GSL

WASTE COLLECTION.IE

UNIT 61
COOKSTOWN INDUSTRIAL ESTATE,
BELGARD ROAD,
TALLAGHT, DUBLIN 24

Tel: 01 4622 822 Web:www.wastecollection.ie
Fax: 01 4622 833 E-mail:info@wastecollection.ie
VAT No. 354 2108 81 REG. No. 1631444

GUARDIAN SILVER LINING

PLEASE E-MAIL TO

robert @ wastecare.ie

Environmental Protection Agency

AER Returns Worksheet

Version 1.1.04

REFERENCE YEAR	2008

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	536400.000
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	robert@wastecare.ie
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	0
Number of Operating Hours in Year	240
Number of Employees	10
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
5c	Installations for the disposal of non-hazardous waste

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 ?	

0380336868376356e 7251f14109b2fe

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

[PRTR# : W0122 | Facility Name : Guardian Environmental Services Ltd | Filename : W0122_2008.xls | Return Year : 2008]

Transfer Destination	European Waste Code	Hazardous	Quantity T/Year	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker	Name and Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)	Licence / Permit No. of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
To Other Countries	09 01 01	Yes	109.0	Photographic Developer	R4	C	Volume Calculation	Abroad	Silver Lining Industries WML 947	Richmond Works, Garforth, Leeds, UK	Silver Lining Industries Garforth Leeds, UK	WML 947
To Other Countries	09 01 02	Yes	285.0	Plate Developer	R4	C	Volume Calculation	Abroad	Silver Lining Industries WML 947	Richmond Works, Garforth, Leeds, UK	Silver Lining Industries Garforth Leeds, UK	WML 947
To Other Countries	09 01 04	Yes	219.0	Fixer	R4	C	Volume Calculation	Abroad	Silver Lining Industries WML 947	Richmond Works, Garforth, Leeds, UK	Silver Lining Industries Garforth Leeds, UK	WML 947
To Other Countries	09 01 07	No	15.0	Film	R4	M	Weighed	Abroad	Silver Lining Industries WML 947	Richmond Works, Garforth, Leeds, UK		
Within the Country	14 06 02	Yes	83.0	Chlorinated Solvent	R13	C	Volume Calculation	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin	ATM, NL 4782 PW Moerdijk Holland	No. 03/7623
Within the Country	14 06 03	Yes	402.0	Non Chlorinated Solvent	R13	C	Volume Calculation	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin	ATM, NL 4782 PW Moerdijk Holland	No. 03/7623
Within the Country	08 01 11	Yes	65.0	Paint / Varnish	R13	C	Volume Calculation	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin	ATM, NL 4782 PW Moerdijk Holland	No. 03/7623
Within the Country	08 03 12	Yes	142.0	Ink	R13	C	Volume Calculation	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin	ATM, NL 4782 PW Moerdijk Holland	No. 03/7623
Within the Country	13 02 08	Yes	31.0	Oil	D9	C	Volume Calculation	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin	Rilta Environmental Greenogue Ind. Est	W0192-01
Within the Country	15 02 02	Yes	85.0	Rags / Absorbents	R13	E	None	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin	ATM, NL 4782 PW Moerdijk Holland	No. 03/7623
Within the Country	15 01 10	Yes	69.0	Contaminated Drums	D15	E	None	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin	KTK Landfill Co. Kildare	W0081-03
Within the Country	16 06 01	Yes	18.0	Batteries	R4	E	None	Offsite in Ireland			Returnbatt Old Mill Ind. Est Co. Kildare	W0105-01
Within the Country	**16 02 14**	**No**	16.0	WEEE	R13	M	Weighed	Offsite in Ireland	TechRec W0233-01	51 Parkwest Ind. Est D12		
Within the Country	08 01 12	No	57.0	Paint / Varnish	R13	C	Volume Calculation	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin		
Within the Country	08 04 10	No	22.0	Adhesive	R13	C	Volume Calculation	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin		
Within the Country	08 03 13	No	9.0	Ink	R13	C	Volume Calculation	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin		
Within the Country	12 01 03	No	126.0	Aluminium Plates	R4	M	Weighed	Offsite in Ireland	Cummins Metal Recycling WPR 045	Station Road Clondalkin D12		
Within the Country	12 01 01	No	12.0	Scrap Metal	R4	M	Weighed	Offsite in Ireland	Cummins Metal Recycling WPR 045	Station Road Clondalkin D12		
Within the Country	20 01 21	Yes	6.0	Fluorescent tubes	R4	E	None	Offsite in Ireland	Irish Lamp Recycling WFP-KE-08-0348-01	Kilkenny Road, Athy, Co. Kildare		
Within the Country	01 01 01	No	80.0	Mine Screenings	R13	M	Weighed	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin		
Within the Country	11 01 09	Yes	12.0	Acidic Sludge	D9	M	Volume Calculation	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin	Rilta Environmental Greenogue Ind. Est	W0192-02
Within the Country	16 10 02	No	30.0	Aqueous waste	D9	M	Volume Calculation	Offsite in Ireland	Rilta Environmental W0192-02	Greenogue Ind. Est Rathcoole Co Dublin	Rilta Environmental Greenogue Ind. Est	W0192-02

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

ANNUAL ENVIRONMENTAL REPORT
2008

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

EPA WASTE REGISTER NUMBER W0122-01

TABLE OF CONTENTS

REPORTING PERIOD

The reporting period for this licence is from 01 January 2008 to 31st December 2008.

WASTE ACTIVITIES CARRIED OUT AT THE FACILITY.

The following are the waste activities carried out by 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's, 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.

