ANNUAL ENVIRONMENTAL REPORT 2008
SUBMITTED TO ENVIRONMENTAL PROTECTION AGENCY

REPORTING PERIOD: JANUARY – DECEMBER 2008

ENVA
JFK Road,
Naas Road,
Dublin 12

WASTE LICENCE NUMBER W0196-1

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ENVIRONMENTAL, HEALTH, SAFETY & QUALITY POLICY

Health, Safety & Environmental Policy

ENVA is a leading supplier of specialist waste & wastewater related products/services in Ireland and the UK. Our capabilities include waste treatment within our own sites, waste handling, emergency response services, the production and supply of chemical products for water treatment and other purposes, the design/installation of water treatment systems at customer sites, the provision of analytical services as well as other products and services associated with the above.

ENVA operates to OHSAS 18001 and ISO 14001 standards for occupational health and safety and environmental management. Compliance with all applicable legal and other HSE requirements are only a minimum starting point as we are committed to continually improving our performance in relation to health, safety and the environment.

We seek to do this by;

- Consulting our HSE committee (selected by our employees) on HSE matters.
- Identifying safety hazards including chemical hazards, assessing and managing these so as to minimise risk as far as practicable.
- Minimising the potential for occupational injury especially those arising from occupational exposure, manual handling, use of equipment/tools, slips, trips and falls.
- Minimising the need for and risks associated with confined space entry and hazardous materials.
- Providing safe places of work and healthy working conditions for employees and visitors.
- Promoting the provision of recovery options for waste in preference to direct disposal.
- Preventing pollution to any environmental media and minimising the environmental impact of emissions to water, land and air.
- Communicating with customers to ensure necessary information is provided and precautions are taken when collecting and handling waste, providing treatment or other services for customers.
- Being prepared for reasonably foreseeable emergency situations.
- Assessing and considering the performance of third parties used by us who may have potential for significant environmental impact.
- Using energy and natural resources efficiently.
- Communicating appropriately with our employees in relation to HSE matters and providing appropriate information and training
- Expecting the cooperation of our employees in relation to HSE management.

We will set improvement objectives and targets on a regular basis in order to achieve goals consistent with the above.

Declan Ryan, Managing Director

Date. 6/6/08

1.0 INTRODUCTION

1.1. General Description

Enva Ireland is located in JFK Road, Naas Road, Dublin 12. Enva have only been accepting contaminated wood during 2007 for onward movement. There was no processing of waste being carried out on site during 2007. Approval has been given to accept wastes as outlined in the waste acceptance procedure (see section 5)

1.2 Waste Management Activities carried out at the Facility.

Third Schedule

Class 7. Physico-chemical treatment not referred to elsewhere in this Schedule (including evaporation, drying and calcination) which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1. to 10. of this Schedule (including evaporation, drying and calcination).

Class 11: Blending or mixture prior to submission to any activity referred to in a preceeding paragraph to this schedule.

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

Class 13. Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Fourth Schedule

Class 3. Recycling or reclamation of other inorganic metals and metal compounds
Class 4. Recycling or reclamation of other inorganic materials.

Class 6 Recovery of components used fo pollution abatement.

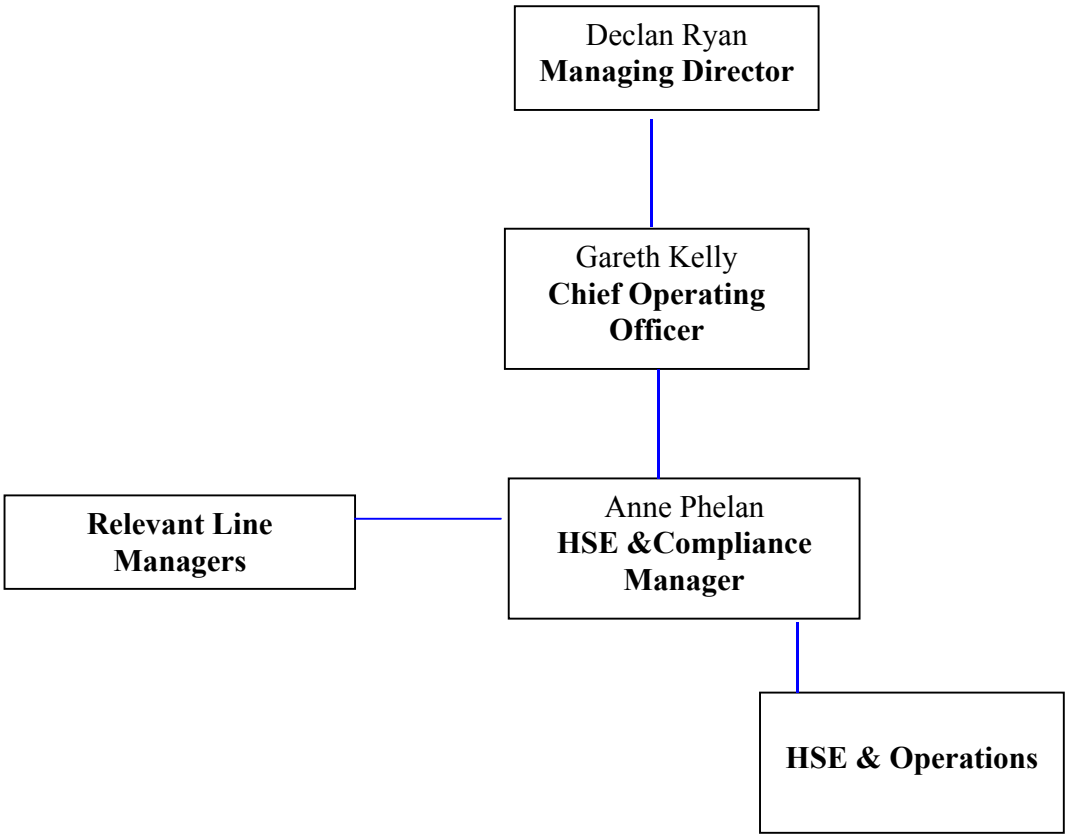
Class 8. Oil re-refining or other re-uses of oil.

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.

Current activities

During 2008 only approximately 140 tonnes of waste was processed through the site. All waste was transferred off site for recycling. Approvals have been sought from the Agency with regard to the acceptance of additional packaged waste streams for storage and onward movement.

1.3 Management Structure



2.0 WASTE ACTIVITIES

Quantities of waste to be accepted on site as detailed in Schedule A of waste licence W0196-1.

Table 1

Waste Type	Quantity (tonnes per annum) Schedule A of W0196-1	Quantity (tonnes per annum) 2008
Hazardous	35,250	141.01
Industrial waste	150	0
Total	35,400	141.01

2.1 Waste Volumes Received

Waste	EWC Codes	Destination Used in 2008	2008(tonnes) Received
Contaminated wood	17 02 04*	Reiling GmBH	**50.45**
Oily water from oil/water separators	13 05 17*	Enva Ireland	**90.56**

2.2 Waste Facilities Off Site

A current list of all Enva third party waste treatment/disposal sites.

Facility Name	Facility Address	Waste streams
1. Mr. Patrick O Toole	Rathbawn, Tullow, Co. Carlow	Organic waste
2. Beofs	Camphill Community, Ballytobin, Callan, Co. Kilkenny	Edible oil and fats EWC 19 08 09 EWC 20 01 08
3. Enva Ireland	Clonminam Industrial Estate, Portlaoise, Co. Laois.	EWC 13 01 04*,13 01 05*,13 01 09*,13 01 10*,13 01 11*,13 01 12*,13 01 13*, 13 02 04*, 13 02 05*, 13 02 06*, 13 02 07*, 13 02 08*, 13 03 01*, 13 03 06*, 13 03 07*, 13 03 08*, 13 03 09*, 13 03 10*, 13 04

		01*, 13 04 02*, 13 04 03*, 13 05 01*, 13 05 02*, 13 05 03*, 13 05 06*, 13 05 07*, 13 05 08*, 13 07 01*, 13 07 02*, 13 07 03*, 13 08 01*, 13 08 02*, 13 08 99* 16 07 08*, 16 07 09*, 16 08 99 19 02 07*
4. Reiling GmbH	Weetfelder Str. 36, 59144, Bonen, Germany.	17 02 04*

3.0 EMISSIONS

3.1 Surface water emissions monitoring

Quarter 1.

There was very little flow from the site interceptor. No sample was taken from the site interceptor due to negligible flow from it since the 1st of January '08.

Quarter 2

Parameter	Date sampled	Result
Visual	**Completed daily**	**n/a**
pH	**25/06/08**	**8.77**
BOD (mg/l)*Note	**02/07/08**	**8**
COD (mg/l)	**25/06/08**	**390**
Suspended solids (mg/l)	**25/06/08**	**79**
Mineral oils (ug/l)	**25/06/08**	**<10**

Quarter 3

Parameter	Date sampled	Result
Visual	**17/07/08**	**Clear**
pH	**n/a***	**n/a***
BOD (mg/l)*Note	**17/07/08**	**7**
COD (mg/l)	**n/a***	**n/a***
Suspended solids (mg/l)	**n/a***	**n/a***

Mineral oils (ug/l)	**17/07/08**	**< 10**

* Due to low flow an adequate sample could not be obtained during the reporting period for the analysis to be completed for surface water.

