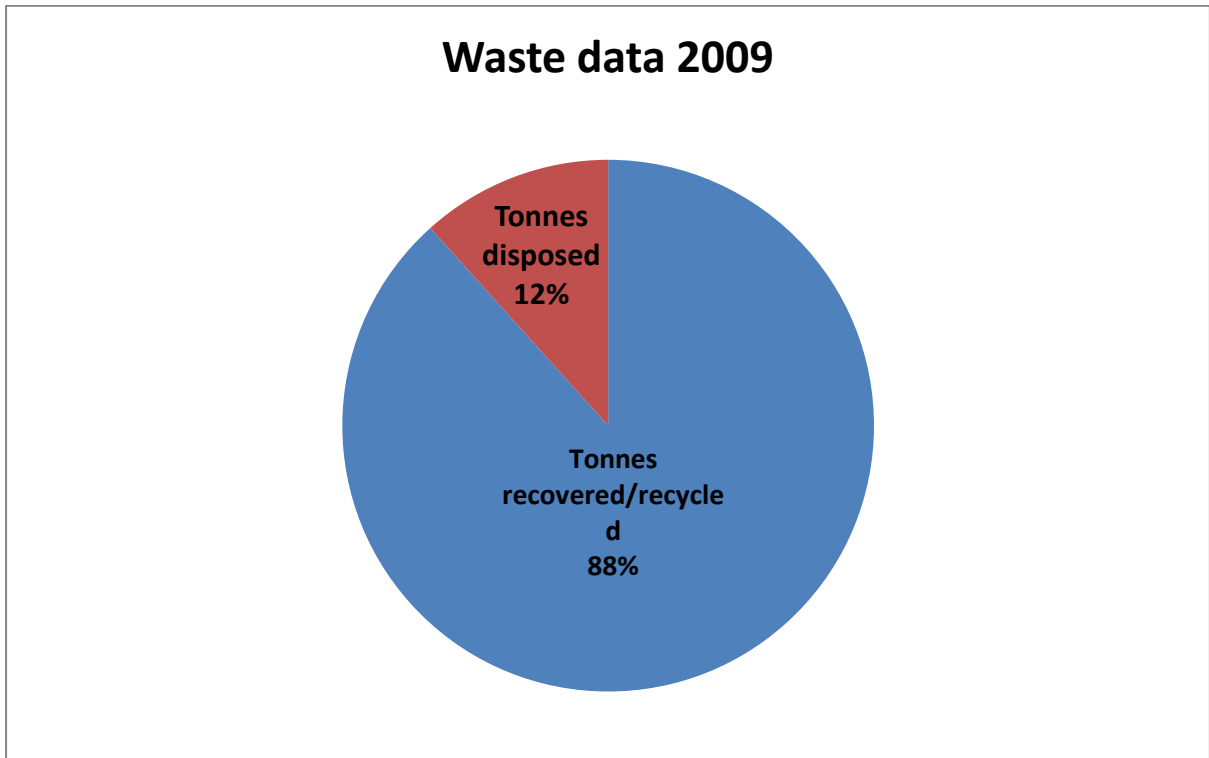
Of this

1386 tonnes were recovered/ recycled.

183 tonnes were disposed.

See pie chart for percentages of wastes recovered / disposed of during the reporting year.

Pie Chart:



EPA licence W0122-01 , AER 2009

Schedule E of Waste Licence W0122-01

E. WASTE ACCEPTANCE AND HANDLING

E.1. Waste Types and Quantities

A detailed inventory of the types and quantities of wastes to be accepted at the facility should be submitted.

TABLE E.1.1 WASTE CATEGORIES AND QUANTITIES

WASTE TYPE	TONNES PER ANNUM	TOTAL (over life of site)
Household	NONE	NONE
Commercial	NONE	NONE
Sewage Sludge	NONE	NONE
Construction and Demolition	NONE	NONE
Industrial Non-Hazardous Liquids	100	NOT APPLICABLE
Industrial Non-Hazardous Sludges	50	
Industrial Non-Hazardous Solids	300	
Hazardous	2500	

Waste Licence Application Form- Recovery/Disposal Activities (other than Landfill)

OTHER WASTES	Check (if accepted)	Additional Information
Plasterboard and Plaster	<input type="checkbox"/> NO	
Dried Paints, Dried Varnish & Dried Lacquer	<input type="checkbox"/> YES	PAINTS ETC LISTED IN 2.1.2. WILL BE LIQUID, SLUDGE, OR DRIED IN TINS ETC.
Foundry Sand & Sand Blasting Residues	<input type="checkbox"/> NO	
Glass	<input type="checkbox"/> YES	IF WITH SILVER CONTENT OR FOR RECOVERY.
Latex & Rubber Solutions	<input type="checkbox"/> NO	
Solid Fully Polymerised Plastics	<input type="checkbox"/> YES	THIS COULD ARRIVE WITH WASTE ELECTRONICS.
Solid Rubber (excluding tyres)	<input type="checkbox"/> NO	
Empty Containers	<input type="checkbox"/> YES	FROM PHOTOGRAPHIC / PRINTING ETC
Hazardous Ferrous and Non-Ferrous Metals	<input type="checkbox"/> YES	WITH SCRAP ELECTRONICS ETC.
OTHER WASTES (APPLICANT TO SPECIFY)	Check (if accepted)	Additional Information
FILM	<input type="checkbox"/>	WASTE FILM AND X RAY
	<input type="checkbox"/>	FILM FOR RECOVERY.
LITHO PLATE	<input type="checkbox"/>	FOR ALUMINIUM
	<input type="checkbox"/>	RECOVERY.
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	

It should be noted that an applicant may be issued with a licence which restricts the type of wastes which may be accepted. The acceptance of wastes outside those set down in the licence will be an offence under s39 of the Waste Management Act as amended.