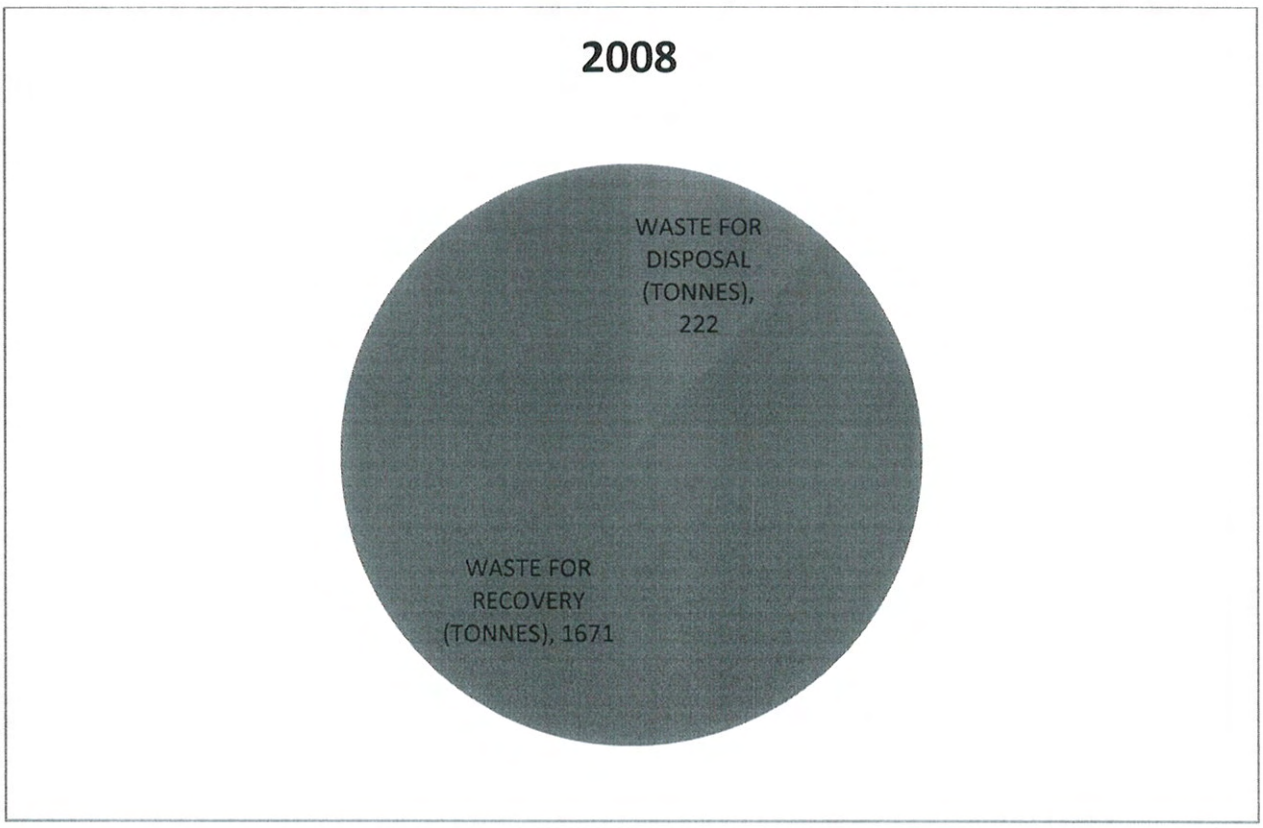
Attached is Schedule E WASTE ACCEPTANCE AND HANDLING
These are the types and quantities of waste accepted at the facility.

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 1893.

Of this
1671 tonnes were recovered/ recycled.
222 tonnes were disposed.

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


2008
WASTE FOR DISPOSAL (TONNES), 222
WASTE FOR RECOVERY (TONNES), 1671

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	

OTHER WASTES	Check (if accepted)	Additional Information
Plasterboard and Plaster	☐ NO.	
Dried Paints, Dried Varnish & Dried Lacquer	☐ YES.	PAINTS ETC LISTED IN F1.2. WILL BE LIQUID, SLURRY OR DRIED IN TINS ETC.
Foundry Sand & Sand Blasting Residues	☐ NO.	
Glass	☐ YES.	IF WITH SILVER CONTENT ETC FOR RECOVERY.
Latex & Rubber Solutions	☐ NO.	
Solid, Fully Polymerised Plastics	☐ YES.	THIS COULD ARRIVE WITH WASTE ELECTRONICS.
Solid Rubber (excluding tyres)	☐ NO	
Empty Containers	☐ YES	FROM PHOTOGRAPHIC / PRINTING ETC
Non-Hazardous Ferrous and Non-Ferrous Metals	☐ YES.	WITH SCRAP ELECTRONICS ETC.

OTHER WASTES (APPLICANT TO SPECIFY)	Check (if accepted)	Additional Information
FILM	☐	WASTE FILM AND X RAY
	☐	FILM. FOR RECOVERY.
LITHO PLATE	☐	FOR ALUMINIUM
	☐	RECOVERY.
	☐	
	☐	
	☐	
	☐	
	☐	
	☐	
	☐	
	☐	
	☐	
	☐	
	☐	
	☐	

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	☐ NO	
Topsoil	☐ NO	
Brickwork	☐ NO	
Stone, Rock and Slate	☐ NO	
Clay	☐ NO	
Natural Sand	☐ NO	
Concrete	☐ NO	
Pottery & China	☐ NO	
Solid Road Planings, Solid Tarmacadam, Solid Asphalt	☐ NO	
BIODEGRADABLE WASTE	**Check (if accepted)**	**Additional Information**
Wood & Wood Products	☑	CONTAMINATED PACKAGING
Paper & Paper Products	☐ YES.	CONTAMINATED PACKAGING PRINTING AND PHOTOGRAPHIC
Vegetable Matter	☐ NO	
Non-Infectious Health-Care Waste	☐ NO.	
Natural & Manmade Fibres	☐ NO.	
Road Sweepings	☐ NO	
Gully Emptyings	☐ NO	
Septic Tank Waste	☐ NO	
Canal & Dredgings	☐ NO	
Boiler Scale	☐ NO	
Ash & Cinders	☐ NO	
Food Stuffs	☐ NO.	
Oil/Water Mixtures	☐ YES.	OIL LISTED IN E.1.2.
Vegetable Oil	☐ NO	
Fats, Waxes and Greases	☐ YES.	WILL BE IN THE WASTE OIL.
Animal Excrement (including paunch contents)	☐ NO.	
Animal Blood	☐ NO	