Quarter 4

Parameter	Date	Result
Visual	**10.11.08**	**Clear**
pH	**10.11.08**	**7.6**
BOD (mg/l)*Note	**10.11.08**	**8**
COD (mg/l)	**10.11.08**	**39**
Suspended solids (mg/l)	**10.11.08**	**28**
Mineral oils (ug/l)	**10.11.08**	**<10**

3.2 Effluent Release

There was no effluent released from the site.

3.3 Groundwater

Quarter 2

A ground water monitoring well was established on site on the 8th of June and sampling was carried out in compliance with the quarterly monitoring requirements. The well installed is 12.5 metres deep. No contamination was found in this well. Appendix 1 includes a full copy of the well installation analysis carried out by URS. Monthly monitoring for June is reported in Table 2 below.

Table 2: Groundwater monitoring for June

Parameter	Date sampled	Result
Visual	**18/06/08**	**Pale brown cloudy appearance.**
Electrical conductivity (µ S)	**18/06/08**	**944**

Quarter 3

Table 2: Groundwater monitoring for July

Parameter	Date sampled	Result
Visual	**15.07.08**	**Pale cloudy, brown**

Electrical conductivity (µ S)	**15.07.08**	**1048**
DO (mg/l)	**15.07.08**	**18.7**
pH	**15.07.08**	**7.6**
Temp (◦C)	**15.07.08**	**13.2**
Mineral Oil (ug/l)	**15.07.08**	**<10**
BTEX	**15.07.08**	**<10**
Groundwater Level	**15.07.08**	**2.9**

Table 2: Groundwater monitoring for August

Parameter	**Date sampled**	**Result**
Visual	**13.08.08**	**Pale cloudy, brown**
Electrical conductivity (µ S)	**13.08.08**	**973**

Table 3: Groundwater monitoring for September

Parameter	**Date sampled**	**Result**
Visual	**26.09.08**	**Pale cloudy, brown**
Electrical conductivity (µ S)	**26.09.08**	**878**

Quarter 4

Table 2: Groundwater monitoring for October

Parameter	**Date sampled**	**Result**
Visual	**01/10/08**	**Cloudy Brown**
Electrical conductivity (µ S)	**01/10/08**	**878**
DO (mg/l)	**01/10/08**	**n/a**
pH	**01/10/08**	**7.4**
Temp (◦C)	**01/10/08**	**11.4**
Mineral Oil (ug/l)	**01/10/08**	**<10**
BTEX	**01/10/08**	**<10**
Groundwater Level	**01/10/08**	**2.95**

Table 2: Groundwater monitoring for November

Parameter	**Date sampled**	**Result**
Visual	**18/11/08**	**Cloudy Brown**
Electrical conductivity (µ	**18/11/08**	**915**

S)		

Table 3: Groundwater monitoring for December

Parameter	**Date sampled**	**Result**
Visual	**16/12/08**	**Cloudy Brown**
Electrical conductivity (µ S)	**16/12/08**	**682**

3.4 Noise Monitoring

Appendix 2 includes the noise monitoring report carried out for the site in 2008. No significant noise sources were identified which attributable to any on site activities.

3.5 Monitoring Locations

Appendix 3 indicates the site monitoring locations, noise monitoring locations are attached to the noise monitoring report as per section 3.4.

4.0 ENVIRONMENTAL MANAGEMENT

4.1 Environmental Management programme.

Appendix 4 details the status of objectives and targets for the site

4.2 Summary of Standard Operating Procedures created since January 2008

There were no new procedures developed for the site in 2008. Procedures were drafted in 2008 for the acceptance of waste into the treatment plant however these will be reported in the 2009 report.

5.0 NON-CONFORMANCES

There were 4 non conformances reported from an Agency audit carried out on the 15th of February 2008. Corrective actions have been put in place for all incidents.

6.0 PUBLIC INFORMATION

Please see Appendix 5 for the Enva Communications procedure

7.0 OEE METHODOLOGY FOR DETERMINATION OF ENFORCEMENT CATEGORIES

Submitted to the Agency as per Appendix 6

8.0 PRTR

Submitted to the Agency as per Appendix 7

9.0 REVIEW OF NUISANCE CONTROLS.

A weekly site inspection is carried out to ensure that all bunds are good condition and that there are no nuisances present on site.

Our Ref: 49341591
Your Ref: PO Number 2032

17 June 2008

Enva Ireland,
Clonminam Industrial Estate,
Portlaoise,
Co. Laois.

For the attention of Ms Anne Phelan

Dear Ms Phelan

Re: Monitoring Well Installation – John F Kennedy Road, Bluebell, Dublin 12

Introduction

URS Ireland Ltd (URS) is pleased to present Enva Ireland (Enva) with this factual report detailing the installation of a groundwater monitoring well at the Enva facility on John F Kennedy Road, Bluebell, Dublin 12 (the site). A site location plan is presented in Figure 1 with a site layout plan presented in Figure 2.

The scope of work included the following:

- Installation of one groundwater monitoring well to a depth of 12 m below ground level (bgl);
- Sampling of the groundwater in the well; and
- Comparison of analytical laboratory results to relevant guidelines.

Site Work

The drilling and monitoring well installation was undertaken on 8 May 2008 and the groundwater sampling was undertaken on 15 May 2008.

A URS field engineer supervised the drilling subcontractors, Ground Restoration Ltd (GRL). Prior to drilling, the borehole location was confirmed to be free of underground services by consulting service plans obtained from the relevant authorities and through discussions with site management. In addition, the borehole location was scanned using a hand held cable avoidance tool (CAT). A permit to dig was also obtained from the Enva site representative, prior to commencing work.

An air rotary drilling rig was used to advance the borehole to a depth of 12.5 m bgl. A groundwater monitoring well, MW01, was installed in the borehole, the location of which is shown on Figure 2. Details of the well construction are presented in the borehole log (presented in Appendix A).

No soil samples were collected during drilling. As water was being used during drilling, headspace measurements of volatile organic compounds could not be made from the drill returns. There were no

visual or olfactory indications of hydrocarbon contamination noted from the drill returns. The well was developed by manual methods following installation.

On 15 May 2008, a URS field engineer returned to site to collect a groundwater sample from monitoring well MW01. At the time of sampling, the well was checked for the presence of free-phase product using an oil/water interface probe. Additionally, the groundwater level was gauged and during purging and sampling, field parameters including pH and electrical conductivity were measured.

A groundwater sample was collected from the well using standard environmental sampling techniques and was submitted to ALcontrol laboratories in Dublin under standard 'Chain of Custody' procedures for the following chemical analysis:

- TPH using CWG method;
- Speciated PAHs; and
- Heavy metals.

A copy of the chain of custody document and the laboratory results as received are presented in Appendix B.

Results

There were no field observations of hydrocarbon contamination noted from the soil or groundwater encountered during the site investigation; however, the limitations of the drilling methodology (see above) are noted in this regard.

Additionally, field parameters measured during groundwater sampling are tabulated below:

Well ID	Static water Level (m bgl)	EC (µs/cm)	pH	Temperature (oC)	Redox (mV)	Dissolved Oxygen (%)
MW01	3.3	387	7.23	13.6	148	8.9

Groundwater analytical results are presented in Tables 1 to 3 (attached).

Analytical results were assessed by comparing them to the Environmental Protection Agency (EPA) Interim Guideline Values (IGVs). These guidelines were developed using a number of existing water quality guidelines in use in Ireland including existing national environmental quality standards, proposed common indicators from the new groundwater directive, drinking water standards and GSI trigger values.

There were no hydrocarbon compounds detected in the sample analysed (above the laboratory detection limit (MDL)), Table 1. As can be seen from Table 2, nine of the polycyclic aromatic hydrocarbons (PAH) compounds were detected, however none were above the respective IGVs. Copper, nickel and zinc were detected, but at concentrations below their respective IGVs (refer Table 3).

The Cammock River is located approximately 250 m to the south of the site, where it flows in an easterly direction towards the coast. On this basis, and noting the measurement of groundwater table elevations was not included in the scope, it is likely that, locally, groundwater would flow south towards the Cammock River. Therefore, it is likely that the newly installed groundwater monitoring well is downgradient of the current bunded tank farm. As such, is it likely that if hydrocarbon contaminants

were present in the soil and groundwater as a result of release from the tanks in the bunded area, that these would be detected in the groundwater monitoring well MW1.
More detailed assessment of the data is outside of the current scope however; if you have any questions, please do not hesitate to contact the undersigned.

