# ANNUAL ENVIRONMENTAL REPORT 2010

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

**EPA WASTE REGISTER NUMBER W0122-01** 

### TABLE OF CONTENTS

- Reporting Period
- Waste activities carried out at the facility.
- Quantity and Composition of waste recovered at the facility, received and disposed of during the reporting period and the previous year.
- Summary report on emissions.
- Results and interpretations of environmental monitoring.
- Resource and energy consumption summary.
- Development / Infrastructural works in place and planned to process waste quantities for the following year.
- Schedule of Environmental Objectives and Targets for the forthcoming year.
- Procedures which relate to the facilities operation.
- Incidents and Complaints.
- Nuisance Control.
- Management and Staffing structure of the facility.
- Appendix

### REPORTING PERIOD

The reporting period for this licence is from 01 January 2010 to 31st December 2010.

#### 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 1442.

Of this

1197 tonnes were recovered/recycled.

245 tonnes were disposed.

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

### Schedule E of Waste Licence W0122-01

# 测量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
Industrial Non- Hazardous Sludges	50	APPLICABLE
Industrial Non- Hazardous Solids	300	
Hazardous	2500	

The state of the s	-	
OTHER WASTES	Check (if accepted)	Additional Information
Plästerboard and Plaster Dried Paints, Dried Varnish &	D NO.	
Diled Lacquer	YES.	PRINTS FTE LISTED IN 1.1.2. WILL OF LIQUID, SCURAC, OR
Foundry Sand & Sand Blasting Residues		DRIED IN TIME ETC.
Glass': William	NO.	IF WITH GILVER CONTENT ATT
-bates & Rubber Solutions	II NO.	FOX RECOVERY.
Solid, Fully Polymerised Plastics	VES.	WASTE ELECTRONICS.
Solid Rubber (excluding tyres)	D NO	
pity Containers	D Yes	FROM PHOTOGRAPHIC / PRINTING- ETG
i-Hazardous Ferrous and Non-Ferrous Metals	D / 6.5.	WITH SCRAP ELECTRONICS
OTHER WASTES (APPLICANT TO SPECIFY)	Check (if accepted)	Additional Information
EILM		WASTE FILM AND X RAY
		FILM. FOR RECOVERY.
LITHO PLATE		FOR ALUMINIUM
C C	estato e	RECOVERY
		Continued and the second of th
		estedujo comentens dans act principativado cas couseupti da o-con i constituido companyacione principativa companyacione per este constituido casa constituido da constituido casa casa constituido casa casa constituido casa constituido casa constituido casa constituido casa casa constituido casa casa casa casa casa casa casa cas
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5 6 6 . 5 6	- Marine James Company Commence of the Commenc	d.

It sliculd 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.

AlfraJuly 17. doc 24/02/99

### TABLE E.1.3 NON-HAZARDOUS WASTE TYPES

INERT OR INACTIVE WASTE	Check (if accepted)	Additional Information
Subsoil	I NO !	
Topsoil	D NO I	
Bricknyork & 12112.	ON O	
Stone, Rock and Slate	T NO	151400000000000000000000000000000000000
Clayian State	□ NO I	mmen en filial media au autorio de 100 de 10
Natural Sand	NO.	epit Zali Gardinara partin di Carlo de Sali di Sali para para di Sali di Sali Sali Sali Sali Sali Sali Sali Sal
Licrote (13)	NO.	
ery, & China	NO.	CO-CONTRACTOR CONTRACTOR CONTRACT
Solid Road Planings, Solid Tarmacadam, Solid Asphalt	NO·	
BIODEGRADABLE WASTE	Cheek (if accepted)	Additional Information
Wood & Wood Products		CONTINUIN 140 PIL HILLING
Paper & Paper Products	D YES.	PRINTING AND PROCERTING
Vegelable Maller	ITI NO	PHENOTOCE TEN PHOTOGRAPHE
Non-Infectious Health-Care Waste	I NO:	Control description control of the SEES SEES SEES SEES SEES SEES SEES SE
Natural & Manmade Fibres	NO° !	**************************************
Road Sweepings	INO :	the state of
Gully Emptyings	In No	
tic Tank Waste	TO NO	
Designed Dredgings	TH NO	
Boilei:Scale	17 NO.	and the state of t
Ash & Cinders	I NO	
Food Stuffs	FI NO.	
Oil/Water Mixtures	J YES.	
Vegetable Oil.	I NO	011. 615.770 IN 6.1.3.
Fats, Waxes and Greases	Yes.	Ho po
Animal Excrement (including	2 4 7 1844 - COORDINATES - CT - CO 1 400 - COORDINATES - CT - CO 1 400 - COORDINATES - CT - C	WILL ING IN THE WASTE CHIL
paunch contents)	No.	
Animal Blood	O NO	and a separate contract contra
Control of the Contro	TT N CI	
*	÷,	

BLE E.1.2 HAZARDOUS WASTE	Typee ann O	I I hippings and
	r eres van Gi	JANTITIES
ZARDOUS WASTE TYPE	TONNES PER ANNUM	TOTAL (over life of site)
te Oil make the	120	
ilters	20	
es tos	NONE	NONE
Sand Mixtures or Mixtures of hid Other Absorbent crial,	100	
inated Rubble. Soil, etc.	NONE	110.15
s Healthcare Waste		NONE
rmaceutical Waste	36	NONE
otoxic Waste	NONE	NONE
rps.Waste	NONE	NONE
ents de	480.	None
eified Risk Material	NONE	NONE
tographic Process ng Waste	1680	100702
it and Ink	960	1,
érics	60	C
or Vehicle Batteries	12.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
int Light Bulbs	60	200
LLR HAZARDOUS WASTE PLICANT TO SPECIFY)	Oct Adambarany of Vaul (AII) à la laufe au favr	REATING TO WOW
Y CLEANING RESIDUES.	360	1. 02 7
Hotel William	120	
MALIFER	120	
Military Control		Annon estimaturas programmento de la compositiva della compositiva
El El All Park		
STATISTICS OF THE PROPERTY OF		