Attachment E.1 should contain any relevant additional information.

TABLE E.1.3 NON-HAZARDOUS WASTE TYPES

INERT OR INACTIVE WASTE	Check (if accepted)	Additional Information
Subsoil	<input type="checkbox"/> NO	
Topsoil	<input type="checkbox"/> NO	
Brickwork	<input type="checkbox"/> NO	
Stone, Rock and Slate	<input type="checkbox"/> NO	
Clay	<input type="checkbox"/> NO	
Natural Sand	<input type="checkbox"/> NO	
Concrete	<input type="checkbox"/> NO	
Stoneware & China	<input type="checkbox"/> NO	
Solid Road Plantings, Solid Tarmacadam, Solid Asphalt	<input type="checkbox"/> NO	
BIODEGRADABLE WASTE	Check (if accepted)	Additional Information
Wood & Wood Products	<input checked="" type="checkbox"/>	CONTAINS NO PESTICIDES
Paper & Paper Products	<input type="checkbox"/> YES	CONTAINS NO PESTICIDES, PRINTING AND PHOTOGRAPHIC
Vegetable Matter	<input type="checkbox"/> NO	
Non-Infectious Health-Care Waste	<input type="checkbox"/> NO	
Natural & Manmade Fibres	<input type="checkbox"/> NO	
Road Sweepings	<input type="checkbox"/> NO	
Gully Emptyings	<input type="checkbox"/> NO	
Septic Tank Waste	<input type="checkbox"/> NO	
Silt & Dredgings	<input type="checkbox"/> NO	
Boiler Scale	<input type="checkbox"/> NO	
Ash & Cinders	<input type="checkbox"/> NO	
Food Stuffs	<input type="checkbox"/> NO	
Oil/Water Mixtures	<input type="checkbox"/> YES	OIL LISTED IN E.1.2.
Vegetable Oil	<input type="checkbox"/> NO	
Fats, Waxes and Greases	<input type="checkbox"/> YES	WILL BE IN THE WASTE OIL.
Animal Excrement (including paunch contents)	<input type="checkbox"/> NO	
Animal Blood	<input type="checkbox"/> NO	

TABLE E.1.2 HAZARDOUS WASTE TYPES AND QUANTITIES

HAZARDOUS WASTE TYPE	TONNES PER ANNUM	TOTAL, (over life of site)
Waste Oil	120	
Oil filters	20	
Asbestos	NONE	NONE
Sand Mixtures or Mixtures of Sand and Other Absorbent Material	100	
Contaminated Rubble, Soil, etc.	NONE	NONE
Classified Healthcare Waste	NONE	NONE
Pharmaceutical Waste	36	
Cytotoxic Waste	NONE	NONE
Sharps Waste	NONE	NONE
Infectious Wastes	480	
Specified Risk Material	NONE	NONE
Photographic Processing Waste	1680	TREATMENT PLAN KNOWN LIFE PERIOD
Paint and Ink	960	
Batteries	60	
Motor Vehicle Batteries	12	
Incandescent Light Bulbs	60	
OTHER HAZARDOUS WASTE (APPLICANT TO SPECIFY)		
DRY CLEANING RESIDUES	360	
Other	120	
Other	120	

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QUANTITIES AND COMPOSITION OF WASTE RECOVERED DISPOSED OF AND/OR RECYCLED DURING THE REPORTING YEAR AND THE YEAR 2009.

B) Waste received and sent for disposal for the year 2009

EWC CODE	DESCRIPTION	QUANTITY 2009 (Tonnes)	QUANTITY 2008 (Tonnes)
110100	<i>Liquid wastes and sludges from metal treatment and coating of metals (eg galvanic process , zinc coating process , pickling processes, etching , pickling processes , etching , phosphatizing ,alkaline degreasing) .</i>	97	12
130	<i>Waste hydraulic oil</i>		
130208	Other engine , gear and lubricating oils	36	31
1501	<i>Packaging (including separately collected municipal packaging waste)</i>		
150110	Packaging containing residues of or contaminated by dangerous substances	50	69
1610	<i>Aqueous liquid waste destined for off-site treatment</i>		
161002	Aqueous liquid waste	0	30

b) Waste received and sent for recovery / recycling.

EWC CODE	DESCRIPTION	QUANTITY 2009	QUANTITY 2008
0801	<i>Wastes from MFSU of paint and varnish</i>		
080111	Waste paints and varnish containing organic solvents or other dangerous substances .	36	65
080112	Waste paint and varnish containing other than those mentioned in 080111	14	57
0803	<i>Wastes from MFSU of printing inks</i>		
080312	Waste ink containing dangerous substances	109	142
080313	Waste ink other than those mentioned in 080312	5	9
0804	<i>MFSU Adhesives</i>		
080410	Waste Adhesive	30	22
0901	<i>Wastes from the photographic industry</i>		
090101	Water –based developer and activator solutions.	71	109
090104	Fixer Solutions	140	219
090102	Water based offset plate developer solutions	253	285
090107	Photographic film and paper containing silver or silver compounds	21	15
1406	<i>Waste organic solvents , refrigerants and foam / aerosol propellants</i>		
140602	Chlorinated Solvent	69	83
140603	Other solvents and solvent mixtures	295	402
1501	<i>Packaging (including separately collected municipal packaging waste)</i>		
150110	Packaging containing residues of or contaminated by dangerous substances	42	
1502	<i>Absorbents, filter materials, wiping cloths and protective clothing .</i>		
150202	Absorbents , filter materials (including oil filters not otherwise specified) , wiping cloths, protective clothing contaminated by Dangerous substances.	101	85

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	components		
160213	Discarded equipment containing hazardous	4	
160214	Components other than those mentioned in 160209 to 160213	8	16
1606	Batteries and accumulators		
160601	Lead batteries	10	18
1201	Metal Waste		
120103	Aluminium	106	126
1801	Wastes from Human Healthcare		
180109	Pharmaceutical Waste	31	0
1910	Metal Containing Waste		
191001	Steel	29	12
20	Municipal wastes (household waste and similar commercial , industrial and institutional wastes) including separately Collected fractions .		
2001	Separately collected fractions (except 1501)		
200121	Fluorescent tubes and other mercury-containing waste.	4	6

SUMMARY REPORT ON EMISSIONS

The following schedule shows the emissions limits of our licence.