Yours faithfully
URS Ireland Ltd

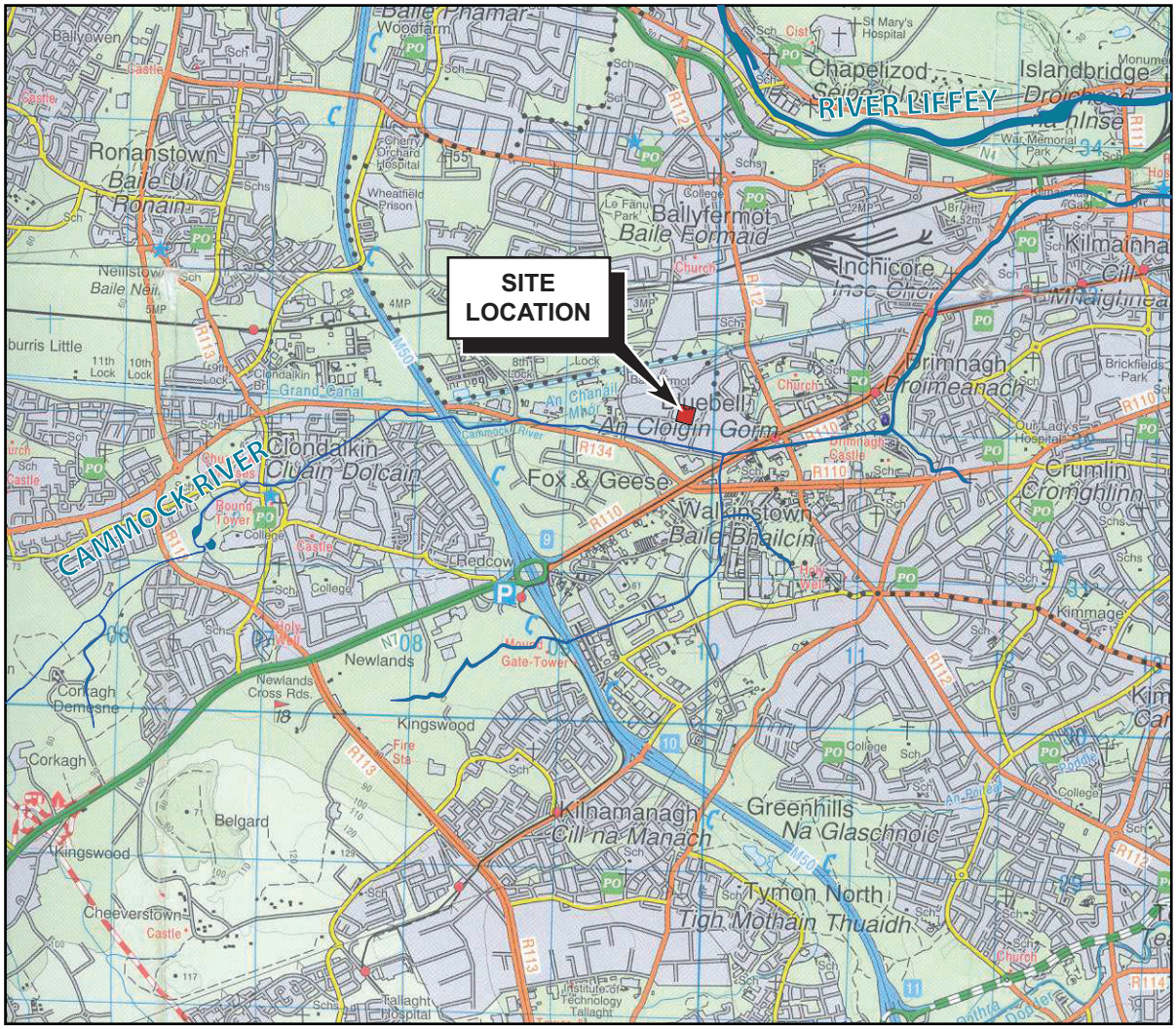
Cecilia Gately
Senior Environmental Scientist

Gavan Butterfield
Technical Director

Attachments:
Figures
Tables
Appendix A – Borehole log and Monitoring Well Construction Details
Appendix B – Chain of Custody Document and ALcontrol Laboratory Results

FIGURES

North



0 km 1 km 2 km 3 km

CLIENT

ENVA IRELAND LTD.

PROJECT LOCATION

JOHN F. KENNEDY ROAD, BLUEBELL

DRAWING TITLE

FIGURE 1 - SITE LOCATION PLAN

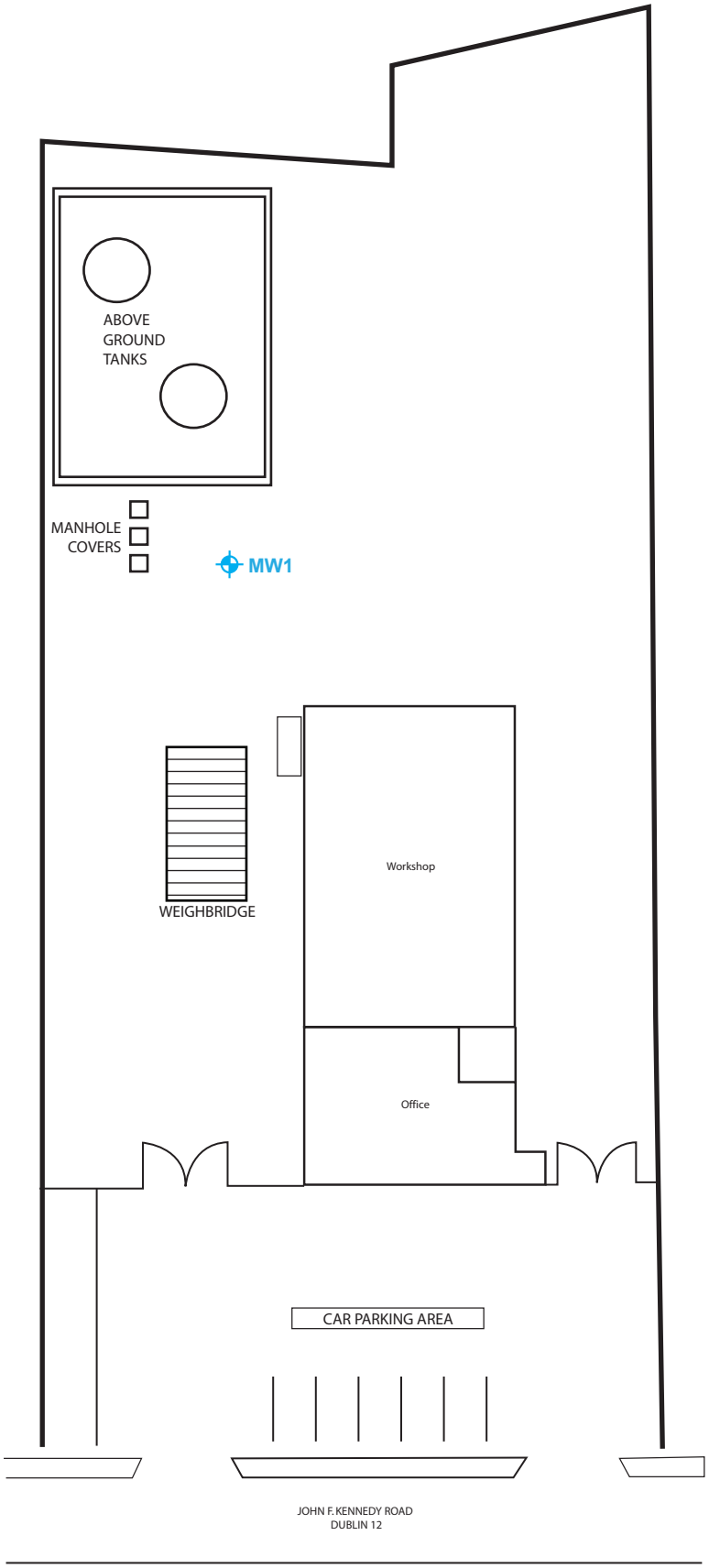
ENVIRONMENTAL CONSULTANTS

URS

Iveagh Court, 6–8 Harcourt Road, Dublin2
TEL +353 1 4155100 FAX +353 1 4155101

DRAWN	TRACED	CHECKED	APPROVED	DATE
SML		CAG / DUB	DR/DUB	JUNE 2008

SCALE	Job No.	REV.
1:50,000	49341591	A



CLIENT

ENVA IRELAND LTD.