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 2010 (Tonnes)	QUANTITY 2009 ( Tonnes)
110100	Liquid wastes and sludges from metal treatment and coating of metals ( eg galvanic process , zinc coating process , pickling processes, etching , pickling processes , etching , phosphatizating , alkaline degreasing ) .	0	97
090102	Plate developer	239	0
130	Waste hydraulic oil		
130208	Other engine, gear and lubricating oils	0	36
<i>1501</i>	Packaging (including separately collected municipal packaging waste) Packaging containing residues of or		
130110	contaminated by dangerous substances	6	50
1610	Aqueous liquid waste destined for off- site treatment		
161002	Aqueous liquid waste	0	0

# b) Waste received and sent for recovery / recycling.

EWC	DESCRIPTION	QUANTITY	QUANTITY
CODE		2010	2009
0801	Wastes from MFSU of paint and varnish		
080111	Waste paints and varnish containing organic solvents or other dangerous substances.	66	29
080112	Waste paint and varnish containing other than those mentioned in 080111	80	14
0803	Wastes from MFSU of printing inks		
080312	Waste ink containing dangerous substances	92	100
080313	Waste ink other than those mentioned in 080312	5	5
0804	MFSU Adhesives		
080410	Waste Adhesive	10	30
0901	Wastes from the photographic industry		
090101	Water –based developer and activator solutions.	65	70
090104	Fixer Solutions	126	130
090107	Photographic film and paper containing silver or silver compounds	15	21
1406	Waste organic solvents, refrigerants and foam / aerosol propellants		
140602	Chlorinated Solvent	52	67
140603	Other solvents and solvent mixtures	277	293
1501	Packaging (including separately collected municipal packaging waste)	A STATE OF THE STA	
150110	Packaging containing residues of or contaminated by dangerous substances	40	40
1502	Absorbents, filter materials, wiping cloths and protective clothing.		
150202	Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by Dangerous substances.	87	91
1602	Wastes from electrical and electronic components		

160213	Discarded equipment containing hazardous	4	4
160214	Components other that those mentioned in 160209 to 160213	7	8
1606	Batteries and accumulators		
160601	Lead batteries	9	10
1201	Metal Waste	a senantina n	
120103	Aluminium	91	106
1801	Wastes from Human Healthcare		
180109	Pharmaceutical Waste	22	31
1910	Metal Containing Waste		
191001	Steel	19	29
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.	3	4

#### 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 72dB(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 7<sup>th</sup> 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 that 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 8<sup>th</sup> Dec 2010, 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

Development / Infrastructural works in place and planned, to process waste quantities for the following year.

See Environmental Objectives and Targets for the forthcoming year which outlines the planned development / infrastructure for the facility.

# 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> <li>To comply with Condition</li> <li>3.7 of EPA Licence</li> </ol>	Environment Efficiency will be commissioned to carry out bund testing	June 2010	R. Malone
	2. Staff Training	Onsite Manager will carry out onsite spill training for all relevant staff	June 2010	P. McDonnell
	3. Ensure adequate stock of Spill Kits / Absorbent	Ensure quantities of spill material quantities will be kept above a minimum level as detailed in the Spill Log	Ongoing	T. Werstak
	4. Carry out regular inspections on the 3 storage tanks	Ensure that tank inspection log is maintained.	Ongoing	T. Werstak
	5. Safe storage of waste	Ensure waste arriving onsite is inspected, as	Ongoing	T. Werstak / M.

					Area	Housekeeping	Objective 2
					reduce the risk of accidents / spillages.	Maintain a high standard of	Target
	5. Ensure waste is stored safely, securely and in designated areas as per waste storage plan	4. Manage incoming and outgoing waste	3. Carry out regular housekeeping audits.	<ol><li>Review and update procedures and practices.</li></ol>	Fire Risk Assessment Accident Prevention Programme Safety Statement	1. Review the following:	Plan
						Ongoing	Timescale
	R. Malone / T. Werstak	R. Malone / T. Werstak	R. Malone	R. Malone / T. Werstak		R. Malone	Responsibility

R. Malone		Permit  8 Review Waste Licence with a view to		
R. Malone		<ol> <li>Apply for the National Waste Collection</li> </ol>		
R. Malone		6. Manage incoming and outgoing waste		
T. Werstak/ R. Malone	A CONTRACTOR OF THE CONTRACTOR	5. Carry out regular facility / vehicle audits.		
R. Malone		<ol> <li>Review and update procedures and practices.</li> </ol>		
R. Malone		3. Ensure compliance with waste legislation		
		2. Ensure compliance with ADR Regulations	Standard	Performance
R. Malone	Ongoing	1. Maintain ISO 14001 standard	1. To ensure compliance with EPA Licence / ISO 14001	Improve the Environmental
Responsibility	limescale	32	larget	Colective

Objective 4	Target	Tan	Timescale	Responsibility
Improve the Visual Appearance of the Facility	Improve the Visual Improve the Visual Appearance of Appearance of the Facility	1. Paint depot area / offices and carry out maintenance where required	Ongoing	
		2. Carry out regular housekeeping audits		
		3. Maintain Nuisance Monitoring Log		

### 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**

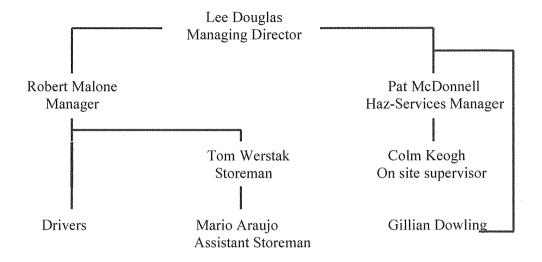
### Condition 8.9

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

# FULL TITLE AND SUMMARY OF ALL PROCEDURES DEVELOPED / REVISED IN 2009 / 2010

SOP NUMBER	46	REVISION NO.	0
WRITTEN BY	Robert Malone	DATE	11/6/09
SIGNED	R. Malox		
APPROVED BY	Lee Douglas		
SIGNED	Cer Loylas		
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:	RAVING CALCULATION OF THE PROPERTY OF THE PROP
AUDITOR:	
SUMMARY SCORES	
AREA	SCORE (%)
ENVIRONMENTAL	
HEALTH & SAFETY	