ABLE E.1.2 HAZARDOUS WASTE TYPES AND QUANTITIES

AZARDOUS WASTE TYPE	TONNES PER ANNUM	TOTAL (over life of site)
aste Oil	120	
il filters	20	
bestos	NONE	NONE
/Sand Mixtures or Mixtures of and Other Absorbent terial	100	
nt inated Rubble, Soil, etc.	NONE	NONE
ous Healthcare Waste	NONE	NONE
harmaceutical Waste	36	
ytotoxic Waste	NONE	NONE
harps Waste	NONE	NONE
lvents	480	
ecified Risk Material	NONE	NONE
hotographic Processing Waste	1680	TREATMENT PLANT NO KNOWN LIFE PERIOD
aint and Ink	960	
atteries	60	
otor Vehicle Batteries	12	
uorescent Light Bulbs	60	
THER HAZARDOUS WASTE (APPLICANT TO SPECIFY)		
RY CLEANING RESIDUES.	360	
ACID	120	
ALKALIS	120	

QUANTITIES AND COMPOSITION OF WASTE RECOVERED DISPOSED OF AND/OR RECYCLED DURING THE REPORTING YEAR AND THE YEAR 2008.

B) Waste received and sent for disposal for the year 2008

EWC CODE	DESCRIPTION	QUANTITY 2008 (Tonnes)	QUANTITY 2007 (Tonnes)
0101	***Waste from Mineral Excavation***		
010101	Waste from mineral metalliferous excavation	80	0
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) .***	12	10
130	***Waste hydraulic oil***		
130208	Other engine , gear and lubricating oils	31	20
1501	***Packaging (including separately collected municipal packaging waste)***		
150110	Packaging containing residues of or contaminated by dangerous substances	69	40
1610	***Aqueous liquid waste destined for off-site treatment***		
161002	Aqueous liquid waste	30	0

b) Waste received and sent for recovery / recycling.

EWC CODE	DESCRIPTION	QUANTITY 2008	QUANTITY 2007
0801	***Wastes from MFSU of paint and varnish***		
080111	Waste paints and varnish containing organic solvents or other dangerous substances .	65	80
080112	Waste paint and varnish containing other than those mentioned in 080111	57	50
0803	***Wastes from MFSU of printing inks***		
080312	Waste ink containing dangerous substances	142	95
080313	Waste ink other than those mentioned in 080312	9	5
0804	***MFSU Adhesives***		
080410	Waste Adhesive	22	27
0901	***Wastes from the photographic industry***		
090101 090104	Water –based developer and activator solutions. Fixer Solutions	109 219	370
090102	Water based offset plate developer solutions	285	191
090107	Photographic film and paper containing silver or silver compounds	15	27
1406	***Waste organic solvents , refrigerants and foam / aerosol propellants***		
140602	Chlorinated Solvent	83	82
140603	Other solvents and solvent mixtures	402	353
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.	85	87
1602	***Wastes from electrical and electronic components***		
160213 160214	Discarded equipment containing hazardous Components other that those mentioned in 160209 to 160213	16	27

1606	***Batteries and accumulators***		
160601	Lead batteries	18	8
1201	***Metal Waste***		
120103	Aluminium	126	127
1910	***Metal Containing Waste***		
191001	Steel	12	18
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.	6	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 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 Silver Lining (Ireland)Ltd in 2nd Dec 2008, to assess compliance with the licence requirements. The licence assigns noise limits of 55 dB(A) by day .Daytime noise emissions from 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 2008	UNITS OF ELECTRICITY USED
Jan	2190
Feb	1666
March	2049
April	1445
May - August	5790
September - December	2512

The total usage in 2008 was 15652 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.

At present all unprocessed photographic waste is shipped under Transfrontier Shipment Regulations to Silver Lining, UK. However our facility has the capacity to process 20,000 litres at any one time should the need arise.

SIGNIFICANT OBJECTIVES AND TARGETS
2009

Objectives	Environmental Impact	Table No.
Bunding	Pollution of Waterways	1
Minimisation of fugitive emissions to air	Air Pollution	2
Improve the layout and storage space of the facility	Housekeeping	3
To improve the environmental performance of the facility	Various environmental impacts	4
Improvement of the visual appearance of the facility	Visual Impact	5
Provide for the efficient use of resources and energy.	Depletion of energy / resources	6

TABLE 1

OBJECTIVE	To minimise the risk of pollution to the waterways
TARGET	1. To comply with Condition 3.7 of EPA licence 2. Ensure all staff are appropriately trained.
DATE OF COMPLETION	2 – End of April 09
RESOURCES REQUIRED	Robert Malone External Consultants
RESPONSIBILITY	Robert Malone – Manager Lee Douglas – Managing Director
REVIEW DATE	June 09

TABLE 2

OBJECTIVE	To minimise fugitive emissions to air
TARGET	1. To reduce emissions through existing technologies
DATE OF COMPLETION	1 – End of April 09
RESOURCES REQUIRED	Robert Malone
RESPONSIBILITY	Robert Malone – Manager Lee Douglas – Managing Director
REVIEW DATE	June 09