In Schedule C: Emission Limits.

Noise Emissions are not to exceed 55dB L(A)eq (30 minutes) during the day .

A consultancy company called Euro Environmental were commissioned to monitor the noise levels.

The measured daytime ambient noise level at location A was 56dB(A).

Their conclusion was that the main contributors to the overall noise level were neighbouring construction noise, activity from other industrial units and local traffic. Full report in Appendix.

Condition 6.7, The licence shall investigate options for the reduction of fugitive emissions to air at the facility including a mass balance of all inputs and outputs during silver recovery.

At present Silver Lining is not operating a silver recovery process so we cannot carry out a mass balance of all inputs and outputs during the silver recovery process.

Fugitive Emission monitoring took place on 7th January 2003.

The concentration of Ammonia was found to be 4 mg/ m³ with a mass emission rate of 0.007 kg / hr .

The concentration of the combined top ten VOC's were found to be less than 1.66 mg / m³ with a mass emission rate of less than 0.003 kg/ hr.

Concentrations of Ammonia and VOC's are found to be well below any Health & Safety standards or Environmental limits.

Condition 6.3 , There has been no emissions to ground water .

Condition 6.4, There has been no trade effluent emissions to sewer or surface water.

Condition 6.5, There has been no non-trade effluent wastewater discharged to the sewer without the prior authorisation of the Sanitary Authority.

Condition 6.6, There was no clearly audible tonal components or impulsive component in the noise emissions from the activity at the noise sensitive locations

RESULTS AND INTERPRETATIONS OF ENVIRONMENTAL MONITORING , INCLUDING A LOCATION PLAN OF ALL MONITORING LOCATIONS .

The monitoring is to be carried out as specified in Schedule D .

One monitoring point was agreed with the agency and can be seen on the map.

Euro Environmental were contracted to carry out this monitoring.
This report is included in this AER.

Report Summary,

An environmental noise survey was conducted at Guardian Silver Lining on 21st Dec 2009, to assess compliance with the licence requirements. The licence assigns noise limits of 55 dB(A) by day .Daytime noise emissions from Guardian Silver Lining are well below measured ambient noise levels . The ambient noise levels are due primarily to neighbouring and industrial activity.

Condition 8.9 NUISANCE MONITORING

Each week the facility and its immediate surrounds are inspected for nuisances caused by dust, vermin and odours.

A file is kept of all the nuisances monitoring done at the facility
A procedure has been developed to address this monitoring.

RESOURCE AND ENERGY CONSUMPTION SUMMARY

The following sources are used at our facility.

- 1) WATER
- 2) ELECTRICITY

1) WATER

Water usage is not currently metered so we do not have a way of monitoring it. However the only use we have for water on-site is for general consumption.

2) ELECTRICITY USAGE AT THE SITE (for reporting year)

DATE 2009	UNITS OF ELECTRICITY USED
Jan - Mar	11,790
Mar - June	6948
June - Sept	8071
Sept - Dec	4407

The total usage in 2009 was 31,216 kWhr

**SIGNIFICANT OBJECTIVES AND TARGETS
2010**

Objectives	Environmental Impact	Table No.
Spill Control	Pollution of Waterways	1
Improve the layout and storage space of the facility	Housekeeping	2
To improve the environmental performance of the facility	Various environmental impacts	3
Improvement of the visual appearance of the facility	Visual Impact	4

Objective 1	Target	Plan	Timescale	Responsibility
Spill Control	<ol style="list-style-type: none"> 1. To comply with Condition 3.7 of EPA Licence 2. Staff Training 3. Ensure adequate stock of Spill Kits / Absorbent 4. Carry out regular inspections on the 3 storage tanks 5. Safe storage of waste 	<p>Environment Efficiency will be commissioned to carry out bund testing</p> <p>Onsite Manager will carry out onsite spill training for all relevant staff</p> <p>Ensure quantities of spill material quantities will be kept above a minimum level as detailed in the Spill Log</p> <p>Ensure that tank inspection log is maintained.</p> <p>Ensure waste arriving onsite is inspected, as per procedures, and stored in a safe manner</p>	<p>June 2010</p> <p>June 2010</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p>	<p>R. Malone</p> <p>P. McDonnell</p> <p>T. Werstak</p> <p>T. Werstak</p> <p>T. Werstak / M. Araujo</p>

Objective 2	Target	Plan	Timescale	Responsibility
Housekeeping within the Storage Area	Maintain a high standard of housekeeping within the facility to reduce the risk of accidents / spillages.	<ol style="list-style-type: none"> 1. Review the following: Fire Risk Assessment Accident Prevention Programme Safety Statement 2. Review and update procedures and practices. 3. Carry out regular housekeeping audits. 4. Manage incoming and outgoing waste 5. Ensure waste is stored safely, securely and in designated areas as per waste storage plan 	Ongoing	<p>R. Malone</p> <p>R. Malone / T. Werstak</p> <p>R. Malone</p> <p>R. Malone / T. Werstak</p> <p>R. Malone / T. Werstak</p>