Scoring System
2 = Full Compliance
1 = Partial Compliance
0 = Non Compliance

# **Environmental Audit**

Section	n 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.	41/00/00/00/00/00
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.	and production of the second o
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

	Comment and required action	Target Date
1		
*Target Control of the Control of th		
1		

Sectio	n 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
		NAME OF THE PROPERTY OF THE PR
		4 - Andrews
		out and the second
		The same of the sa

Section	n 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.	Management of the same of the
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.	Sand of Sanday 1811 1894
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 1.1	O There is suitable access and egress within the facility	

**SCORE** 

Reference	Comment and required action	Target Date
	·	
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		and the second s
		na pounitrium registra

Section	n 4: Site Equipment / Operation S	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.	
	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

### REPORT ON FINANCIAL PROVISIONS

We will be reviewing our Environmental Liability Risk Assessment and the financial provision required.

A copy of this review will be forwarded to the Agency for approval.

## EPA licence W0122-01, AER 2010

## **APPENDIX**

- A) Bund TestingB) Environmental Noise Survey



Parnell House, 19 Quinsboro Road, Bray Co.Wicklow, Ireland.

## **Bund Integrity Assessment**

## Silver Lining Industries W0122-01

EEC Document No.1267-02 v1.0

Tel: 353 1 276 1428 Fax: 353 1 276 1561 Email:energy@iol.ie www.enviro-consult.com

> Registered Office as above. Registered Number 243 412 Directors: Noel J. McGrath, Robert B. Sutcliffe

## QF 1. Document Lead Sheet

Document Title	Bund Integrity Assessment
Project No.	1267
Document No.	1267-02
Client	Silver Lining Industries (Ireland) Limited

Icono	Status	Date	Author	Signed for and on behalf of		
Issue	Status	Date	Author	Environmental Efficiency	Client	
1.00	Approved	23/09/2010	RBS	Residentle.		
	×					

Where it is a requirement that this report be issued to a regulatory or other authority, then the client should sign the appropriate place in the above table and, unless specifically agreed in writing to the contrary, forward copies to the appropriate authority (e.g. EPA).

**EEC Project Manager:** 

Bob Sutcliffe, CEng, MIMechE

**EEC Document Author:** 

Bob Sutcliffe, CEng, MIMechE

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## Silver Lining Industries (Ireland) Limited

## **Bund Integrity Report**

1.	Intro	oduction	۷.
2.	Sum	nmary	. 4
		t Protocol	
		t results and discussion	
		Smaller bunded area	
		Larger bunded area	
		clusion	

## 1. Introduction

Silver Lining Industries Limited has a Waste licence issued by the EPA. This licence requires, amongst other things, that the water tightness of all bunding structures and their resistance to penetration by water or other materials stored therein to be demonstrated. This document reports this assessment.

## 2. Summary

The bunds inspected and the results of the assessment are as follows

Table 4.1-1 Inspected bunds

Bund No.	Description	Pass/Fail Integrity Test		
	Smaller bunded area (Portion of floor adjacent to	Pass		
N/A	entrance)			
N/A	Larger bunded area (remainder of floor)	Pass		

## 3. Test Protocol

The test protocol used was as per the IPPC Guidance Note of Storage and Transfer of Materials for Scheduled Activities published by the EPA.

For the smaller bunded area, the assessment was by means of a 6 hour Water Retention Test to CIRIA163.

For the larger bunded area, a visual inspection was carried out by a Chartered Engineer. The reason a Water Retention Test was inappropriate is that

- Excessive quantity of water would be used
- Test water would be contaminated
- Normal operations of the site would be hindered.

Environmental Efficiency

## 4. Test results and discussion

## 4.1. Smaller bunded area

## Table 4.1-1 Description

Bund ref	N/A
Tank contents	None present
Wall construction	Cast concrete curb at base of two opposite walls with concrete with concrete ramps on other two opposite sides.
Floor Construction	Reinforced Mass Concrete.
Sump present	No

### Table 4.1-2 Results of test

Initial water level	75 mm @ 10:15
Final water level	75 mm @ 16:20
Pass/Fail	Pass

## 4.2. Larger bunded area

## **Table 4.2-1 Description**

Bund ref	N/A
Tank contents	Many IBCs and drums
Wall construction	Cast concrete curb at base of walls.
Floor Construction	Reinforced Mass Concrete.
Sump present	No

## Table 4.2-2 Results of visual inspection

Outside of wall	No defects noted	
Inside of wall	No defects noted	
Floor	No defects noted	
Sump	N/A	
Other comments	No comments	
Corrective Action	None required	
Pass/Fail	Pass	

## 5. Conclusion

All bunds passed the assessment.

## Guardian Silver Lining Industries

Unit 61, Cookstown Industrial Estate, Belgard Rd, Tallaght, Dublin 24

## Environmental Noise Survey Annual Noise Report

Report Date:

17<sup>th</sup> December 2010

## **EURO** environmental services

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

Report No. 2980/M06

### SUMMARY

The noise survey was commissioned by Robert Malone of Guardian Sliver Lining Industries to monitor compliance with the noise conditions assigned in Waste Licence No. 122-1 from the Environmental Protection Agency.

Condition D1 the Waste Licence sets a daytime noise limit of 55 dB(A), and a night time noise limit of 45 dB(A) at noise sensitive locations.

### 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 License No. 122-1. The day time noise survey was carried out on the 8<sup>th</sup> December by Lisa Doyle 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 license 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 maneuvering 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 Surveying

The daytime survey was carried out between 10:57 and 11:28 on Wednesday 8<sup>th</sup> December 2010. The following measurements were carried out at each site:

- Daytime Broadband measurements L(A)<sub>eq</sub>, L(A)<sub>10</sub>, L(A)<sub>00</sub>, L(AF)<sub>max</sub>, L(AF)<sub>min</sub> and L(C)<sub>peak</sub> over a 30 minute period.
- Daytime 1/3 Octave Band measurements over in the range 25Hz to 16 kHz.