TABLE 3

OBJECTIVE	To improve the layout and storage of the facility.
TARGET	1. To increase the racking system. 2. To improve the organisation skills within the area 3. Manage incoming and out going waste
DATE OF COMPLETION	1 – By end of 2009
RESOURCES REQUIRED	Robert Malone Tom Werstak
RESPONSIBILITY	Robert Malone – Manager Lee Douglas – Managing Director
REVIEW DATE	June 09

TABLE 4

OBJECTIVE	To improve the environmental performance of the facility.
TARGET	1. Maintain ISO 14001 standard 2. Ensure compliance with all conditions of EPA Waste Licence and ADR Regulations. 3. Review and update procedures and practices 3. Carry out regular audits. 4. Ensure waste inspection log is maintained. 5. Manage incoming and out going waste
DATE OF COMPLETION	On-going
RESOURCES REQUIRED	Robert Malone Tom Werstak
RESPONSIBILITY	Robert Malone – Manager Lee Douglas – Managing Director
REVIEW DATE	June 09

TABLE 5

OBJECTIVE	To improve the visual appearance of the facility.
TARGET	1. Paint depot area / depot office and carry out maintenance where required. 2. Carry out regular housekeeping audits.
DATE OF COMPLETION	1 – End of May 09
RESOURCES REQUIRED	Robert Malone Tom Werstak
RESPONSIBILITY	Robert Malone – Manager Lee Douglas – Managing Director
REVIEW DATE	June 09

TABLE 6

OBJECTIVE	To provide for the efficient use of energy
TARGET	1. Implement recommendations of Energy Audit
DATE OF COMPLETION	1 – June 09
RESOURCES REQUIRED	Robert Malone
RESPONSIBILITY	Robert Malone – Manager Lee Douglas – Managing Director
REVIEW DATE	June 09

SIGNIFICANT OBJECTIVES AND TARGETS
2008

Objectives	Environmental Impact	Table No.
Bunding	Pollution of Waterways	1
Minimisation of fugitive emissions to air	Air Pollution	2
Improve the layout and storage space of the facility	Housekeeping	3
To improve the environmental performance of the facility	Various environmental impacts	4
Improvement of the visual appearance of the facility	Visual Impact	5
Provide for the efficient use of resources and energy.	Depletion of energy / resources	6

TABLE 1

OBJECTIVE	To minimise the risk of pollution to the waterways
TARGET	1. To comply with Condition 3.7 of EPA licence 2. To carry out bund testing on new bunded areas (as per Fire Risk Assessment). 3. Ensure all staff are appropriately trained.
DATE OF COMPLETION	2 – End of April 08
RESOURCES REQUIRED	Robert Malone External Consultants
RESPONSIBILITY	Robert Malone – Manager Lee Douglas – Managing Director
REVIEW DATE	June 08

REVIEW OF OBJECTIVES AND TARGETS

OBJECTIVE: To minimise the risk of pollution to the waterways

REVIEW DATE: June 08

COMMENTS:

The EPA agreed to a visual inspection of the three storage tanks.

This is carried out and recorded on a weekly basis.

In order to achieve the 3000L shortfall in firewater retention capabilities (as per Fire Risk Assessment) additional bunding was put in place at the front and rear of the premises.

This additional bunding passed a bund integrity test in May 2008.

TABLE 2

OBJECTIVE	To minimise fugitive emissions to air
TARGET	1. To reduce emissions through existing technologies
DATE OF COMPLETION	1 – End of April 08
RESOURCES REQUIRED	Robert Malone
RESPONSIBILITY	Robert Malone – Manager Lee Douglas – Managing Director
REVIEW DATE	June 08

REVIEW OF OBJECTIVES AND TARGETS

OBJECTIVE: To minimise the fugitive emissions to air

REVIEW DATE: June 08

COMMENTS:

The fugitive emissions were analysed in the past and were found to be below Health and Safety limits.

We commissioned Alert Engineering to fabricate a lid on the large 20,000L storage tank. This lid is now ready to be fitted.

We also plan to install a removable lid on the sump area.

TABLE 3

OBJECTIVE	To improve the layout and storage of the facility.
TARGET	1. To increase the racking system. 2. To improve the organisation skills within the area 3. Manage incoming and out going waste
DATE OF COMPLETION	1 – By end of 2008
RESOURCES REQUIRED	Robert Malone Tom Werstak
RESPONSIBILITY	Robert Malone – Manager Lee Douglas – Managing Director
REVIEW DATE	June 08

REVIEW OF OBJECTIVES AND TARGETS

OBJECTIVE: To improve the layout and storage of the facility

REVIEW DATE: June 08

COMMENTS:

The volume of waste stored on-site is kept to a minimum as a result of the increased turn around time.

In relation to the racking issue we have been in initial contact with a number of companies. This issue will be re-addressed in 2009.

TABLE 4

OBJECTIVE	To improve the environmental performance of the facility.
TARGET	1. Maintain ISO 14001 standard 2. Ensure compliance with all conditions of EPA Waste Licence and ADR Regulations. 3. Review and update procedures and practices 4. Carry out regular audits. 5. Ensure waste inspection log is maintained. 6. Manage incoming and out going waste
DATE OF COMPLETION	On-going
RESOURCES REQUIRED	Robert Malone Tom Werstak
RESPONSIBILITY	Robert Malone – Manager Lee Douglas – Managing Director
REVIEW DATE	June 08

REVIEW OF OBJECTIVES AND TARGETS

OBJECTIVE: To improve the environmental performance of the facility

REVIEW DATE: June 08

COMMENTS:

Facility and Vehicle Audits are carried out on a regular basis.

Procedures and Practices are constantly reviewed.

Onsite quantities are kept to a minimum level

TABLE 5

OBJECTIVE	To improve the visual appearance of the facility.
TARGET	1. Paint depot area / depot office and carry out maintenance where required. 2. Carry out regular housekeeping audits.
DATE OF COMPLETION	1 – End of May 08
RESOURCES REQUIRED	Robert Malone Tom Werstak
RESPONSIBILITY	Robert Malone – Manager Lee Douglas – Managing Director
REVIEW DATE	June 08

REVIEW OF OBJECTIVES AND TARGETS

OBJECTIVE: To improve the visual appearance of the facility

REVIEW DATE: June 08

COMMENTS:

The painting of the depot and offices will now be scheduled for an appropriate time in 2009.