Objective 3	Target	Plan	Timescale	Responsibility
<p>Improve the Environmental Performance</p>	<p>1. To ensure compliance with EPA Licence / ISO 14001 Standard</p>	<ol style="list-style-type: none"> 1. Maintain ISO 14001 standard 2. Ensure compliance with ADR Regulations 3. Ensure compliance with waste legislation 4. Review and update procedures and practices. 5. Carry out regular facility / vehicle audits. 6. Manage incoming and outgoing waste 7. Apply for the National Waste Collection Permit 8. Review Waste Licence with a view to amending waste types and quantities permitted onsite. Consult with EPA 	<p>Ongoing</p>	<p>R. Malone</p> <p>R. Malone</p> <p>R. Malone</p> <p>T. Werstak/ R. Malone</p> <p>R. Malone</p> <p>R. Malone</p> <p>R. Malone</p>

Objective 4	Target	Plan	Timescale	Responsibility
<p>Improve the Visual Appearance of the Facility</p>	<p>Improve the Visual Appearance of the Facility</p>	<ol style="list-style-type: none"> 1. Paint depot area / offices and carry out maintenance where required 2. Carry out regular housekeeping audits 3. Maintain Nuisance Monitoring Log 	<p>Ongoing</p>	

REPORTED INCIDENTS AND COMPLAINTS SUMMERY

For the reporting year there have been no reported incidents.

For the reporting period we have not received any complaints

NUISANCE CONTROLS

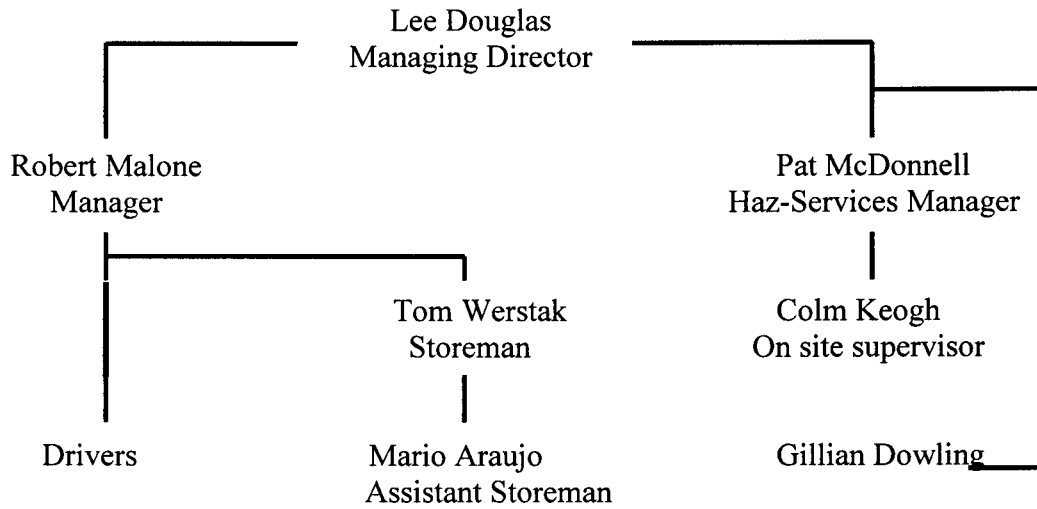
Condition 8.9

Once a week the facility and its immediate surrounds shall be inspected for nuisances caused by dust, vermin and odours.

A file is kept of all the nuisances monitoring done at the facility.
A procedure has been developed to address this monitoring.

MANAGEMENT AND STAFFING STRUCTURE OF THE FACILITY

ORGANISATION CHART



Drivers: Michael Devoy
Sean O'Rourke

EPA licence W0122-01 , AER 2009

**FULL TITLE AND SUMMARY OF ALL
PROCEDURES DEVELOPED / REVISED IN THE
YEAR 2009**

SOP NUMBER	46	REVISION NO.	0
WRITTEN BY	Robert Malone	DATE	11/6/09
SIGNED	<i>R. Malone</i>		
APPROVED BY	Lee Douglas		
SIGNED	<i>Lee Douglas</i>		
DISTRIBUTION	To all relevant staff	SOP LOCATED IN MAIN OFFICE / STORES	
NO. OF PAGES			

TITLE: Depot Audits

PURPOSE: To establish and maintain a programme for periodic auditing.

SCOPE: This procedure applies to the facility and the fleet vehicles

PROCEDURE:

GSL will carry out regular internal audits throughout the year. The audits will address all management and operational aspects in addition to health and safety and transport.

Depot audits shall be carried out on a monthly basis by the Manager. The Manager shall use the attached checklist as the basis for the audit.

Drivers will carry out audits on their vehicles on a fortnightly basis using the attached checklist.

Audits shall be numbered as follows: GSL DA 001 for all depot audits and GSL TA 001 for all vehicle audits

Depot audits shall be scored as follows: 2= Full compliance, 1= Partial compliance, 0= non compliance

All non conformances / issues will be recorded on the audit report along with the corrective action and an expected time for completion.

The results of all audits will be filed in the Auditing File and will be made available for inspection.