### 3.0 Weather Conditions

Weather conditions for the day-time survey on the  $8^{th}$  December were good for noise monitoring. Conditions were generally sunny and cold, with snow on the ground. There was no wind. Temperatures ranged from -2 - 0 °C.

## 4.0 Environmental Noise Terminology:

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<sub>Aeq T</sub>: This is the equivalent continuous sound pressure level. A measure of the average sound pressure level during a period of time, t, in dB with 'A' weighting.

LA10: 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, which accumulates the total sound energy over a measurement period and calculated an average.

## 5.0 Location and Position of Monitoring Points

N1

This monitoring point was located 6m away from the entrance to the storage warehouse; 1m from the industrial unit access road and approximately 30m from the main industrial estate access road.

### 6.0 Activities on Site

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 and shouting in the vicinity.

## 7.0 Methodology

The noise survey was carried out in accordance with ISO 1996/1/2/3 - Acoustics - Description and Measurement of Environmental Noise. Reference was also made to the guidance document issued by the EPA entitled "Environmental Noise Survey Guidance document" EPA 2003.

Broadband measurements were analysed for 30-minute intervals.

## 8.0 Equipment

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

The meter was fixed to a tripod 1.3 meters above the 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.

## 8.1 Calibration

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

9.0 Noise Measurements Daytime

Comments	No noise was recorded from premises at the time of monitoring as there were very few activities in operation at the Silver Lining facility during the course of the survey. The primary contributors of noise during the survey were traffic movements on adjacent road, reverse beeping of vehicles at adjacent facilities, people talking and shouting in nearby facilities. Works carried out on other facilities were audible also. Overhead aircraft was audible during the survey. Birds were singing, Magpies crowing. People walking on the snow.
L(A) <sub>90</sub>	0.09
L(A)10	74.5
L(A)eq	71.8
Sampling Interval minutes	30
Date/ Time	10:57
Monitoring	Σ

### 11.0 Interference

The main sources of interference during the survey were traffic movements on adjacent road, operations on other sites.

## 12.0 Conclusions

N1 monitoring point exceeded the noise emissions levels as set out in Schedule D, part D.2 of the waste license. The noise level was measured at 71.8 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 reverse beeping from vehicles 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 N1 recorded an LA $_{90}$  value of 60.0 dB (A), indicating that for 90% of the time, the noise levels were above the 55 dB (A) daytime limit.

There was no significant tonal noise qualities detected at this location.

Lisa Doyle

Environmental Technician

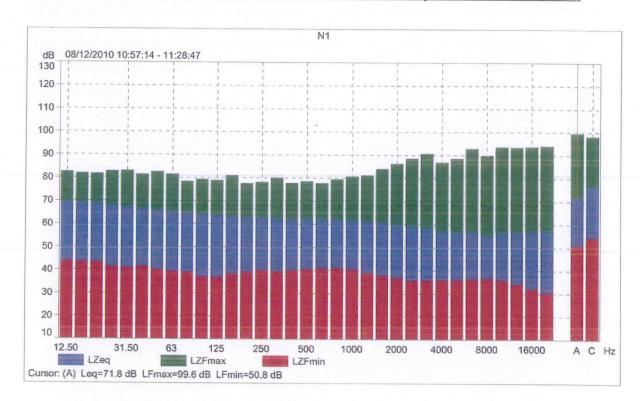
Aadil Khan

**Environmental Technical Manager** 

20/12/2010

N1

	Start time	End time	Elapsed time	LAeq [dB]	LAFmax [dB]	LAFmin [dB]	LAF10 [dB]	LAF90 [dB]	LCpeak [dB]
Value				71.8	99.6	50.8	74.5	60.0	132.4
Time	10:57:14	11:28:47	0:30:00						11:07:47
Date	08/12/2010	08/12/2010							08/12/2010



## **Chris Mee Safety Engineering**

## **Guardian Silver Lining**

## **ATEX Risk Assessment**

Commissioned by Lee Douglas Managing Director

Report by: Gary Horgan Msc (Hons), Eng, Dip HSW, CMIOSH

Approved by: Darren O'Keeffe Dip HSW, Dip RM, CMIOSH

Chris Mee Safety Engineering

27<sup>th</sup> August 2010

## Contents

1.0		Introduction
	1.1	The Atex Regulations; Background & Requirements
	1.2	Principle requirements of the legislation
	1.3	The Explosion Triangle
2.0		Description of the Workplace & Activities
3.0		The Substances & their properties that present an explosion hazard
4.0		Warehouse Review
5.0		Warehouse Area Classification
	5.1	Hazardous Area Classification
6.0	Reco	ommendations for ATEX Compliance

Appendix 1 Hazard Area Classification & ATEX Risk Assessment

## 1.0 Introduction

Guardian Silver Lining is a licensed waste handling company based in Unit 61 Cookstown Industrial Estate, Tallagh, Dublin 24. Chris Mee Safety Engineering, (CMSE), has been commissioned by Guardian to carryout an ATEX Risk Assessment of there flammable storage waste handling activities to ensure compliance in accordance with the ATEX Regulations S.I. 299 of 2007 "Safety, Health and Welfare at Work (Explosive Atmospheres) Regulations 2007.

## 1.1 The ATEX Regulations: Background & Requirements

S.I. 299 of 2007 transposes into Irish Law a European Directive called the ATEX directive No.1999/92/EC and is concerned with the risks from fire and explosion arising from flammable substances stored or used in the workplace.

The regulations apply to most workplaces where flammable substances are stored or used for example where flammable liquids or flammable dusts are present.

The Regulations apply from the 1<sup>st</sup> of July 2003 to new workplaces or workplaces which undergo modifications, extensions or restructuring after July 2003.

The Regulations apply to existing workplaces after 30<sup>th</sup> June 2006.

From the date the regulations apply all work equipment and protective systems which are made available at the work place must comply with these regulations and with the ATEX product regulations S.I. 83 of 1999. That is the equipment or protective system must be suitable for use in explosive atmospheres and must be CE Marked.