TABLE 6

OBJECTIVE	To provide for the efficient use of energy
TARGET	1. Implement recommendations of Energy Audit
DATE OF COMPLETION	1 – Sept 08
RESOURCES REQUIRED	Robert Malone
RESPONSIBILITY	Robert Malone – Manager Lee Douglas – Managing Director
REVIEW DATE	June 08

REVIEW OF OBJECTIVES AND TARGETS

OBJECTIVE: To provide for the efficient use of energy

REVIEW DATE: June 08

COMMENTS:

An energy audit was carried out on 25/1/07 by Environmental Efficiency.

There were 4 audit recommendations of which 2 have been completed.

2 recommendations remain:

1. Convert electromagnetic ballasts to electronic
2. Install ambient light sensors

Recommendation 1 is expected to be completed by Dec 2008

The installation of light sensors is not practical as the stores. We are investigating the possibility of replacing the clear panels in the roof thus increasing the amount of light transmitted.

FULL TITLE AND SUMMARY OF ALL PROCEDURES DEVELOPED / REVISED IN THE YEAR 2008

SOP NUMBER	45	REVISION NO.	0
WRITTEN BY SIGNED	Robert Malone R. Malone	DATE	5/6/08
APPROVED BY SIGNED	Lee Douglas		
DISTRIBUTION	To all relevant staff	SOP LOCATED IN MAIN OFFICE / STORES	
NO. OF PAGES	4		

TITLE: Procedure for the Preparation of Waste for Onward Disposal

PURPOSE: To outline the steps to be taken to ensure that the waste leaving site complies with ADR / IMDG Regulations.

SCOPE: This procedure applies all waste onsite.

PROCEDURE:

Upon consultation with the Manager the storeman will prepare a waste departure manifest.
This manifest will accurately detail the waste type and quantity for departure.
It will also include the corresponding transfer note number and customer details.

The Manager will notify the disposal outlet of the expected arrival time and date.
In the cases where the waste is to be exported the Manager will notify the relevant Authorities and the Consignee 3 working days in advance.

Prior to loading all waste containers must be palletised and well secured with shrink wrap.

Packaging

The storeman must ensure that all hazardous waste is in UN Approved packaging.
Packages must be in good condition, not leaking or damaged.
All lids, caps, bungs must be in place and secure.
The drum must be suitable for it's contents:

Solids in Open Top drums
Liquids in Bung Top drums

Labels

All containers must be labelled in accordance with ADR / IMDG Regulations.
Labels should be placed directly onto the container/package, with the label facing outwards when on a pallet.
In the event of containers being re-used, all previous labels must be removed or defaced so as to be illegible.
IBCs and FIBC bags require labels on two opposite sides.

Combination Packages

Where combination packaging is used, a list of inner packages will be required including the following details: UN Number, Proper Shipping Name, Class, Packing Group, Pack Size and Quantity

C1 Consignment Note

This is a five-part document that must accompany hazardous waste when in transit by road within the Republic of Ireland.
The Manager must complete Section A and the driver Section B before the waste leaves the site. The pink copy is retained while all other copies are given to the driver.

For waste schedule for export the corresponding TFS documentation shall be prepared by the Manager.

Transport by Road Emergency Card - Tremcard (Instructions in Writing)

This document details the steps to be taken in an emergency. A tremcard corresponding to each waste type must accompany the waste during transport.

Refer to the attached GSL Waste Matrix for the list of waste types and corresponding disposal outlets.

GSL WASTE MATRIX

WASTE DESCRIPTION	EWC CODE	HAZARDOUS Y/N	DESTINATION OF WASTE	LICENCE NO.	FINAL DESTINATION (if waste is exported)	LICENCE NO.
Photographic Fixer	090104	Y	-	-	Silver Lining UK	WML 947
Photographic Developer	090101	Y	-	-	Silver Lining UK	WML 947
Plate Developer	090102	Y	-	-	Silver Lining UK	WML 947
Photographic Film	090107	N	-	-	Silver Lining UK	WML 947
Solvents	140602	Y	Rilta Environmental Greenogue Ind. Est	W0192-01	ATM Holland	03/7623
Printing Inks	080312	Y	Rilta Environmental Greenogue Ind. Est	W0192-01	ATM Holland	03/7623
Contaminated Rags	150202	Y	Rilta Environmental Greenogue Ind. Est	W0192-01	Recyfuel Belgium	R1.2/40/97/16
Filters	150202	Y	Rilta Environmental Greenogue Ind. Est	W0192-01	Recyfuel Belgium	R1.2/40/97/16
Paint / Varnish	080111	Y	Rilta Environmental Greenogue Ind. Est	W0192-01	ATM Holland	03/7623
Perc Residues	140602	Y	Rilta Environmental Greenogue Ind. Est	W0192-01	Watco Ecoservice France	IC/97/071

Adhesive	080409	Y	Rilta Environmental Greenogue Ind. Est	W0192-01	ATM Holland	03/7623
Lead Acid Batteries	160601	Y	Returnbatt Kill, Co. Kildare	97/2002		
Pharmaceuticals	160507 / 160508	Y	Rilta Environmental Greenogue Ind. Est	W0192-01	RZR Germany	0409
WEEE	160213 / 160214	Y / N	Immark Ire. 51 Parkwest Ind Est D12	WP 98099		
Oil	130208	Y	Rilta Environmental Greenogue Ind. Est	W0192-01		
Fluorescent tubes	200121	Y	Irish Lamp Recycling Athy, Co. Kildare	02/2000B		
Contaminated Packaging	150110	Y	Rilta Environmental Greenogue Ind. Est	W0192-01	ATM Holland	03/7623
Zinc Filters	150202	Y	Rilta Environmental Greenogue Ind. Est	W0192-01	IAG Germany	03/7623