PROJECT LOCATION

JOHN F. KENNEDY ROAD, BLUEBELL

DRAWING TITLE

FIGURE 2
MONITORING WELL LOCATION PLAN

ENVIRONMENTAL CONSULTANTS

URS

Iveagh Court, 6–8 Harcourt Road, Dublin2
TEL +353 1 4155100 FAX +353 1 4155101

DRAWN	TRACED	CHECKED	APPROVED	DATE
SML	SML	CAG	CAG/DUB	MAY 2008

SCALE	Job No.	REv
1 : 200(A1)	49341591	A

NOTES

Key

MONITORING WELL LOCATION

TABLES

Client: ENVA Ireland Ltd
Project: ENVA JFK Road
Location: JFK Rd, Bluebell, Dublin 12
Job Number: 49341591
Table 1: **Hydrocarbons in Groundwater**

Sample ID				ENVA_MW01
Date				15-May-08
Parameters	**UNITS**	**MDL**	**IGV**	
Aliphatics				
C5-C6	ug/l	n/a	nv	<10
C6-C8	ug/l	n/a	nv	<10
C8-C10	ug/l	n/a	nv	<10
C10-C12	ug/l	n/a	nv	<10
C12-C16	ug/l	n/a	nv	<10
C16-C21	ug/l	n/a	nv	<10
C21-C35	ug/l	n/a	nv	<10
Total Aliphatics	ug/l	n/a	nv	<10
Aromatics				
C6-C7	ug/l	n/a	nv	<10
C7-C8	ug/l	n/a	nv	<10
C8-C10	ug/l	n/a	nv	<10
C10-C12	ug/l	n/a	nv	<10
C12-C16	ug/l	n/a	nv	<10
C21-C35	ug/l	n/a	nv	<10
C21-C35	ug/l	n/a	nv	<10
Total Aromatics	ug/l	n/a	nv	<10
PRO	ug/l	n/a	nv	<10
TPH	ug/l	n/a	nv	<10
MTBE	ug/l	<10	30	<10
Benzene	ug/l	<10	1	<10
Toulene	ug/l	<10	10	<10
Ethylbenzene	ug/l	<10	10	<10
Xylenes	ug/l	<10	10	<10

xx	**IGV** = Interim Guideline Value (Towards Setting Guideline Values for the Protection of Groundwater in Ireland – Interim Report, EPA)
MDL	Method Detection Limit
nv	no value

Client: ENVA Ireland Ltd
Project: ENVA JFK Road
Location: JFK Rd, Bluebell, Dublin 12
Job Number: 49341591
Table 2: **PAHs in Groundwater**

Sample ID				ENVA_MW01
Date				
Parameters	**UNITS**	**MDL**	**IGV**	
Naphthalene	ug/l	0.01	1	0.083
Acenaphthylene	ug/l	0.01	nv	0.01
Acenaphthene	ug/l	0.01	nv	0.013
Fluorene	ug/l	0.01	nv	0.02
Phenanthrene	ug/l	0.01	nv	0.034
Anthracene	ug/l	0.01	10000	0.012
Fluoranthene*	ug/l	0.01	1	0.01
Pyrene	ug/l	0.01	nv	0.01
Benzo(a)anthracene	ug/l	0.01	nv	<0.01
Chrysene	ug/l	0.01	nv	<0.01
Benzo(b)+Benzo(k) fluoranthene*	ug/l	0.01	0.05	<0.01
Benzo(a)pyrene*	ug/l	0.01	0.01	<0.01
Indeno(123cd)pyrene*	ug/l	0.01	0.05	<0.01
Dibenzo(ah)anthracene	ug/l	0.01	nv	<0.01
Benzo(ghi)perylene*	ug/l	0.01	0.05	<0.01
Total 6 EPA PAHs	ug/l	0.01	0.1	0.05

xx	Exceeds Drinking Water Standards
xx	Exceeds EQS for Surface Waters
xx	**IGV** = Interim Guideline Value (Towards Setting Guideline Values for the Protection of Groundwater in Ireland – Interim Report, EPA)
MDL	Method Detection Limit
-	Less than the MDL
na	Not Analysed
nv	no value

Client: ENVA Ireland Ltd
Project: ENVA JFK Road
Location: JFK Rd, Bluebell, Dublin 12
Job Number: 49341591
Table 3: **Metals in Groundwater**

Sample ID				ENVA_MW01
Date				15-May-08
Parameters	**Units**	**MDL**	**IGV**	
Arsenic	mg/l	0.001	0.01	<0.001
Cadmium	mg/l	0.0004	0.005	<0.0004
Chromium	mg/l	0.001	0.03	<0.001
Copper	mg/l	0.001	0.03	0.002
Lead	mg/l	0.001	nv	<0.001
Mercury	mg/l	0.00005	0.001	<0.00005
Nickel	mg/l	0.001	0.02	0.002
Zinc	mg/l	0.001	0.1	0.004

xx	**IGV** = Interim Guideline Value (Towards Setting Guideline Values for the Protection of Groundwater in Ireland – Interim Report, EPA)
MDL	Method Detection Limit
nv	no value

APPENDIX A – Borehole log and Monitoring Well Construction Details

URS Ireland Ltd
Iveagh Court, 6-8 Harcourt Road
Dublin 2
Telephone: +35314155100
Fax: +35314155101

BOREHOLE LOG

Project				BOREHOLE No
Enva John F Kennedy Rd - Well Installation				**MW01**
Job No	Date	Ground Level (m)	Co-Ordinates ()	
49341591	08-05-08			
Contractor				Sheet
Ground Restoration Ltd (GRL)				1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
						(1.80) 1.80	Made Ground		
						(9.70) 11.50	Brown sandy silty CLAY		
						(1.00) 12.50	Sandy CLAY		
							EOH		

Boring Progress and Water Observations						Chiselling			Water Added	
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To

GENERAL REMARKS

Silt sock installed around well screen

Drill diameter: 90mm

Flush cover fitted over well

All dimensions in metres Scale 1:81.25	Client Enva Ireland	Method/ Plant Used Air Rotary Drill Rig	Logged By K Reid

AGS3 UK BH ENVA LOG.GPJ AGS3_ALL.GDT 5/6/08

APPENDIX B - Chain of Custody Document and ALcontrol Laboratory Results

ALcontrol Laboratories (Dublin)

18a Rosemount Business Park,
Ballycoolin,
Dublin 11
Ireland
Tel: +353 (0) 1 8829893
Fax: +353 (0) 1 8829895

CERTIFICATE OF ANALYSIS

Client: URS Ireland Limited (DUB)

Iveagh Court
6 Harcourt Rd
Dublin 2
Ireland

Attention: Michele O'Brien

Date: 3 June, 2008

Our Reference: 08-B02985/01

Your Reference: ENVA

Location:

A total of 1 samples was received for analysis on Thursday, 15 May 2008 and authorised on Tuesday, 3 June 2008. Accredited laboratory tests are defined in the log sheet, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation. We are pleased to enclose our final report, it was a pleasure to be of service to you, and we look forward to our continuing association.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Signed

Lorraine Mc Namara

Lorraine McNamara
Laboratory Technical Manager

Dylan Halpin

Compiled By

Dylan Halpin

UKAS TESTING
1291
GROUP

ALcontrol Laboratories Ireland

Test Schedule

Ref Number: 08-B02985/01

Client: URS Ireland Limited (DUB)

Date of Receipt: 15/05/2008

Sample Type: WATER

Location:

Client Contact: Michele O'Brien

Client Ref: ENVA

Detection Method				CV AA	GC	GC	GCMS	ICP MS	ICP MS	ICP MS	ICP MS	ICP MS	ICP MS	ICP MS			
UKAS Accredited [Testing Laboratory] No. 1291								✓	✓	✓	✓	✓	✓	✓			
ALcontrol Reference	Sample Identity	Other ID	P / V	Dissolved Mercury Low Level	DRO CWG	PRO CWG	Total Aqueous EPA (16 Speciated) PAHs	Dissolved Arsenic Low Level	Dissolved Cadmium Low Level	Dissolved Chromium Low Level	Dissolved Copper Low Level	Dissolved Lead Low Level	Dissolved Nickel Low Level	Dissolved Zinc Low Level			
08-B02985-S0001-A01	ENVA_MW01	15/05/08	Plastic Bottle	X	-	-	-	X	X	X	X	X	X	X			
08-B02985-S0001-A04	ENVA_MW01	15/05/08	Glass Bottle	-	X	-	X	-	-	-	-	-	-	-			
08-B02985-S0001-A07	ENVA_MW01	15/05/08	Volatile Vial	-	-	X	-	-	-	-	-	-	-	-			
08-B02985-S0001-A09	ENVA_MW01	15/05/08	Volatile Vial	On Hold													

Notes : NUMERIC VALUES INDICATE ADDITIONAL SCHEDULING

* SUBCONTRACTED TO OTHER LABORATORY / ** SAMPLES ANALYSED AT THE CHESTER LABORATORY

ALcontrol Laboratories Ireland

Test Schedule Summary

Ref Number: 08-B02985/01 **Sample Type: WATER**
Client: URS Ireland Limited (DUB) Location:
Date of Receipt: 15/05/2008 Client Contact: Michele O'Brien
Client Ref: ENVA

* SUBCONTRACTED TO OTHER LABORATORY / ** SAMPLES ANALYSED AT THE CHESTER LABORATORY

SCHEDULE	METHOD	TEST NAME	TOTAL
X	CV AA	Dissolved Mercury Low Level	1
X	GC	DRO CWG	1
X	GC	PRO CWG	1
X	GCMS	Total Aqueous EPA (16 Speciated) PAHs	1
X	ICP MS	Dissolved Arsenic Low Level	1
X	ICP MS	Dissolved Cadmium Low Level	1
X	ICP MS	Dissolved Chromium Low Level	1
X	ICP MS	Dissolved Copper Low Level	1
X	ICP MS	Dissolved Lead Low Level	1
X	ICP MS	Dissolved Nickel Low Level	1
X	ICP MS	Dissolved Zinc Low Level	1