Work equipment in use before 30<sup>th</sup> June 2003 can continue to be used provided it complies with the legislation in force at that time e.g. 'Ex' equipment which is suitable for the application and complies with a harmonized European Standard is acceptable.

## 1.2 Principle requirements of the legislation:

- A risk assessment must be carried out for any work activities involving flammable substances.
- 2. The findings of the risk assessment must be recorded in a document called the Explosion Protection Document. The Explosion Protection Document must exist as an identifiable document. The document must be available to employees.
- 3. Technical and organizational measures must be provided so as to reduce the risk of explosions.
- 4. Training must be provided to workers where explosive atmospheres may occur.
- 5. Places where explosive atmospheres may occur must be classified into zones.
- 6. Signs must identify locations of zoned areas.
- 7. Equipment installed in hazardous areas must be suitable for use in the zone.
- 8. Equipment must be CE marked and certified for the hazardous area into which it is installed.

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## 1.3 The Explosion Triangle:

An explosion occurs if a flammable substance is present in mixture with air (i.e. sufficient oxygen), within the explosion limits, together with a source of ignition.



All substances capable of an exothermic oxidation reaction are to be regarded as flammable.

Examples of flammable substances include:

- Flammable gases and gas mixtures, e.g. liquefied gas (butane, propane), natural gas, combustion gases (carbon monoxide, methane) or gaseous flammable chemicals (acetylene, vinyl chloride)
- 2. Flammable liquids, e.g. solvents, fuels, petroleum, heating, lubricating or waste oils, paints, water-insoluble and water soluble chemicals.
- Dusts of flammable solids, e.g. coal, wood, food and feedstuffs (sugar, flour, and cereals), plastics, metals or chemicals.
  - A number of substances are not readily flammable under normal conditions but are explosive when mixed with air if the particle size is particularly small or if the ignition energy sufficiently high (metal dusts, aerosols)

## 2.0 Description of the Workplace& Activities:

Unit 61 Cookstown Industrial Estate is a 2 storey building of brick construction used as a hazardous waste transfer station, EPA Licence No. W0122-01. The site is licensed to handle 2650 tonnes per annum which equates to daily volumes on site of 20 – 60 tonnes. Guardian Silver Lining is an ISO 14001 accredited facility.

Flammable substances (liquids & solids) are stored on racking in the warehouse in sealed IBC'S (600- 1000 litre) and 25- 200 litre drums. Solid waste classified as flammable (contaminated rags etc) are stored in FIBC and UN approved pallet boxes. The warehouse is bunded and has no interceptors or drains. There is no dispensing or mixing of flammable substances on site.

All waste is segregated and stored in the warehouse prior either disposal within Ireland or abroad. Liquid solvent waste is disposed of through a local waste disposal company; Rialta (<10C flash point) or is exported to Belgium (>10C flash point).

The maximum amount of flammable substance (liquid and solids) within the facility on a daily basis is 25 tonnes (7 tonnes of liquid and 18 tonnes of solids). Flammable solvents for disposal at Rialta are collected on a regular basis with daily collections, with solvents being exported to Belgium every 2 weeks when enough solvent is accumulated.

Flammable waste is mainly in the form of solvents (480 t per annum), paints/inks (500 t per annum), and waste materials from garages which includes oil, oil filters, rags (240 t per annum). All waste materials irrespective of the percentage of flammable substance present are classified as flammable from an ADR waste handling perspective.

Flammable wastes (liquids and solids) handled on site include mainly;

- Isopropanol
- Methoxypropanol
- Propanol
- White Spirit 100
- XETAC6 Ethyl Acetate
- IMS/ Ethyl Acetate blends <80/20
- Rollotherm Inks

- Acrylac Dispersion Varnish
- GK 60 Wash
- Blast

Please see Table 1 for the flammable properties of these products.

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## 3.0 The Substances and Their Properties That Present an Explosion Hazard:

Materials with the potential to form explosive mixtures with air include:

Flammable gases & vapours

Table 1: The substance and their properties that present an explosion hazard; Flammable liquids/gases

Description of Material	Properties of flammable materials – Gas / Vapour / Liquid							
	Flash Point °C	Auto- ignitio n Temp	LEL %Vol	UEL %Vol	Gas / Vapour Density Air = 1	Gas Group	MIE mJ	T Class
Isopropanol	12	399	2	12.7	2.1			T2
Methoxypropanol	33	286		>1	>1		7 7	Т3
Propanol	12	399	2	12	2.1			T2
White Spirit 100	39	230	0.6	8	<1			Т3
XETAC6 Ethyl Acetate	-3	425	2.2	11	3.04			T2
IMS/ Ethyl Acetate blends <80/20	<23	>350	1.5	20	0.8			T2
Rollotherm Inks	>100	N/A	0.5	6.5	N/A			
Acrylac Dispersion Varnish	>100	651	N/A	N/A	N/A			T1
GK 60 Wash	40	>230	0.6	8	N/A			Т3
Blast	46	N/A	N/A	N/A	N/A			

Data obtained from relevant MSDS sheets supplied by client

N/A denotes information not available

N/B denotes not applicable

## 4.0 Warehouse Review 19th August 2010.

Access to Unit 61 warehouse is through a 4.5m in width, approximate height of 6m forklift goods entrance. The door is left in the full open position during normal business hours, giving good natural ventilation in the warehouse.

On the day of the visit it was observed that the warehouse was quiet full of waste products; IBC, FIBC, drums and EU approved pallet boxes. Management advised that this was due to the fact that the waste disposal company in Belgium was in the process of moving premises and there was a back-log in deliveries to them.

All flammable waste was stored in sealed IBC's or drums. Flammable material was stored in various locations within the warehouse, in the racks and on the ground. Management advised that waste stock on site is carefully managed to minimise the storage of waste.

All waste is collected by trained HAZCHEM Guardian personnel using company licensed vehicles. Guardian has a policy of not accepting any waste from its customers unless it is clearly labelled and contained in sealed undamaged container.