SOP NUMBER	43	REVISION NO.	0
WRITTEN BY SIGNED	Robert Malone	DATE R. Malone	23/5/08
APPROVED BY SIGNED	Lee Douglas	L Douglas	
DISTRIBUTION	To all relevant staff	SOP LOCATED IN MAIN OFFICE / STORES	
NO. OF PAGES	2		

TITLE: Use and Maintenance of Pumping Units

PURPOSE: To ensure the all pumpouts are carried out in a safe and effective manner and which will not have an adverse effect on the environment

SCOPE: This procedure is relevant to activities both onsite at the facility and at customers' premises.

PROCEDURE:

Initial Check

Before commencing / departing facility please ensure that the following checks are carried out:

Container should be clean and dry
Hoses should have caps on both ends
There should be a supply of fuel and water present
Warning signs / spill material available
Check the condition of the hoses and pump for leaks

Before commencing ensure that the hoses are securely placed into the corresponding tank.
Place trip hazard signs in appropriate areas
Remove the lids and place in container alongside the pump.
In the event that the pump has or may run dry pour approx 5 litres of water into the pump through the top valve.
Move the both the choke and speed levers fully to the right.
Start the pump.
Allow the pump to run for approx 10 secs.

Move both the choke and speed levers left into a central position.
Throughout the pumpout carefully monitor the tank to ensure that the hose is positioned at a level above any sludge that may be present.
If there is a significant distance between pump and tank turn off the pump beforehand.

When the pumpout is over turn off the pump and replace caps on the end of the hoses.
Do not allow pump to run dry.

During the pumpout carefully monitor for leaks from the pump and tanks.
Should a leak occur turn off the pump immediately and contain with spill kit.
Place contaminated material into a suitable drum and label accordingly.

SOP NUMBER	44	REVISION NO.	0
WRITTEN BY SIGNED	Robert Malone R. Malone	DATE	4/6/08
APPROVED BY SIGNED	Lee Douglas		
DISTRIBUTION	To all relevant staff	SOP LOCATED IN MAIN OFFICE / STORES	
NO. OF PAGES			

TITLE: External Inspection of Tanks for Leakage

PURPOSE: To reduce the risk of catastrophic failure or significant material loss

SCOPE: This procedure applies to the three storage tanks onsite.

PROCEDURE:

The three storage tanks onsite shall be inspected on a weekly basis.
This is to be carried out by the storeman.
The inspection should take place from the top of the bund wall and from the floor above the tanks through the grating.
The tanks and supports should be thoroughly checked for signs of leaks, corrosion or damage as per inspection checklist.
The inspection should be carried out using a suitable torch and the results recorded on the inspection form.

In the case where an aspect of the inspection fails the Manager must be informed immediately.
A Corrective Action will then be implemented and recorded.

WEEKLY INSPECTION FORM

Please mark Pass or fail against each aspect

Aspect	Fibre Glass Tank 1	Stainless Steel Tank 2	Stainless Steel Tank 3
Outside surface of tanks for evidence of leaks			
Examine welds for leaks	N/A		
Examine tank support brackets for corrosion	N/A		
Examine vertical steel supports (floor to brackets) for buckling	N/A		
Examine blanked off connections for leaks			
Examine bottom tank discharge pipes and valves for leaks	N/A		

Date of Inspection _____ Week Number ____

Inspected by _____

Signed _____

Where any aspect failed, please comment below

Tank ID	
Summary of Failure	
Recommended Corrective Action	
Date Corrective Action completed	
Corrective Action completed by	

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.

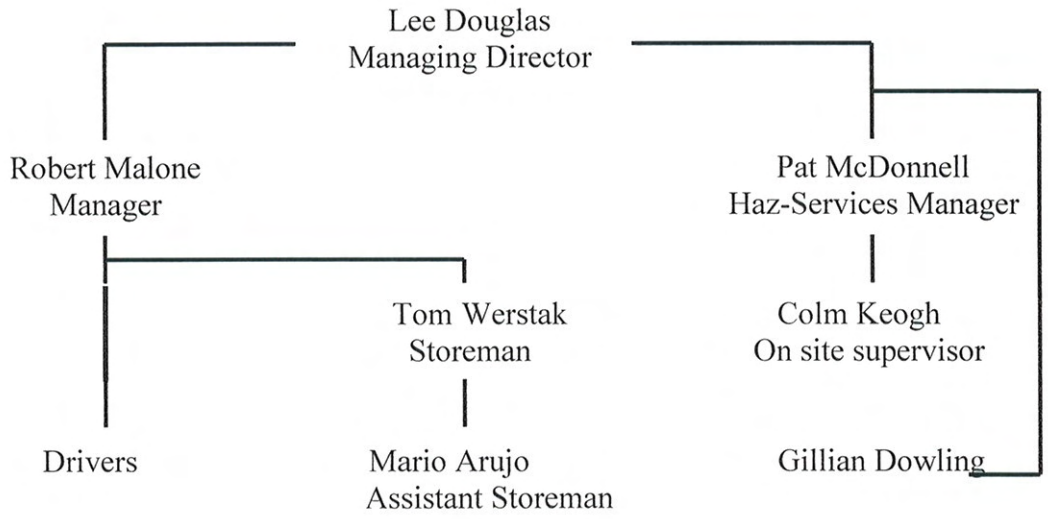
REPORT ON FINANCIAL PROVISIONS

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.