DEPOT AUDIT

AUDIT NUMBER: _____

AUDIT DATE: _____

AUDITOR: _____

SUMMARY SCORES

AREA **SCORE (%)**

ENVIRONMENTAL _____

HEALTH & SAFETY _____

Scoring System

2 = Full Compliance

1 = Partial Compliance

0 = Non Compliance

Environmental Audit

Section 1: Site Documentation	Score
E1.1 A copy of the previous environmental audit is available for inspection. All actions have been closed out satisfactorily.	_____
E1.2 A copy of the current waste management licence is available.	_____
E1.3 A framed copy of the current Environmental Policy is displayed in the entrance.	_____
E1.4 A framed copy of the ISO 14001 Certification is displayed in the entrance.	_____
E1.5 All Transfer Notes and C1 consignment notes are fully completed, cross-referenced, correctly filed and kept up to date.	_____
E1.6 Select a number of wastes and verify that all required documentation can be traced.	_____
E1.7 Waste quantities stored onsite are within the licensed limits.	_____
E1.8 Waste types stored onsite are permitted by the licence.	_____
E1.9 Waste inspection log is kept up to date.	_____
E1.10 Spill log / inventory is kept up to date	_____
E1.11 Filter log for bulb crushing unit is kept up to date.	_____
E1.12 Monitoring and Reporting, as per licence, are up to date and available for inspection.	_____
E1.13 Procedures have been appropriately distributed and are available for inspection.	_____
E1.14 Copies of all Environment Agency Inspection Reports are on file and any non-conformances and / or observations have been closed out satisfactorily	_____
E1.15 Training files are up to date and contain evidence of Environmental Awareness Training	_____

SCORE

Reference	Comment and required action	Target Date

Section 2: Site Inspection	Score
E2.1 The condition of drums is acceptable for containing it's contents, and up-lift of any drum is unlikely to cause damage to it's integrity	_____
E2.2 All waste drums and containers are labelled correctly and completely. No conflicting labels are displayed.	_____
E2.3 All waste is stored in designated signed areas.	_____
E2.4 Sufficient absorbent materials, clearly marked, are stocked and easily accessible for use in the event of a spillage or leak.	_____
E2.5 Drum storage areas are sufficiently bunded to contain any leaks or spillages. Bunds are in satisfactory condition with no visible deterioration.	_____
E2.6 Level sensors on tanks are operational.	_____
E 2.7 All pumps and hosing are well serviced and in good condition.	_____
E2.8 The drains outside the facility where loading / unloading of vehicles takes place show no signs of damage/deterioration.	_____
E2.9 A Facility Notice Board is prominently displayed outside the main entrance. Details are legible and include site licence number, hours of opening, and contact numbers.	_____
E2.10 There is an adequate stock of C1s for each area.	_____
E2.11 There is an adequate stock of all relevant labels and 'Proper Shipping Name' document available to the drivers	_____
E2.12 There is an adequate stock of 'Load Manifest' documents	_____

SCORE

Reference	Comment and required action	Target Date

Section 3: Site Inspection / Housekeeping

Score

- HS 1.1 There is no evidence of smoking within the facility. _____
- HS 1.2 Yard is clean and free of rubbish, debris and cigarette butts _____
- HS 1.3 No GSL items to be stored in the yard. _____
- HS 1.4 Rubbish bins must not be overflowing. _____
- HS 1.5 There is no indication of spills. All spills must be cleaned up immediately and reported to the Manager. _____
- HS 1.6 All materials are stacked and stored in a safe and appropriate manner. _____
- HS 1.7 Warehouse floor is clean and tidy. _____
- HS 1.8 Offices are clean and tidy. _____
- HS 1.9 Bulb crushing area is clean and tidy and free from obstructions. There is a stock of filters present. _____
- HS 1.10 There is suitable access and egress within the facility _____

SCORE

Reference	Comment and required action	Target Date

Section 4: Site Equipment / Operation

Score

- HS 2.1 Exterior lighting is in good working order. _____
- HS 2.2 Security shutters and facility alarm are all in good working order. _____
- HS 2.3 Fire extinguishers are located throughout the facility and are in the correct configuration for the risk. _____
- HS 2.4 All fire extinguishers are fully charged. _____
- HS 2.5 An inspection label is attached to each fire extinguisher showing the last inspection date (must be within the last 12 months). _____
- HS 2.6 The fire alarm is serviced and in good working order. _____
- HS 2.7 All first aid kits are stocked, clean, readily accessible and clearly indicated with the approved sign. _____
- HS 2.8 Emergency eye wash stations are operational; the bottles are within the valid usable date and readily accessible. _____
- HS 2.9 There is an adequate stock of PPE and signs indicating where PPE is required to be worn are in place. _____
- HS 2.10 All storage areas more than 6ft above ground level have handrails and kick plates all around. _____
- HS 2.11 The mezzanine storage has an opening for access by forklift and pallet, this opening is kept closed and secured when not in use. _____

SCORE

Reference	Comment and required action	Target Date

Silver Lining Industries Ltd
Unit 61 Cookstown Ind. Est, Belgard Road, Tallaght

Environmental Noise Survey

Report Date:

23rd December 2009

EURO environmental services

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

Report No. 2980/M05

1.0 Introduction

EURO environmental services were commissioned by Silver Lining Industries to carry out a day time noise survey at a pre-determined noise monitoring location. This monitoring was to be carried out as required under Condition D1 of the current EPA Waste Licence No. 122-1. The day time noise survey was carried out on the 21st of December 2009 by David Kelly of EURO environmental services.

Silver Lining Industries Ltd is located in the Cookstown Industrial Estate, Tallaght, Co. Dublin. The site is situated in an urban area and is bound by public roads, other industrial units and construction sites.

According to the licence table D.2, activities onsite shall not give rise to noise levels which exceed the sound pressure limits of 55 dB (A) during the day.

The facility operates between 9.00 and 17.00, Monday to Friday. The main activities at the installation that give rise to noise are produced on site from activities such as the manoeuvring of forklift and lorries, waste container loading and unloading, the movement of plastic waste containers within the warehouse and other day to day activities.

2.0 Duration and Measurements of Survey

The daytime broadband noise survey was carried out between 14:21 and 14:51 hours on Monday 21st of December 2009. The following measurements were carried out at each site:

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

3.0 Weather Conditions

Conditions were clear and cold with a slight breeze during the day survey. Weather conditions were considered neutral for noise monitoring with temperatures between 0-5 °C.