The racking was observed in good condition and was labelled with the safe working load (SWL). Management advised that the racking was subject to routine inspection by staff and independent inspection by a competent person on an annual basis.

The racking was three levels high, management has a rack stacking policy whereby heavy IBC's pallets are stored at low level and light pallets, drums are stored at high level. All drums and containers stored at high level are pallet wrapped to secure the load from falling.

Two spill kits including portable bunds are available within the warehouse in the event of a leakage or spillage and staff are all trained in chemical spill safety and control. In the event of a spill occurring due for example; drum leak or IBC damage, management keep spare empty containers available for such emergency situations and the product would be transferred to the new container.

The warehouse has adequate fire fighting equipment and all staff has received fire extinguisher training. Fire equipment is on an annual service contract. The warehouse and offices is fitted with an automatic monitored fire detection system which is on a quarterly maintenance contract. The warehouse is secure when not in use and is fitted with a monitored security alarm system.

The warehouse has two battery operated forklift and chargers, operated by a trained and licensed forklift driver. The forklifts are maintained and serviced by a competent contractor.

### 5.0 Warehouse ATEX Classification

Currently the warehouse is classified as an ATEX Zone 2; abnormal/emergency explosion risk scenario (see table 2 for exact definitions) due to the haphazard storage of flammable materials (liquids and solids) in various locations within the warehouse. Within the waste solvent IBC's, drums and containers are classified as ATEX Zone 0; continuous explosion risk.

The main explosion risk associated with this waste activity would be due to a leakage of a 600- 1000lt solvent IBC or 200lt drums within the warehouse, the spill spreading uncontrolled within the warehouse and ignition of the flammable vapours within the explosive range due to an electrical spark etc.

Flammable solid waste poses a negligible explosion risk within the warehouse due to its containment in sealed containers, size and type of containers, relatively high flash point of oil wastes (various) and physical composition. Flammable solid waste (rags etc) poses more of a fire risk in the warehouse.

See ATEX Risk Assessment in Appendix 1.

If the recommendations of this Risk Assessment report as highlighted in Section 6.0 of this report are implemented as outlined, the area of risk (zone 2) could be limited to the bulk liquid solvent two bays inside the main entrance door. Any solvent spillages in this area would be contained within the bund and the ramp. Due to its location, close proximity to the goods opening; the ventilation would be considered to be Natural, High and availability is good. The removal of electrical ignition sources from this area and the implementation of the organisational controls as indicated will adequately control this explosion risk.

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## 5.1 Hazardous Area Classification

Hazardous areas are classified into zones based upon the frequency of the occurrence and duration of an explosive gas atmosphere, as follows:

Table 2: Zone Classification

Zone	Description
Zone 0	A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is present continuously or for long periods or frequently
Zone 1	A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is likely to occur in normal operation occasionally.
Zone 2	A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

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## 6.0 Recommendations for ATEX Compliance

- Segregate flammable solvent IBC's to a designated rack area, the first two bays inside the main goods entrance door. This area is well ventilated due to goods entrance door. Any flammable spills will be contained between the entrance bund and speed ramp area, just in side the goods entrance door. Confirm that spills in this area are contained.
- 2. Waste solvent IBC should be stored on the first rack level only.
- 3. Solid flammable waste should be stored in designated racking area only, preferable in the bays adjacent to flammable liquids.
- 4. Pallets of products must not be stored in the entrance area of the warehouse and restrict access/egress for the forklift. This needs to be enforced by site management. Erect warning sign or cross-hatch ground.
- 5. Relocate battery charging to rear of the warehouse. Battery charging would be considered an ignition source for fires, so no combustibles should be stored in battery charging area.
- 6. Remove the sockets in the existing battery charging area.
- 7. Relocate the electrical services (light switch, fire alarm call point, fire sounder, door controls) on the wall appositive the new designated solvent store area.
- 8. Replace high level light fitting in the first bay with an Ex rated type E Ex II G3 T3 or equivalent.
- 9. IBC's should be secured to forklift prior to transportation within yard and warehouse.
- 10. Door to the office off warehouse should be fitted with a self closing mechanism.
- 11. Update the facility emergency plan to include in the event of a flammable spillage; Isolation of the forklifts or restrict forklift access to warehouse in the event of a spillage.
- 12. Repair the door motor at high level- casing does not look secure.
- 13. Issue all staff with anti-static footwear.
- 14. Erect warning signage restricting the use of mobile phones in warehouse.
- Erect "flammable storage area" signage in designated waste area for liquid and solids
- 16. Erect warning ATEX signage at entrance to warehouse.
- 17. Ensure leg guards are fitted to racking system used to store waste solvent IBC's.
- 18. Purchase a calibrated LEL gas meter to use in the event of an flammable spillage emergency.
- 19. Hot work (welding, cutting, burning, brazing etc) should be strictly managed and should only be carried out in the warehouse once all flammable liquids and solids are removed.