MANAGEMENT AND STAFFING STRUCTURE OF THE FACILITY

ORGANISATION CHART



Drivers: Michael Devoy
Sean O'Rourke

APPENDIX

A) Bund Testing
B) Environmental Noise Survey

Silver Lining Industries Ltd

Unit 61 Cookstown Ind. Est, Belgard Road, Tallaght

Environmental Noise Survey

Report Date:

3rd December 2008

EURO environmental services

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

Report No. 2980/M04

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 2nd of December 2008 by Victor Olmos 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 12:03 and 12:33 hours on Tuesday 2nd of December 2008. The following measurements were carried out at each site:

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

3.0 Weather Conditions

Conditions were overcast and cold with a slight breeze during the day survey. Weather conditions were considered neutral for noise monitoring with temperatures between 0-5 ^{O}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, squeaking noise from neighbouring units, reverse beeping sirens, forklift in operation, plane flying overhead, timber being dropped, birds singing, people talking, car idling and a lorry being loaded.

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 mins/sec	L(A)eq	L(A)10	L(A)90	Comments
B1	02/12/08 12:03	30	**56**	58	52	A forklift worked in close proximity to the monitoring point for the duration of the noise survey. On the estate road 4 cars and a HGV passed during the survey. Noise from neighbouring units included reverse beeping sirens, banging noise of timber, people talking; rock breaker operating in the distance, forklift passing approximately 3m away from the monitoring location and a car idling also contributed to elevate noise levels.

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	20 KHz	Impulsive or Tonal Qualities
B1	64.15	64.35	64.42	53.23	49.11	48.56	47.4	42.15	36.66	27.99	22.87	16.22	None

12.0 Interference

The main sources of interference during monitoring at Silver Lining Industries included traffic movements on adjacent road, squeaking noise from neighbouring units, reverse beeping sirens, forklift in operation, plane flying overhead, timber being dropped, birds singing, people talking, car idling and a lorry being loaded.

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 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 52 dB (A), indicating that for 90% of the time, the noise levels were below the 55 dB (A) daytime limit.

There were no significant tonal noise qualities determined at the B1 noise monitoring location.

Aadil Khan
Environmental Technical Manager

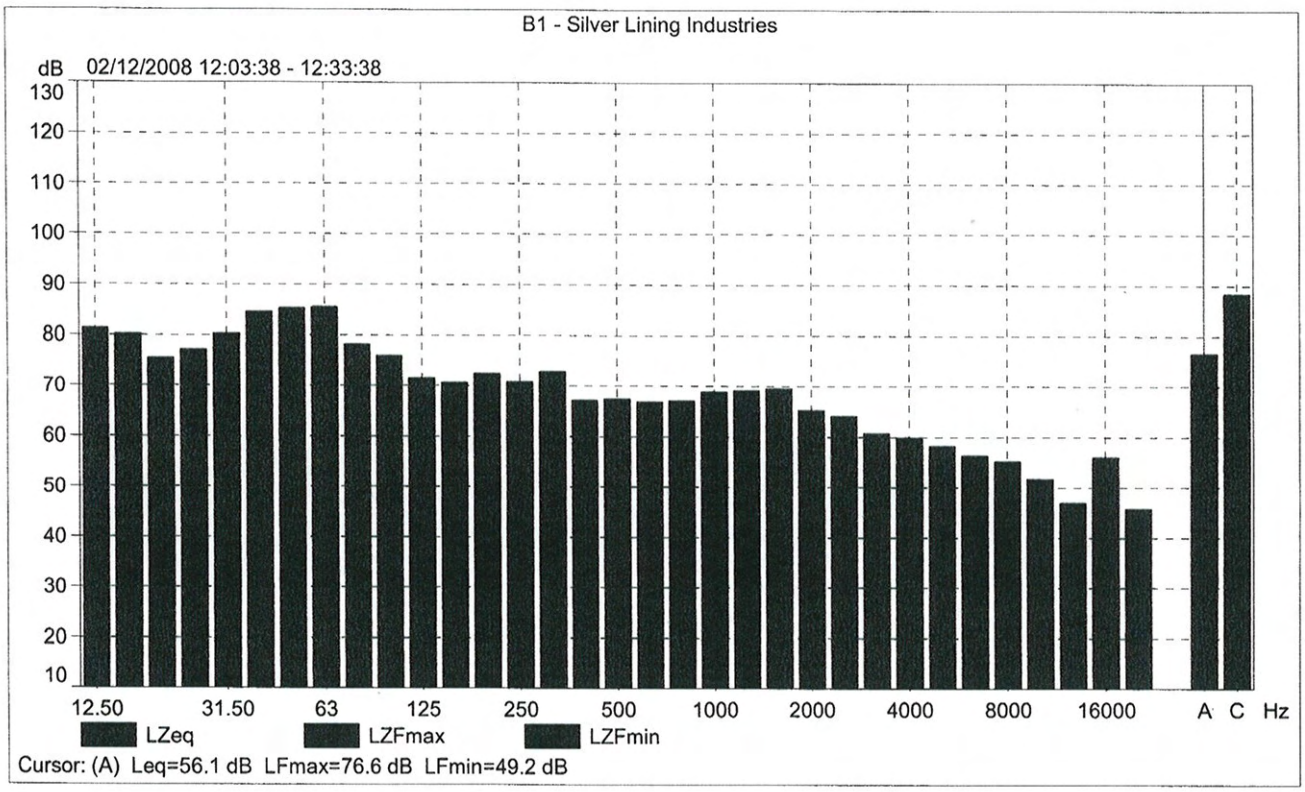
Victor Olmos
Environmental Technician

3rd December 2008

Appendix 1: Broadband Results and 1/3 Octave Spectrum

B1 - Silver Lining Industries

	Start time	End time	Overload [%]	LAFmax [dB]	LAFmin [dB]	LAeq [dB]	LAF10 [dB]	LAF90 [dB]	LCpeak [dB]
Value			0.00	76.6	49.2	56.1	58.0	51.6	96.6
Time	12:03:38	12:33:38							
Date	02/12/2008	02/12/2008							