4.0 Environmental Noise Glossary:

Decibel (dB): Is the unit of sound pressure levels, calculated as a logarithm of the intensity of sound. 0 dB represents the threshold of hearing and 140 dB the threshold of pain. An increase in 10 dB is generally perceived as a doubling of loudness.

dB(A): An 'A-weighted decibel' is the measure of the noise level of sound across the audible frequency range (20 Hz – 20 kHz) with A-frequency weighting.

$L_{Aeq T}$: This is the equivalent continuous sound pressure level. It is a measure of the average sound pressure level during a period of time, t, in dB with 'A' weighting.

L_{A10} : This is the sound pressure level recorded for 10% of the monitoring period.

L_{A90} : This is the sound pressure level recorded for 90% of the monitoring period. When noise is continuous with diminutive oscillation the L_{Aeq} will more or less be the same as the L_{A90} .

1:3 Octave Band Filters: Single 1:1 Octave bands divided into three parts.

A Weighting: A standard weighting of the audible frequencies designed to reflect the response of the human ear to noise.

Fast Time Weighting: A standard time weighting applied by the Sound Level Meter.

Integrating Time Weighting: A sound level meter accumulates the total sound energy over a measurement period and calculates an average.

5.0 Location of Monitoring Point

5.1 B1

This monitoring point was located 8m away from the entrance to the storage warehouse; 2m from the industrial unit access road and approximately 30m from the main industrial estate access road.

6.0 Sources of noise

6.1 Facility activities

There were very few activities in operation at the Silver Lining Industry warehouse during the course of the survey. No noise was recorded from premises at the time of monitoring. The primary contributors of noise during the survey were traffic movements on adjacent road, operation of a forklift in the car park of an adjacent facility, car doors opening, talking in car park and shutters opening at another facility.

7.0 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.

Broadband measurements were analysed for 30-minute intervals. Daytime measurement range was set at 30-90dB.

Daytime 1/3 Octave Bands were analysed for the same period in the set range of 12.5 Hz to 20 KHz.

8.0 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.

9.0 Calibration

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

10.0 Day Time Monitoring

Monitoring Point	Date/Time	Sampling Interval (minutes)	L _{Aeq}	L _{A90}	L _{A5}	Comments
B1	21/12/09 14:21	30	56.4	58.0	53.6	There were very few activities in operation at the Silver Lining Industry warehouse during the course of the survey. No noise was recorded from premises at the time of monitoring. The primary contributors of noise during the survey were traffic movements on adjacent road, operation of a forklift in the car park of an adjacent facility, car doors opening, talking in car park and shutters opening at another facility.

11.0 1/3rd Octave Band Analysis

Monitoring Point	12.5 Hz	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 KHz	2 KHz	4 KHz	8 KHz	16 KHz	Impulsive or Tonal Qualities
B1	63.9	62.1	69.9	51.4	47.8	48.7	47.5	43.8	37.0	26.6	13.8	Yes

12.0 Interference

The main sources of interference during the survey were traffic movements on adjacent road, operation of a forklift in the car park of an adjacent facility, car doors opening, talking in car park and shutters opening at another facility.


13.0 Conclusions

B1 monitoring point exceeded the noise emissions levels as set out in Schedule D, part D.2 of the waste licence. The noise level was measured at 56.4 dB (A) which is above the recommended daytime limit of 55 dB (A). Very little noise from the Silver Lining facility was audible during the survey. The most significant contributor of noise during the survey was the engines of the forklifts operating in the neighbouring units and other interferences.

The LA_{90} value is a good indication of the background noise levels at a particular monitoring location. The background noise level can be defined as the A-weighted sound pressure level of the residual noise at the assessment position that is exceeded for 90% of a given time interval, T. ($LA_{90, T}$). Monitoring location B1 recorded an LA_{90} value of 53.6 dB (A), indicating that for 90% of the time, the noise levels were below the 55 dB (A) daytime limit.

There was one significant tonal noise qualities determined at the B1 noise monitoring location. This was between 8000 and 16000 Hz and may be attributed to opening of shutters at a neighbouring facility.