## Appendix 1

Hazardous Area Classifica  Completed by; Gary Horgan (CMSE)  Equipment Used: Flammable containers Forklift operation Forklift o				Guardian	Guardian Silver Lining	
Completed by; Gary Horgan (CMSE)   Equipment Used:   Ventilation:			Hazardo	ous Area Classific	ation & ATEX Risk Assessment	
Equipment Used: Ventilation:   Flammable containers   Type – Natural     Racking system   Degree – Low     Forklift operation   Electrical lighting & power     Continuous   Sources   Primary     Secondary   Secondary     It   Continuous   None     It   It   It   It     It   It   It	August 2010	Completed by;	Gary Hor	gan (CMSE)		Sheet No.: 1/2
Racking system Forklift operation Availability - Poor Forklift operation Availability - Poor Forklift operation Forklift operat		ipment Used:	Ventila	tion:	Type of Zone & Extent Surround Area (Zone):	Area (Zone):
Racking system Forklift operation Forklift operation Forklift operation Forklift operation Formation Continuous Secondary K Continuous None None Forklift operation Availability - Poor Availability - Poor Consequence Sources None None	handling	nable containers	Type - N	atural	Zone 0 within waste solvent (liquid and solids) IBC's, drums, pallet boxes	solids) IBC's, drums, pallet boxes
Forklift operation  Electrical lighting & power  Electrical lighting & power  Continuous  Sources  Primary  Secondary  It Continuous  None  None	ح	ng system	Degree -	. Low		
Electrical lighting & power  Release: Potential Consequence Sources Primary Secondary  K Continuous None None	Forklit	ft operation	Availabilit	ty - Poor		
re Release: Potential Potential Continuous Sources Primary Secondary  K Continuous None None	Electri	ical lighting & power				
Continuous Sources Primary Secondary None None	-			Potential		Additional Control Measures/Comments
Secondary Secondary None It	Source of			Consequence		
Secondary None None	Prim					
Sk Continuous None None tr	Seco	ndary				
			_	None	livents stored in sealed,	All containers are clearly labelled
Waste flammable solvent IBC's Waste flammable drums	<u></u>					Emergency Procedures in place in the event of a spillage
Waste flammable solvent IBC's Waste flammable drums						All staff trained in HAZCHEM and emergency procedures
Waste flammable drums	lammable solvent					Management staff safety competency, Dangerous Good
	ammable drums					Safety Advisors (DGSA) and to Diploma in Health & Safety level.
Waste flammable boxes	lammable boxes	-				

			Guardiar	Guardian Silver Lining	
		¥	azardous Area Classifi	Hazardous Area Classification & ATEX Risk Assessment	ıt.
Date; August 2010	Comp	Completed by; Gary	y Horgan (CMSE)		Sheet No.: 2/2
Location:	Equipment Used:		Ventilation:	Type of Zone & Extent Surround Area (Zone):	d Area (Zone):
Flammable waste handling	Flammable containers		Type - Natural	Zone 2 within the warehouse- ground floor	loor
warenouse Unit 61 Cookstown, Tallagh	Racking system	Δ	Degree – Medium		
	Forklift operation	4	Availability - Good		
	Electrical lighting & power	* power			
Explosive Atmosphere	Release:	Potential	Potential	Basis of Safety	Additional Control Measures/Comments
Present/Source of Release	Continuous	Sources	Consequence		
	Primary				
	Secondary				
Secondary explosion risk	Secondary	Electrical spark for	for Explosion	See control measures/comments	Facility does not take in damaged containers
Mithin warehouse- ground floor area		equipment; batt	ery		Emergency Procedures in place in the event of a spillage
		chargers, sockets,	ets,		All staff trained in HAZCHEM and emergency procedures
Waste solvent Container failure/leak		Spark from forklif			Management staff safety competency: Dangerous Good Safety Advisors (DGSA) and to Diploma in Health & Safety level.
		Static			Restricted access area
		Impact spark			Trained forklift driver
		·			No smoking policy in place
-					Hot work is not allowed under any circumstances in the warehouse
					See recommendation in report



| PRTR# : W0122 | Facility Name : Guardian Environmental Services Ltd | Filename : W0122 | 2010.xism | Return Year : 2010 |

## Guidance to completing the PRTR workbook

## **AER Returns Workbook**

/ersion 1.1.12

RI	EF	EF	REN	ICE	YE/	AR	2010	1

## 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
	Recycling or reclamation of metals and metal compounds.  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.

	Unit 61, Cookstown Industrial Estate
Address 2	Belgard Road
Address 3	Tallaght
Address 4	Dublin 24
	Dublin
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	Lee Douglas
AER Returns Contact Email Address	joanleedouglas_1@hotmail.com
AER Returns Contact Position	Managing Director
AER Returns Contact Telephone Number	01-4587270 / 086-2604437
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	
User Feedback/Comments	
Web Address	

### 2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General
50.1	General

| PRTR# : W0122 | Facility Name : Guardian Environmental Services Ltd | Filename : W0122\_2010.xlsm | Return Year : 2010 | Page 1 of 2

Sheet: Facility ID Activities AER Returns Workbook 27/9/2011 18:2

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

ls 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 ?	네 사람이 있었다. 그는 사람이 많은 아이를 하여 하다 하면, 나는 이번에 가는 사람이 하는 것은 사람이 하는 것은 것이 되었다. 그는 사람이 되는 것은 것은 것이 없다.

TO ANNOUNCE OF THE PERSON OF T	
5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE	

Haz Wasie; I Manne and Licencore Permit No of Mexit  Destination Focility  Max Wasie; I ame and Destination Facility  Haz Wasie; I ame and Destination Facility
Method Used
Waste Treatment Coperation M/C/E Method Used Treatment Treatment
ator R13 E Volume Calculation Off
water-based offset plate developer 223.0 solutions D9 E Volume Calculation Offsite in Ireland Enva Ireland, W0041
116.0 fixed solutions R13 E Volume Calcutation Offsite in Ireland Enva Ireland,W0041
Rita Environmental,W0192- 286.0 other solvents and solvent mixtures R13 E Volume Calculation Offsite in Ireland 02
other halogenated solvents and solvent R13 E Volume Calculation Offsite in Ireland 02
Recyfuel SA,D2200/81080/RGPED/2 60.0 solvents or other dangerous substances R1 E Volume Calculation Abroad 008/2JAP-PU
absorbents, filter materials (including oil filters not otherwise specified), wiping SA,02200/61080/RGPED/2 cloths, protective clothing contaminated by SA,02200/61080/RGPED/2 SA,0400/61080/RGPED/2 Abroad 00812AP-PU
81.0 waste ink containing dangerous substances R1 E Volume Calculation Abroad 008/2/AP-PU
8.1. Containmated by dailigerous studientes R1 E Weighed Adread Outstander-Fu Recytled Waste paint and variets other than those P3. D2306061080RGPED/2 P4. Values Containing Annay A
R4 M Missished Offsite in Ireland
Buridaa.
R1 E Volume Calculation Abroad
19.0 Terrous metal milys and untings K4 E Weighed Onsite in Heland mullinedas, www osool 40