☐ Interim
☑ Validated

ALcontrol Laboratories Ireland

Table Of Results

Ref Number: 08-B02985/01
Client: URS Ireland Limited (DUB)
Date of Receipt: 15/05/2008
(of first sample)

Sample Type: WATER
Location:
Client Contact: Michele O'Brien
Client Ref: ENVA

	Detection Method	CV AA	GC	GC	GCMS	GCMS	GCMS	GCMS	GCMS	GCMS	GCMS	GCMS	GCMS	GCMS	GCMS	GCMS
	Method Detection Limit	<0.05ug/l	n/a	n/a	<10ng/l	<10ng/l	<10ng/l	<10ng/l	<10ng/l	<10ng/l	<10ng/l	<10ng/l	<10ng/l	<10ng/l	<10ng/l	<10ng/l
UKAS Accredited [Testing Laboratory] No. 1291																
ALcontrol Reference	Sample Identity	Other ID	Dissolved Mercury Low Level	DRO CWG	PRO CWG	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b)+Benzo(k) fluoranthene	Benzo(a)pyrene
			ug/l			ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l
08-B02985-S0001	ENVA_MW01	15/05/08	<0.05	Done	Done	83	10	13	20	34	12	10	10	<10	<10	<10	<10

Notes : METHOD DETECTION LIMITS ARE NOT ALWAYS ACHIEVABLE DUE TO VARIOUS CIRCUMSTANCES BEYOND OUR CONTROL.

NDP = NO DETERMINATION POSSIBLE

Checked By : Dylan Halpin

* SUBCONTRACTED TO OTHER LABORATORY / ** SAMPLES ANALYSED AT THE CHESTER LABORATORY

☐ Interim
☑ Validated

ALcontrol Laboratories Ireland

Table Of Results

Ref Number: 08-B02985/01 **Sample Type: WATER**

Client: URS Ireland Limited (DUB) Location:

Date of Receipt: 15/05/2008 Client Contact: Michele O'Brien

(of first sample) Client Ref: ENVA

	Detection Method	GCMS	GCMS	GCMS	GCMS	ICP MS	ICP MS	ICP MS	ICP MS	ICP MS	ICP MS	ICP MS				
	Method Detection Limit	<10ng/l	<10ng/l	<10ng/l	<10ng/l	<1ug/l	<0.4ug/l	<1ug/l	<1ug/l	<1ug/l	<1ug/l	<1ug/l				
UKAS Accredited [Testing Laboratory] No. 1291						✓	✓	✓	✓	✓	✓	✓				
ALcontrol Reference	Sample Identity	Other ID	Indeno(123cd)pyrene	Dibenzo(ah)anthracene	Benzo(ghi)perylene	Total Aqueous 16 EPA PAHs	Dissolved Arsenic Low Level	Dissolved Cadmium Low Level	Dissolved Chromium Low Level	Dissolved Copper Low Level	Dissolved Lead Low Level	Dissolved Nickel Low Level	Dissolved Zinc Low Level				
			ng/l	ng/l	ng/l	ng/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l				
08-B02985-S0001	ENVA_MW01	15/05/08	<10	<10	<10	192	<1	<0.4	<1	2	<1	2	4				

Notes : METHOD DETECTION LIMITS ARE NOT ALWAYS ACHIEVABLE DUE TO VARIOUS CIRCUMSTANCES BEYOND OUR CONTROL. **NDP** = NO DETERMINATION POSSIBLE

Checked By : Dylan Halpin

* SUBCONTRACTED TO OTHER LABORATORY / ** SAMPLES ANALYSED AT THE CHESTER LABORATORY

GEOCHEM ANALYTICAL SERVICES

C 5 - C 35 Speciated TPH

By GC

Alcontrol Laboratories Dublin **B02985**
Matrix: **WATER**
Units: **µg/l**

Client: **URS Ireland Limited (DUB)**
Location: **0**

Sample Number	S0001
Client Ref:	ENVA_MW01
Depth	0.0
Aliphatics	
EC C5-C6	<10
EC>C6-C8	<10
EC>C8-C10	<10
EC>C10-C12	<10
EC>C12-C16	<10
EC>C16-C21	<10
EC>C21-C35	<10
Total Aliphatics	<10
Aromatics	
EC C6-C7	<10
EC>C7-C8	<10
EC>C8-C10	<10
EC>C10-C12	<10
EC>C12-C16	<10
EC>C16-C21	<10
EC>C21-C35	<10
Total Aromatics	<10
PRO	<10
TPH	<10
MTBE	<10
Benzene	<10
Toluene	<10
Ethylbenzene	<10
Xylene	<10

*TPH is the sum of Aliphatics and Aromatics (C5-C35)

EC=Equivalent carbons

Checked E By. Patricia Morado

APPENDIX

APPENDIX

1. Results are expressed as mg/kg dry weight (dried at 30°C) on all soil analyses except for the following: NRA Leach tests, flash point, and ammoniacal N_2 by the BRE method, VOC, PRO, Cyanide, Acid Soluble Sulphide,TPH by IR, OFGs and SEM.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. A sub sample of all samples received will be retained free of charge for one month for soils and one month for waters (sample size permitting), but may then be discarded unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, an asbestos screen is done in-house on soils and if no fibres are found will be reported as NFD – no fibres detected. If fibres are detected, then identification and quantification is carried out by ALcontrol Technichem or Alcontrol Shutlers in the UK . If a sample is suspected of containing asbestos, then drying and crushing will be suspended on that sample until the asbestos results are known. If asbestos is present, then no analysis requiring dry sample are undertaken.

7. If no separate volatile sample is supplied by the client, the integrity of the data may be compromised if the laboratory is required to create a sub-sample from the bulk sample – similarly, if a headspace is present in the volatile sample.

8. NDP – No Determination Possible due to insufficient/unsuitable sample.

9. Metals in water are performed on a filtered sample, and therefore represent dissolved metals – total metals must be requested separately.

10. A table containing the date of analysis for each parameter is not routinely included with the report, but is available upon request.

Last updated February 2005

Chain of Custody No: 31034

GEOTRACE - ANALYSIS REQUEST FORM AND SAMPLE CUSTODY SHEET

ALcontrol Laboratories

Unit 18a, Rosemount Business Park,
Ballycoolin, Dublin 11
e-mail: Ireland.schedulers@alcontrol.ie
Tel: 01 8829893 Fax: 01 8829895

Client: URS Ireland	Date of Despatched:
Address: Meagh Court, 6-8 Harcourt Rd	Sampler: James Jennings
	Email schedule to:
Contact name: Michele O'Brien	michele_obrien@urscorp.com
Tel: 01 4155100 Fax: 01 4155101	Email results to:
Project/Site Name: ENVA	michele_obrien@urscorp.com
Project Code:	
Quote Reference:	Job Continuation - yes / no

Sheet 1 of 1 page 9 / 9

Date of Sampling:	Sample Ref. ID	Depth in metres	Sample Preservation Y/N	(S)oil or (W)ater (specify if other	Sample Concentration Low, Medium or High (L, M, H)	Suite Name/Analysis Required: TPH CWG	Spec. PAH	Metals*	Turnaround - please tick	Report format	Sampler Signature
15/5/08	ENVA_MW01		N	W		X	X	X	10 day t/a X 5 day t/a ___ 3 day t/a ___ 1 day t/a ___ date results required by:	Standard ___	

Comments: 2 x vials, 1L glass bottle, 1L plastic bottle

*Metals required: As, Cd, Cr, Cu, Hg, Ni, Pb, Zn

Special Instructions/Known Hazards:
(Please inform the lab of any known hazards in the sample, ie Asbestos)

P.O. Number ~~DBSA~~ DUB/3561

Invoice address if different from above: James

Date Received: 15/5 Time: 16:33 Temp 12° Signature: 15-5-08

CONFIDENTIAL REPORT

Client

Enva Ireland Ltd
Clonminam Industrial Estate
Portlaoise
Co. Laois

Attn. Ms. Anne Phelan

Title

Annual Environmental Noise Survey 2008
Enva Ireland Ltd. – Dublin
EPA Waste Licence Reg. No. 196-1

Report Ref:	0943	Report by:	Frances Wright
Date recd:		Approved by:	Paddy Wright
Copies to:		Date:	9th May 2008

CONTENTS PAGE

1. INTRODUCTION:

Enva Ireland Ltd. operate a waste recovery facility at JFK Industrial Estate, JFK Road, Naas Road, Dublin 12 which is licensed under the EPA Waste Licence system (Reg. No. 196-1). Schedule D of the company's licence requires an annual Environmental Noise Survey to be undertaken.