David Kelly
Field Services Manager


Damien O Reilly
Quality manager

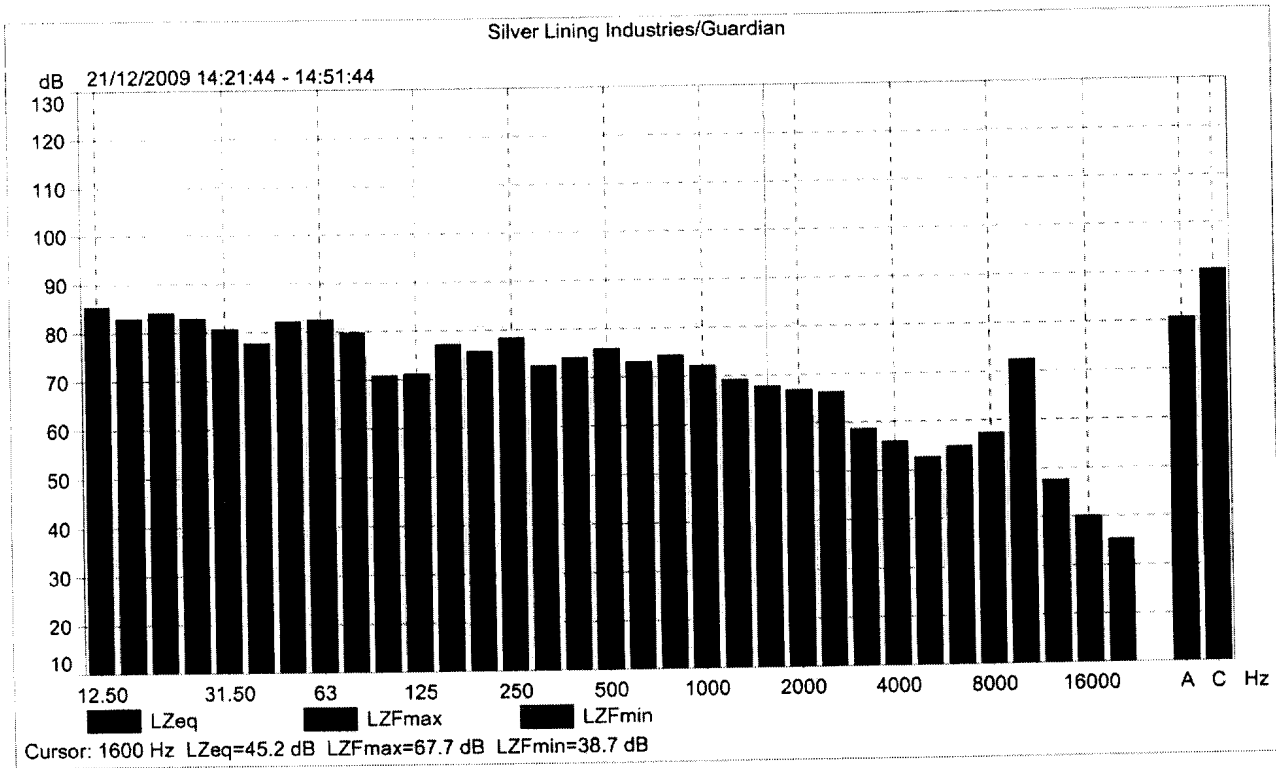
3rd December 2008

Appendix 1: Broadband Results and 1/3 Octave Spectrum



Silver Lining Industries/Guardian

	Start time	End time	Overload [%]	LAFmax [dB]	LAFmin [dB]	LAeq [dB]	LAF10 [dB]	LAF90 [dB]	LCpeak [dB]
Value			0.00	80.7	51.7	56.4	58.0	53.6	98.6
Time	14:21:44	14:51:44							14:37:57
Date	21/12/2009	21/12/2009							21/12/2009





| PRTR# : W0122 | Facility Name : Guardian Environmer.
AER W0122_2009.xlsm | Return Year : 2009 |

Environmental Protection Agency

AER Returns Worksheet

Version 1.1.10

REFERENCE YEAR	2009
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1. FACILITY IDENTIFICATION

Parent Company Name	Guardian Environmental Services Limited
Facility Name	Guardian Environmental Services Ltd
PRTR Identification Number	W0122
Licence Number	W0122-01

Waste or IPPC Classes of Activity

No.	class_name
4.3	Recycling or reclamation of metals and metal compounds.
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.

Address 1	Unit 61, Cookstown Industrial Estate
Address 2	Belgard Road
Address 3	Tallaght
Address 4	Dublin 24
Country	Ireland
Coordinates of Location	-6.37534 53.2913
River Basin District	IEEA
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Robert Malone
AER Returns Contact Email Address	robert@wastecollection.ie
AER Returns Contact Position	Manager
AER Returns Contact Telephone Number	01-4622822 / 086-8207873
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	0.0
Production Volume Units	
Number of Installations	1
Number of Operating Hours in Year	2080
Number of Employees	10
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General
50.1	General

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

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

ef4b2abaa97fa04419f37e34778c230f.

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Transfer/Destination	European Waste Code	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/Depositor	Haz Waste - Address of Next Destination Facility Non-Haz Waste: Address of Recover/Depositor	Name and License / Permit No. and Address of Final Recoverer / Depositor (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination (i.e. Final Recovery/Disposal Site) (HAZARDOUS WASTE ONLY)
					M/C/E	Method Used					
To Other Countries	09 01 01	55.0 Developer	Developer	R4	E	Volume Calculation	Abroad	Silver Lining Industries,WML 947	Richmond Works ,Garforth,Leeds,,United Kingdom	Silver Lining Industries,WML 947,Richmond Works,Garforth,Leeds,,United Kingdom	Richmond Works ,Garforth,Leeds,,United Kingdom
To Other Countries	09 01 02	192.0 Plate Developer	Plate Developer	R4	E	Volume Calculation	Abroad	Silver Lining Industries,WML 947	Richmond Works ,Garforth,Leeds,,United Kingdom	Silver Lining Industries,WML 947,Richmond Works,Garforth,Leeds,,United Kingdom	Richmond Works ,Garforth,Leeds,,United Kingdom
To Other Countries	09 01 04	103.0 Fixer	Fixer	R4	E	Volume Calculation	Abroad	Silver Lining Industries,WML 947	Richmond Works ,Garforth,Leeds,,United Kingdom	Silver Lining Industries,WML 947,Richmond Works,Garforth,Leeds,,United Kingdom	Richmond Works ,Garforth,Leeds,,United Kingdom
Within the Country	09 01 01	4.0 Developer	Developer	R13	E	Volume Calculation	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,,Co Dublin,Ireland	Blackrod,Bolton,Lancashire, BL6 5SL,United Kingdom Remonds UK,WML 0707, Scot Lane Industrial Estate	Blackrod,Bolton,Lancashire, BL6 5SL,United Kingdom
Within the Country	09 01 02	13.0 Plate Developer	Plate Developer	R13	E	Volume Calculation	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,,Co Dublin,Ireland	Blackrod,Bolton,Lancashire, BL6 5SL,United Kingdom Remonds UK,WML 0707, Scot Lane Industrial Estate	Blackrod,Bolton,Lancashire, BL6 5SL,United Kingdom
Within the Country	09 01 04	7.0 Fixer	Fixer	R13	E	Volume Calculation	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,,Co Dublin,Ireland	Blackrod,Bolton,Lancashire, BL6 5SL,United Kingdom Remonds UK,WML 0707, Scot Lane Industrial Estate	Blackrod,Bolton,Lancashire, BL6 5SL,United Kingdom
Within the Country	09 01 01	11.0 Developer	Developer	R4	E	Volume Calculation	Offsite in Ireland	Enva Ireland,W0041-01	Smithstown Industrial Estate,,Shannon,Co Clare,Ireland	Smithstown Industrial Estate,,Shannon,Co Clare,Ireland	Smithstown Industrial Estate,,Shannon,Co Clare,Ireland
Within the Country	09 01 02	38.0 Plate Developer	Plate Developer	R4	E	Volume Calculation	Offsite in Ireland	Enva Ireland,W0041-01	Smithstown Industrial Estate,,Shannon,Co Clare,Ireland	Smithstown Industrial Estate,,Shannon,Co Clare,Ireland	Smithstown Industrial Estate,,Shannon,Co Clare,Ireland
Within the Country	09 01 04	20.0 Fixer	Fixer	R4	E	Volume Calculation	Offsite in Ireland	Enva Ireland,W0041-01	Smithstown Industrial Estate,,Shannon,Co Clare,Ireland	Smithstown Industrial Estate,,Shannon,Co Clare,Ireland	Smithstown Industrial Estate,,Shannon,Co Clare,Ireland
Within the Country	14 06 03	293.0 Solvent	Solvent	R13	E	Volume Calculation	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,,Co Dublin,Ireland	ATM Holland,Licence 037623,Viasweg 12 ,NL 4782,PW Moerdijk,,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,,Netherlands
Within the Country	08 03 12	100.0 Ink	Ink	R13	E	Volume Calculation	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,,Co Dublin,Ireland	ATM Holland,Licence 037623,Viasweg 12 ,NL 4782,PW Moerdijk,,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,,Netherlands
Within the Country	08 01 11	29.0 Paint/Varnish	Paint/Varnish	R13	E	Volume Calculation	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,,Co Dublin,Ireland	ATM Holland,Licence 037623,Viasweg 12 ,NL 4782,PW Moerdijk,,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,,Netherlands