Environmental Efficiency
Consulting Engineers

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

Bund and Tank Inspection Report

Silver Lining Industries (Ireland) Ltd

Document Number 787-02 v2.0

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

QF 1. v2 Document Lead Sheet

Document Title	Bund and Tank Inspection Report
Project No.	787
Document No.	787-02
Client	Silver Lining Industries (Ireland) Ltd
Address	Unit 61, Cookstown Industrial Estate, Tallaght, Dublin 24

Issue	Status	Date	Author	Signed for and on behalf of	
				Environmental Efficiency	Client
1.0	Approved	19/05/2008	RBS		
2.0	Approved	23/05/2008	RBS		
3.0	Approved	28/05/2008			

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: as above

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1. No alteration to this report by third parties is permitted
2. Where this report is reproduced, it shall only be reproduced in full.
3. Reports remain the property of Environmental & Efficiency Consultants (Ireland) Limited until paid for in full.

1. Introduction

Silver Lining Industries (Ireland) Ltd has a Waste Licence issued by the EPA. This licence requires, amongst other things, that

> *The integrity and water tightness of all the bunds and their resistance to penetration by water or other materials stored therein shall be confirmed by the licensee and shall be reported to the Agency within six months of the date of grant of this licence.*
>
> *This confirmation shall be repeated at least once every three years thereafter and reported to the Agency on each occasion.*

This report is to satisfy the second paragraph of this condition.

2. Summary

The tanks were inspected and deemed to be of adequate construction and not pose a risk of catastrophic failure based on the inspection and proposed regular client inspection.

The bund was visually inspected and found to be adequate.

The new bunded floor passed the water integrity test.

3. Discussion of methods

3.1 Tanks

There are three tanks that are bunded at the client's site. A water retention test on the bund is not possible due to the present of low lying electric motors and pumps.

As an alternative to a water integrity test, it was proposed by the client to the EPA that the tanks themselves be inspected. The rational for this is as follows.

- One of tanks is of plastic construction and the other two of stainless steel construction. Thus catastrophic failure due to corrosion (the most common mode of bunded tank failure) is extremely unlikely for the stainless steel tanks and impossible for the plastic tank.
- The most likely failure mode for this tank is pin hole corrosion of the welds of the stainless steel tanks. Such failure would result in very small quantities of liquid being released
- Provided the tanks pass an initial inspection by a Chartered Engineer and a regular inspection procedure is put in place, then the risk of a significant loss of containment is very low.

Checking of the wall thickness of the tanks to assess thickness reduction due to corrosion was considered. Following a review of the tank materials (one plastic, two stainless steel) it was considered that there would be no corrosion between the tank material and the tank contents and therefore there is no need for such wall thickness checking.

3.2 Bunded floor

In addition to the tanks and associated bund, the factory floor is bunded. This bunded floor has been extended to the entrance. A water retention test on the extended bunded floor was tested using CIRIA 163 which is a six hour test over which there should be no drop in water level.

4. Inspection

4.1 Tanks

Access into the bund was not possible as this was deemed to be a confined space. The inspection took place from the top of the bund wall and from the floor above the bund which consisted of grating and could be looked through. The inspection was carried out by a Chartered Engineer.

The aspects of the tanks inspected were as follows

Aspect	Fibre Glass Tank	Stainless Steel Tank 1	Stainless Steel Tank 2
Outside surface of tanks for evidence of leaks	Pass	Pass	Pass
Examine welds for leaks	N/A	Pass	Pass
Examine tank support brackets for corrosion	N/A	Pass	Pass
Examine vertical steel supports (floor to tank support brackets) for buckling	N/A	Pass	Pass
Examine blanked off connections for leaks	Pass	Pass	Pass
Examine bottom tank discharge pipes and valves for leaks	N/A	Pass	Pass

4.2 Bund

The bund was visually inspection at the same time as the tanks were inspected. The bunds were in good condition with no sigh of cracks in the floor or walls and no heave of the floor.

4.3 Bunded floor

The floor was flooded with water. The initial and final depths were noted. There was no adjustment for rainwater as the bunded floor was internal.

	Time	mm
Initial water level from datum	11:10	65
Final water level from datum	17:12	65

5. Recommendations

- The client inspects the tanks on a weekly basis for the aspects listed in Section 4. A suitable check sheet is shown in Appendix 1. These forms should be completed and filed in date order.

- Lighting to be installed over the bunded area with a minimum level of 500 lux to enable inspection to be carried out easily. Local on/off switch to be fitted to prevent light being left on unnecessarily.

6. Conclusions

The tanks were inspected and considered to be of adequate construction and without evidence of leaks or corrosion of supports. Provided a regular weekly inspection of the tanks is carried out using the methodology defined in Appendix 1 then there is no need for a bund test.

The bunds were found to be of adequate construction.

The bunded floor was tested floor. The floor passed the test.

Appendix 1 Weekly inspection form

Please mark Pass or Fail against each aspect.

Aspect	Fibre Glass Tank	Stainless Steel Tank 1	Stainless Steel Tank 2
Outside surface of tanks for evidence of leaks			
Examine welds for leaks	N/A		
Examine tank support brackets for corrosion	N/A		
Examine vertical steel supports (floor to brackets) for buckling	N/A		
Examine blanked off conections for leaks			
Examine bottom tank discharge pipes and valves for leaks	N/A		

Week number … … … … …. …… … …. …

Date of inspection … … … … … … … … … (dd/mm/yyyy)

Inspection by … … … … …. … … …. … … (Print name)

Signed … … … … … … … … … … … … … ..

Where any aspect failed, please comment below

Tank name	
Summary of failure	
Recommended corrective action	
Date corrective action completed	
Corrective action completed by (name and signature)	