At the request of Ms. Anne Phelan of Enva Ireland Ltd., Wright Environmental Services carried out this Noise Survey on the 7th May 2008.

This report presents and interprets the results of the survey with reference to the companies waste licence limits. The methodology used for the survey is described in Appendix I. Instrumentation and calibration is described in Appendix II. Monitoring locations are shown in the site map in Appendix III. Appendix IV presents the 1/3 octave band analysis of the noise at monitoring locations.

2. SUMMARY

Wright Environmental Services carried out the day (08:00 – 22:00) and night (22:00 – 08:00) Environmental Noise Survey on the 7th May 2008.

The dominant noise at the sampling locations was external industrial noise and traffic noise from the busy industrial road (JFK Road). The main activity onsite during the daytime survey was vehicles moving in/out and around the site. There was no activity or noise from the facility during the night time monitoring period.

Noise levels at the noise sensitive location, NSL 1 (where the licence limit applies), were above the criterion levels set in the waste licence. However, NSL 1 is located on the busy JFK road in the industrial estate. Noise levels are mainly affected by the high volume of traffic passing this location and extraneous industrial noise from the surrounding area. Except for one van entering the site during the daytime monitoring period, there was no noise audible from Enva Ireland Ltd.

There was no audible tonal component in the noise emission from the activity at the monitoring locations which is confirmed by the one third octave band analysis which is presented in Appendix IV.

3. MONITORING RESULTS AND DISCUSSION:

Wright Environmental Services carried out the day (08:00 – 22:00) and night (22:00 – 08:00) Environmental Noise Survey on the 7th May 2008. The monitoring locations are described below and are shown in the site map in Appendix III.

Location **NB 1**: This is a boundary location to the south/east of the site.

Location **NB 2**: This is a boundary location to the east of the site.

Location **NB 3**: This is a boundary location to the north/east of the site.

Location **NB 4**: This is a boundary location to the west of the site.

Location **NSL 1**: This noise sensitive locations is the neighbouring facility to the west. It is near the roadside on the busy JFK road in the JFK industrial estate. The neighbouring facility is a place of worship.

Enva Ireland do not operate or have any plant running during night time (22:00 – 08:00). Noise monitoring was therefore carried out at all locations during the daytime survey and at the noise sensitive location only during the night time survey.

The following "A-Weighted" data was determined for each discrete sampling period.

L_{eq} : The equivalent continuous noise level for the measurement period. (This is defined as the sound level of a steady sound having the same energy as a fluctuating sound over the specified measuring period).

$L_{(1)}$: The noise level exceeded for 1% of the measurement period. (This parameter gives a good indication of typical maximum levels.)

$L_{(10)}$: The noise level exceeded for 10% of the measurement period.

$L_{(90)}$: The noise level exceeded for 90% of the measurement period. (This is taken to represent the background noise level).

Detailed results are presented in Table 1 and 2 below along with appropriate comments regarding noise in the monitoring environment.

Table 1

Boundary Locations Results – 7th May 2008

Monitoring Position	Time	L_{eq} (dBA)	L_1 (dBA)	L_{10} (dBA)	L_{90} (dBA)	Comments
NB 1	15.31 – 16.01	**58**	67	59	52	Activity onsite included: Truck moving around site. No Enva trucks dispensing into holding tanks. Dominant noise sources are external industrial noise from surrounding industrial estate and traffic noise - approximately 40 cars, 15 trucks, 25 vans pass. Helicopter overhead. Truck loaded up next door (Nita Cortex Ltd). Prominent hissing noise from east (possible BOC facility).
NB 2	14.59 – 15.29	**56**	65	57	50	Activity onsite included: van packing up equipment, forklift operating. No Enva trucks dispensing into holding tanks. Dominant noise sources are external industrial noise from surrounding industrial estate. Plant noise from neighbours to north. Hammering/Sawing from neighbours to north. Prominent hissing noise from east (possible BOC facility). Traffic noise prominent – approximately 90 cars, 45 trucks, 30 vans pass. Helicopter overhead.
NB 3	16.05 – 16.35	**55**	64	57	50	Activity onsite included: chatting, car leaves site. No Enva trucks dispensing into holding tanks. Dominant noise sources are external industrial noise from surrounding industrial estate. Plant noise from neighbours to north. Fan/Stack noise from plant to north. Birds singing. Traffic noise audible. Helicopter overhead.
NB 4	14.28 – 14.58	**54**	63	57	50	Activity onsite included: chatting, one car in/out, van's engine on idle. No Enva trucks dispensing into holding tanks. Dominant noise sources are external industrial noise from surrounding industrial estate. Hammering from neighbours to north. Prominent hissing noise from east (possible BOC facility). Traffic noise can also be heard.

Table 2

Noise Sensitive Location Results - 7th May 2008

Monitoring Position	Time	L_{eq} (dBA)	L_1 (dBA)	L_{10} (dBA)	L_{90} (dBA)	Comments
NSL 1	16.55 – 17.25	**60**	71	63	53	Traffic passing is dominant noise - approximately 70 cars, 5 trucks, 25 vans pass. Hissing noise from the east (possible BOC facility). Van enters and leaves Enva. No noise audible from Enva.
NSL 1	22.05 – 22.35	**53**	62	53	48	Dominant noise source is the BOC Gas plant to the east of the site. 9 cars and 1 truck pass. Distant road traffic audible. Ambulance siren audible. No Enva activity or noise.

In accordance with their waste licence, Enva Ireland Ltd are required to comply with maximum noise limit values. Criterion noise levels are set for day and night time and apply at noise sensitive locations. They are presented in the licence as follows:

C.1 Noise Emissions: (Measured at any noise sensitive location).

Day	*55*	*dB(A) LAeq(30 minutes)*
Night	*45*	*dB(A) LAeq(30 minutes)*

The dominant noise at the sampling locations was external industrial noise and traffic noise from the busy industrial road (JFK Road). The main activity onsite during the survey was vehicles moving in/out and around the site. There was no activity or noise from the facility during the night time monitoring period.

Monitoring at the boundary locations resulted in L_{eq} noise levels of 58 dB(A) , 56 dB(A), 55 dB(A), 54 dB(A) at NB 1, NB 2, NB 3 and NB 4 respectively. As you can see from the comments in Table 1 above the noise levels at these boundary locations were mainly affected by industrial noise from surrounding industrial estate and traffic noise. These are however boundary locations and the limit level does not apply here.

Noise levels at the noise sensitive location, NSL 1 (where the limit applies), were 60 dB(A) during day time monitoring and 53 dB(A) during night time monitoring. During day time monitoring approximately 70 cars, 5 HGVs and 25 vans passed during the half hour sampling interval. Except for one van entering the site, there is no noise audible from Enva Ireland Ltd. During night time monitoring there was no activity and no noise audible from Enva Ireland Ltd. The dominant noise source during the night time survey was the BOC Gas facility approximately 300 meters to the east of Enva Ireland Ltd.

Section 6.6 of the company's licence states that

> *"There shall be no clearly audible tonal component or impulsive component in the noise emissions from the activity at the noise sensitive locations."*

There was no audible tonal component in the noise emission from the activity at the noise monitoring locations. One third octave band analysis of the noise was carried out at each locations. This analysis, which is presented in Appendix IV, confirms that there was no tonal component to the noise.

4. CONCLUSION:

Wright Environmental Services carried out day (08:00 – 22:00) and night time(22:00 – 08:00) Environmental Noise Survey on the 7th May 2008.

In accordance with their waste licence, Enva Ireland Ltd are required to comply with maximum L_{eq} noise limit values at noise sensitive location.

Noise levels at the noise sensitive location, NSL 1 (where the limit applies), were above the criterion levels set in the waste licence. However, noise levels at NSL 1 are mainly affected by the high volume of traffic passing this location and extraneous industrial noise from the surrounding area. Except for one van entering the site during the daytime monitoring period, there was no noise audible from Enva Ireland Ltd.

There was no audible tonal component in the noise emission from the activity at the monitoring locations which is confirmed by the one third octave band analysis which is presented in Appendix IV.

From this survey, it is therefore concluded that the environmental noise impact of Enva Ireland Ltd is such that they are in compliance with their waste licence.

APPENDIX I

Methodology

METHODOLOGY

The methodology of the survey was based upon procedures set out in the International Standard, ISO 1996-2 (Acoustics – description and measurement of environmental noise). The following Environmental Protection Agency's guidance documents were also referenced; "Environmental Noise Survey Guidance Document, 2003" and "Guidance Note For Noise In Relation To Schedule Activities, 2nd Edition , 2006".

Environmental noise levels were determined by using a Pulsar Model 33 , Type 1 Real Time Sound Level Meter, with half inch condenser microphone. The instrumentation was calibrated directly before and after the noise measurements. Details of the instrumentation and external calibration are presented in Appendix II of this report. A series of 1/3 Octave Band level measurements were simultaneously taken using the Sound Level Analyser and this data was used to evaluate the presence of tones. This analysis is presented in Appendix IV.