Transfer/Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	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/CE	Method Used					
Within the Country	08 01 12	No	14.0	Varnish	D9	E	Volume Calculation	Offsite in Ireland	Voecia Environmental,W0052-02	Corn...Fermoy,Co Cork,Ireland	ATM Holland,Licence 03/7623,Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands
Within the Country	14 06 02	Yes	67.0	Chlorinated Solvent	R13	E	Volume Calculation	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	ATM Holland,Licence 03/7623,Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands
Within the Country	15 02 02	Yes	91.0	Regs / Absorbents / Filters	R13	E	Weighted	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	ATM Holland,Licence 03/7623,Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands
Within the Country	15 01 10	Yes	40.0	Contaminated Tins	R13	E	Weighted	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	ATM Holland,Licence 03/7623,Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands
Within the Country	08 04 09	Yes	30.0	Adhesive	R13	E	Weighted	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	ATM Holland,Licence 03/7623,Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands
Within the Country	12 01 01	No	29.0	Mill Liners	R4	E	Weighted	Offsite in Ireland	Multimetals,WV 09001401	Wicklow,Ireland	ATM Holland,Licence 03/7623,Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands
Within the Country	18 01 09	No	31.0	Pharmaceutical waste	D15	E	Weighted	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	ATM Holland,Licence 03/7623,Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands
Within the Country	15 01 10	Yes	50.0	Contaminated Drums	D15	E	Weighted	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	ATM Holland,Licence 03/7623,Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands
Within the Country	11 01 09	Yes	97.0	Acidic Sludge	D9	M	Weighted	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	ATM Holland,Licence 03/7623,Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands
Within the Country	08 03 13	No	5.0	Ink	R13	E	Volume Calculation	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	ATM Holland,Licence 03/7623,Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands
To Other Countries	09 01 07	No	21.0	Film	R4	E	Weighted	Abroad	Silver Lining Industries,WML 947	Richmond Works Gartton,Leeds,..,United Kingdom	KTK Landfill,W081-03,Kilcullen,..,Co Kildare,Ireland	Kilcullen,..,Co Kildare,Ireland
Within the Country	16 02 14	No	4.0	WEEE	R13	E	Weighted	Offsite in Ireland	Techrec Ireland,W0233-01	51 Parkwest Industrial Estate,..,Dublin,12,Ireland	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	51 Parkwest Industrial Estate,..,Dublin,12,Ireland
Within the Country	16 02 13	Yes	8.0	Monitors	R13	E	Weighted	Offsite in Ireland	Techrec Ireland,W0233-01	51 Parkwest Industrial Estate,..,Dublin,12,Ireland	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	51 Parkwest Industrial Estate,..,Dublin,12,Ireland
Within the Country	20 01 21	Yes	4.0	Fluorescent tubes	R4	E	Weighted	Offsite in Ireland	Irish Lamp Recycling,KE-08-034801	Alfry ...Co Kildare,Ireland Station Road,..,Clondalkin,Dublin 22,Ireland	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland
Within the Country	12 01 03	No	106.0	Aluminium Plates	R13	M	Weighted	Offsite in Ireland	Cummins Metal Recycling,WPR 045	Naas,..,Co Kildare,Ireland	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland
Within the Country	16 06 01	Yes	10.0	Batteries	R4	E	Weighted	Offsite in Ireland	Returnbatt,W0105-01	Naas,..,Co Kildare,Ireland	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland
Within the Country	13 02 08	Yes	36.0	Oil	D9	E	Volume Calculation	Offsite in Ireland	Ritla Environmental,W0192-02	Greenogue Industrial Estate,Rathcoole,..,Co Dublin,Ireland	ATM Holland,Licence 03/7623,Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands	Viasweg 12 ,NL 4782,PW Moerdijk,..,Netherlands

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