Actual Address of Final Destination Le Final Recovery / Disposal Site	(HAZAKDOUS WASTE ONLY)				KilcullenKildareIreland		Greenogue Industrial : Estate,Rathcoole,Dublinlre land	Zoning Industriel d'Ehein, B4480, EngisBelgi um		Blackrod,Bolton,Lanchashire ,BL6 5SL,United Kingdom		Kilkenny Road,Athy,Kildare,!reland	77 Broomhill Road,Tallaght,Dublin,24,Irel and		
Name and License / Permit No. and Address of Final Rocoverer / Disposer (HAZARDOUS WASTE	ONLY	Total Control			KTK Landfill,W081- 03,Kilcullen,.,Kildare, relan d	Ritta Environmental, W0192- 02, Greenogue Industrial Estate, Rathcoole, Dublin, Ire land	Killa Environmental, W0192- 02, Greenogue Industrial Estate, Rathcoole, Dublin, , Ire land	Recyluel SA,D3200/R1080/RGPED/2 008/2/AP-PU,Zoning industriel dTEhein,B4480,Engis,Belgi um	Remondis UK,WML 0707,Blackrod,Bolton,Lanch ashire,BL6 5SL,United Kingdom	Remondis UK, WML 0707, Blackrod, Bolton, Lanch ashire, BL6 5SL, United Kingdom	Remondis UK,WML 0707,Blackrod,Bolton,Lanch ashire,BL6 5SL,United Kingdom	Irish Lamp Recycling,KE-08- 034801,Kilkenny Road,Athy,Kildare,,,Ireland	renab recycle, Wr-FDs-10- 0008-02,77 Broomhill Road, Fallaght, Dublin, 24, Irei and		
Haz I	Lecoyell Disposer	Zoning Industriel d'Ehein,B4480,EngisBelgi		Greenogue Industrial Estate,Rathcoole,Co. Dublin,,Ireland	Greenogue Industrial Estate,Rathcoole,Co, Dublin, Ireland	Greenogue industrial Estate,Rathcoole,Co. Dublin,Ireland	Greenogue Industrial Estate,Rathcoole,Co. Dublin,,Ireland	Allied industrial Estate, Kylemore Road, Dublin, 10, Ireland	Greenogue Industrial Estate,Rathcoole,Co. DublinIreland	Greenogue Industrial Estate,Rathcoole,Co, Dublin,Irefand	Greenogue Industrial Estate,Rathcoole,Co. Dublin,.,Ireland	Kilkenny Road,Athy,Kildare,!reland	77 Broomhill Road, Tallaght, Dublin, 24, Irel and	// Broomhill Road, Tallaght, Dublin, 24, Irel and	Unit 2 Duteek Business Park,Duteek,Meath,.,Iretand
Licenee/Permt No of Next Destination Facility Name and Haza Wagag. Name and Haza Wagag. Name and Licenee/Permt No of Descriptions of Descripti	Neodel Circles	Recyfuel SA,D3200/61080/RGPED/2	Ougline - FO Rilla Environmental, W0192- 02	Rita Environmental,W0192- 02	Rilta Environmental,W0192- 02	Rilta Environmental,W0192- 02	Rita Environmental,W0192- 02	Ecosafe Systems,W054-2	Rilla Environmental,W0192- 02	Rilla Environmental,W0192- 02	Rita Environmental,W0192- 02	frish Lamp Recycling,KE-08- 034801	Rehab Recycle,WFP-DS-10- 0008-02	Rehab Recycle,WFP-DS-10- 0008-02	Irish Metal Refiners,WCP- MH-10-0003-01
	Location of Treatment	Arroad	n Abroad Offsite in Ireland	Offsite in Ireland	Offsite in Ireland	Volume Calculation Offsite in Ireland	Offsite in Ireland	Volume Calculation Offsite in Ireland	n Offsite in Ireland	Volume Calculation Offsite in Ireland	Votume Calculation Offsite in Ireland	Offsite in Ireland	Offsite in freland	Offsite in Ireland	Irish Metal Refin Offsite in treland MH-10-0003-01
Method Elsed			Volume Carculation Aurodu Weighed Offsite	Weighed	Weighed	Volume Calculatio	Weighed	Volume Calculatio	Volume Calculation	Volume Calculation	Volume Calculation	Weighed	Weighed	Weighed	Weighed
	nt M/C/E		n m	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш
91.000 Marketon (n. 17.	Waste Treatment Operation	2	£ £	 D10	D15	R 13	R13	£ 33	R13	R13	R13	<b>%</b>	R5	RS	£ 5
	Description of Waste	waste ink other than those mentioned in 08 5.0 03.12	sludges and filter cakes other than those 25.0 mentioned in 11 01 09	medicines other than those mentioned in 18 22.0 01 08	packaging containing residues of or 6.0 contaminated by dangerous substances	42.0 other engine, gear and lubricating oils	9.0 lead batteries	waste paint and varnish containing organic 5.0 solvents or other dangerous substances	water-based developer and activator 10.0 solutions	water-based offset plate developer 13.0 solutions	10.0 fixed solutions	fluorescent tubes and other mercury-3.0 containing waste	discarded equipment containing hazardous components (16) other than those mentioned in 16 02 09 to 16 02 12	discarded equipment other than those 7.0 mentioned in 16 02 09 to 16 02 13	photographic film and paper containing No 15.0 silver or silver compounds Propriate program at form the roles makes
Quantity (Tonnes per Year)		C	25.0	22.0	6.0	42.0	0.6	5.0	10.0	13.0	10.0	3.0	4.0	7.0	15.0 9 appens an expense of
	Hazardous	C Z	2 2	S S	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	o <sub>N</sub>	No
	European Waste Code	08 03 13		18 01 09	15 01 10	13 02 08	16 06 01	08 01 11	09 01 01	09 01 02	09 01 04	20 01 21	16 02 13	16 02 14	
	Transfer Destination	To Other Countries		Within the Country	Within the Country	Within the Country	Within the Country	Within the Country	Within the Country	Within the Country	Within the Country	Within the Country	Within the Country	Within the Country	Within the Country 09 01 07