Results reported were determined using the fast response, A-Weighting (ref. 20 μPa) and are rounded off to the nearest whole decibel. Monitoring was conducted in relatively calm, dry weather conditions during the day (08:00 – 22:00) and night (22:00 – 08:00). Throughout the monitoring, the microphone was situated 1.5 m above ground level, away from any reflective surfaces. The monitoring equipment was manned throughout the sampling intervals and comments were recorded in order to aid the interpretation of the results.

During the survey air temperature and humidity measurements were undertaken using a Delta Ohm Hygrometer HD 8501 H. Wind speed measurements were taken using a TSI VelociCalc and the wind direction was noted using a compass. Details of the weather conditions are presented in Table below.

Summary of Weather Condition

Time	Air Temperature ºC	Relative Humidity %	Wind Direction	Wind Speed m/s	General Conditions
15:30	23	42	S/E	2.8	Dry – no precipitation.
22:20	16	67	-	Calm	Dry – no precipitation.

APPENDIX II

Instrumentation and External Calibration Details

INSTRUMENTATION AND EXTERNAL CALIBRATION DETAILS

Instrumentation:

Pulsar Model 33 , Type 1 Real Time Sound Level Meter, with half inch condenser microphone, Serial Number T223417.

On-site calibrations were carried out before and after sampling with a Pulsar Calibrator – model 100B, Serial Number: 42171.

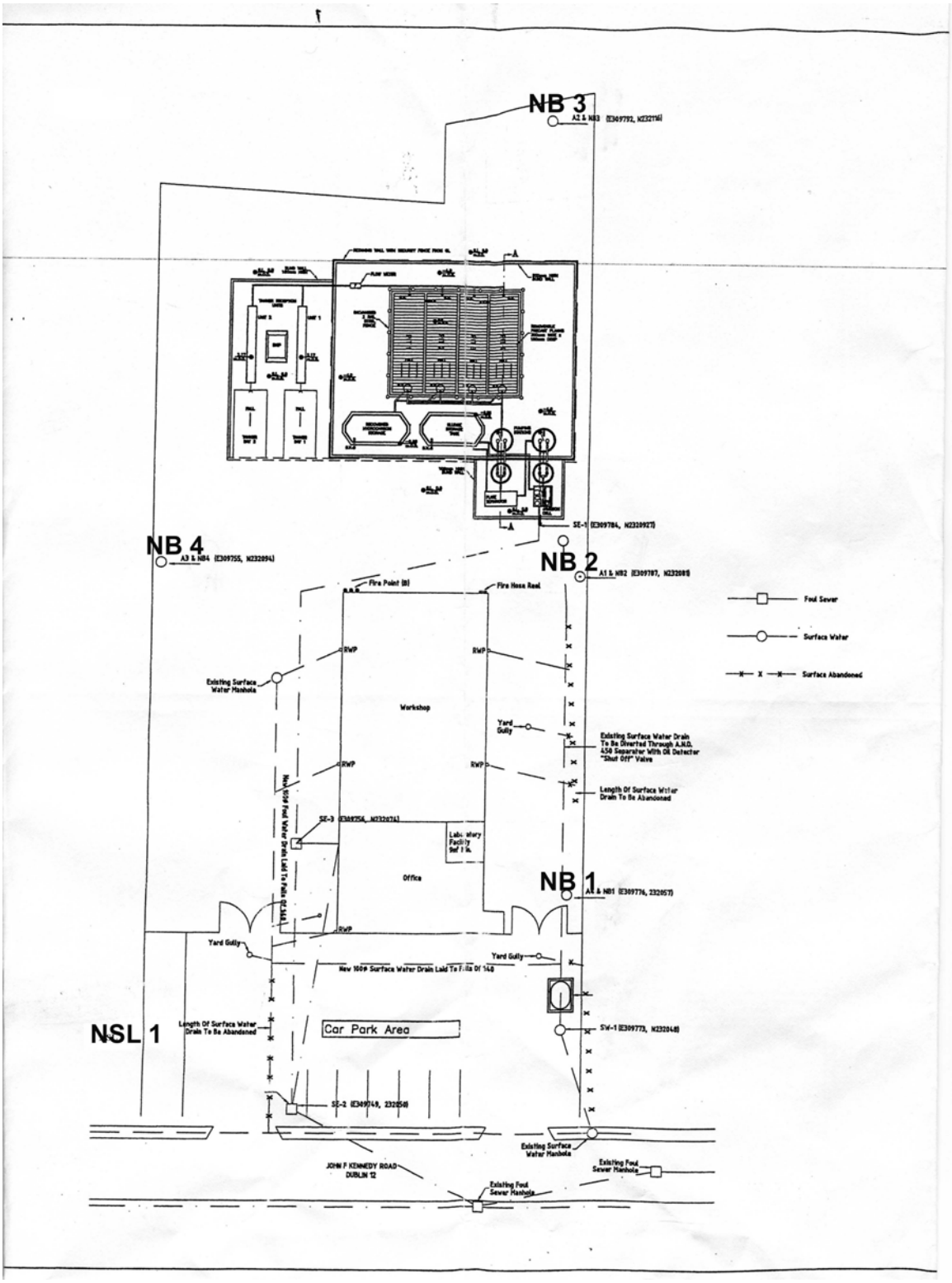
External Calibration:

External Calibration of instrumentation was undertaken by Pulsar Instruments Plc:

Unit	Date of Calibration	Calibration Certificate Number
Sound Level Meter Serial No. T223417	19th October 2007	155379
Calibrator – Serial No. 42171	19th October 2007	155380

APPENDIX III

Site Plan showing Noise Monitoring Positions


NB 3
NB 4
NB 2
NB 1
NSL 1
Foul Sewer
Surface Water
Surface Abandoned
Fire Point (B)
Fire Hose Reel
RWP
Existing Surface Water Manhole
Workshop
Yard Gully
Existing Surface Water Drain To Be Diverted Through A.N.D. 450 Separator With Oil Detector "Shut Off" Valve
Length Of Surface Water Drain To Be Abandoned
Office
Car Park Area
Length Of Surface Water Drain To Be Abandoned
JOHN F KENNEDY ROAD DUBLIN 12
Existing Surface Water Manhole
Existing Foul Sewer Manhole

APPENDIX IV

1/3 Octave Band Analysis (OBA)

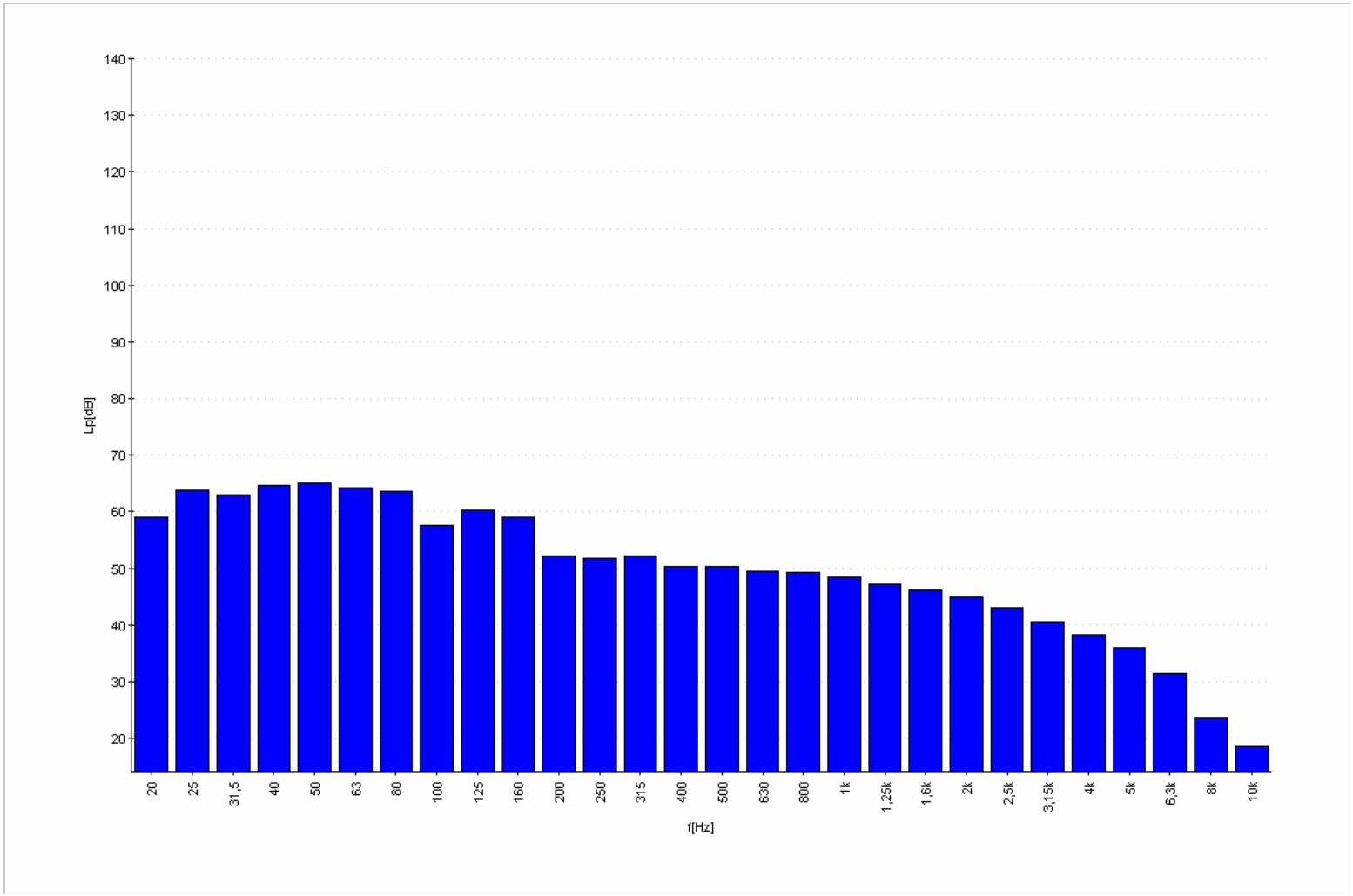


Figure 1: NB 1 - Daytime

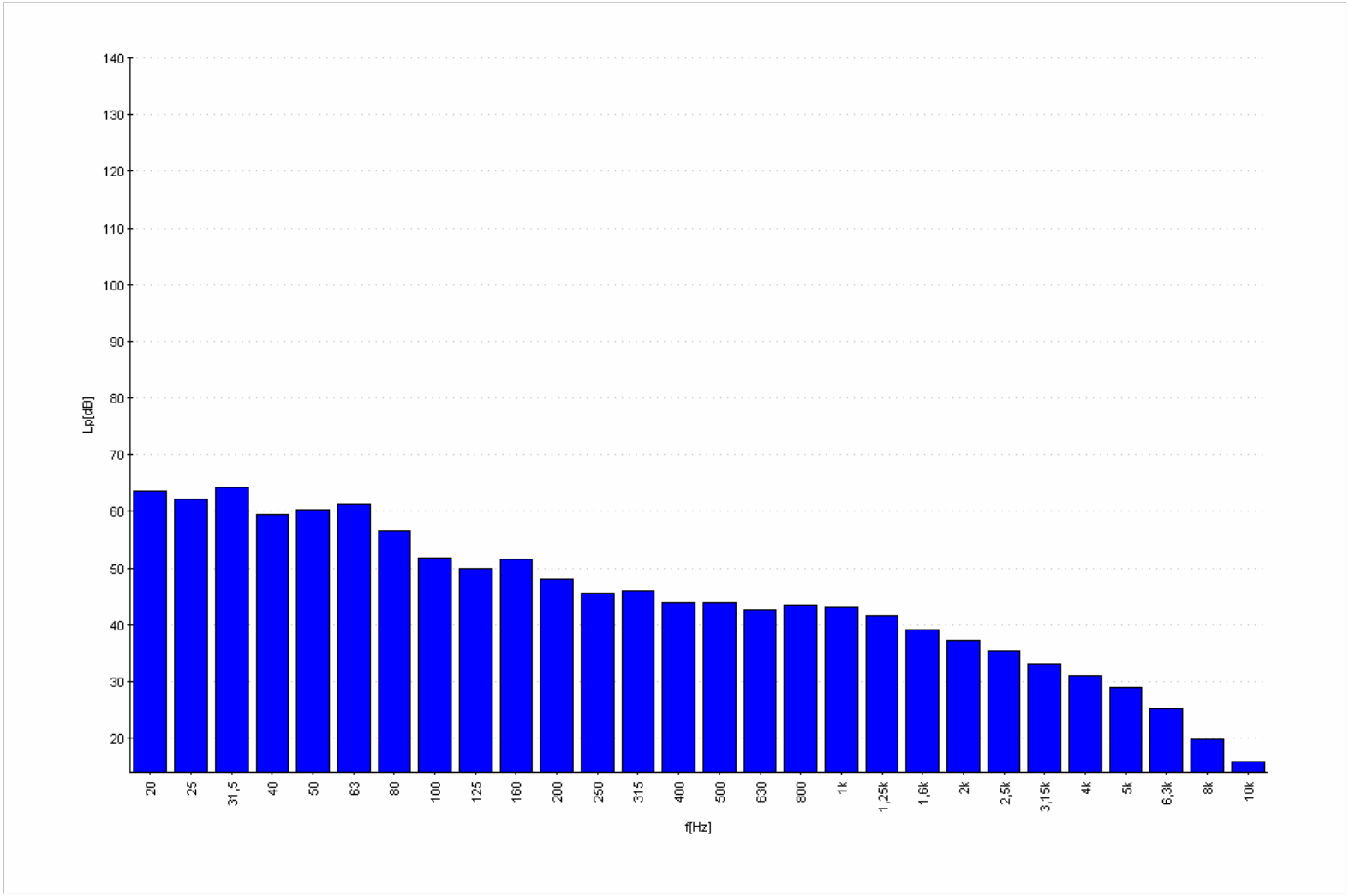


Figure 2: NB 2 - Daytime

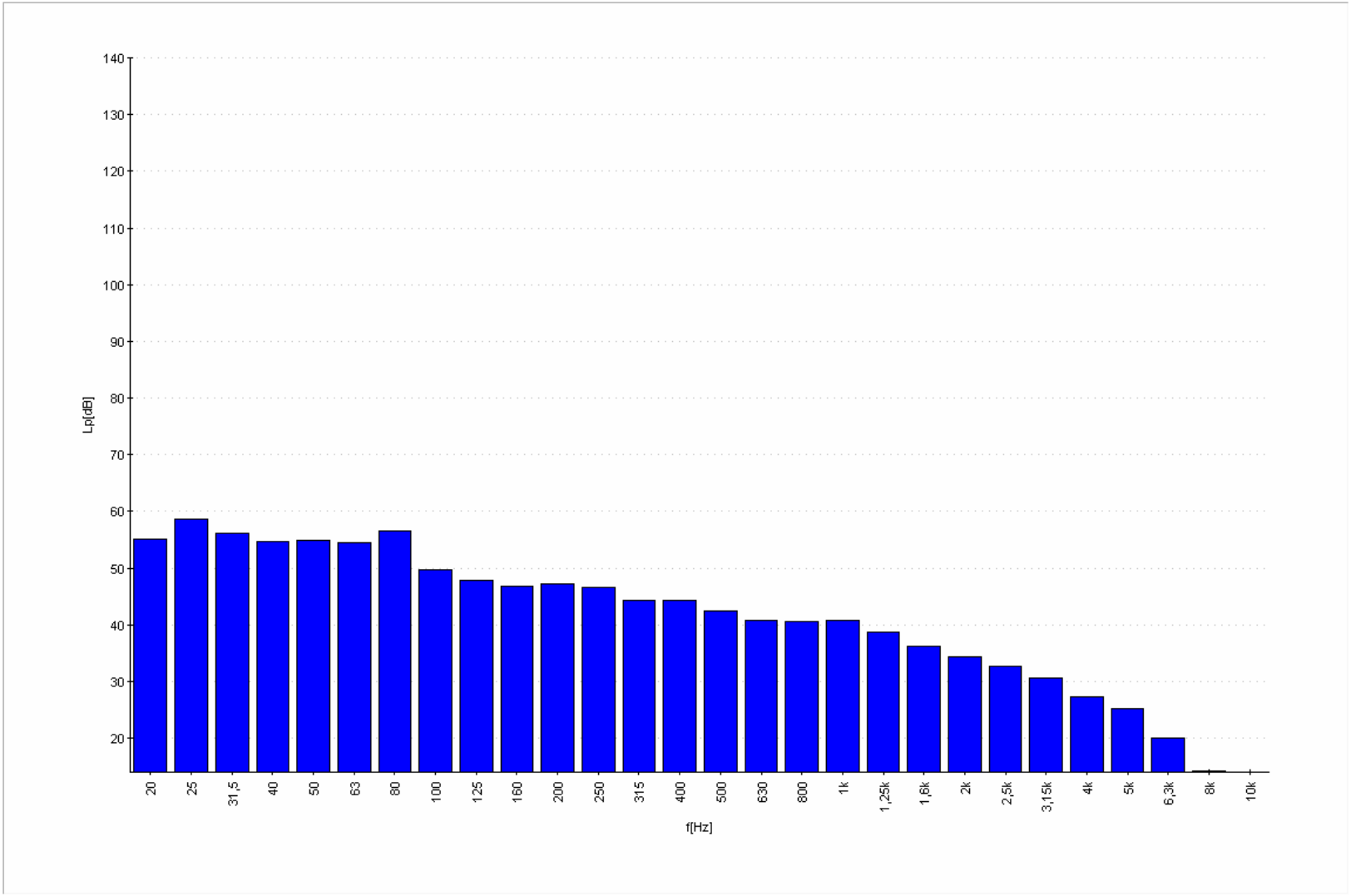


Figure 3: NB 3 - Daytime

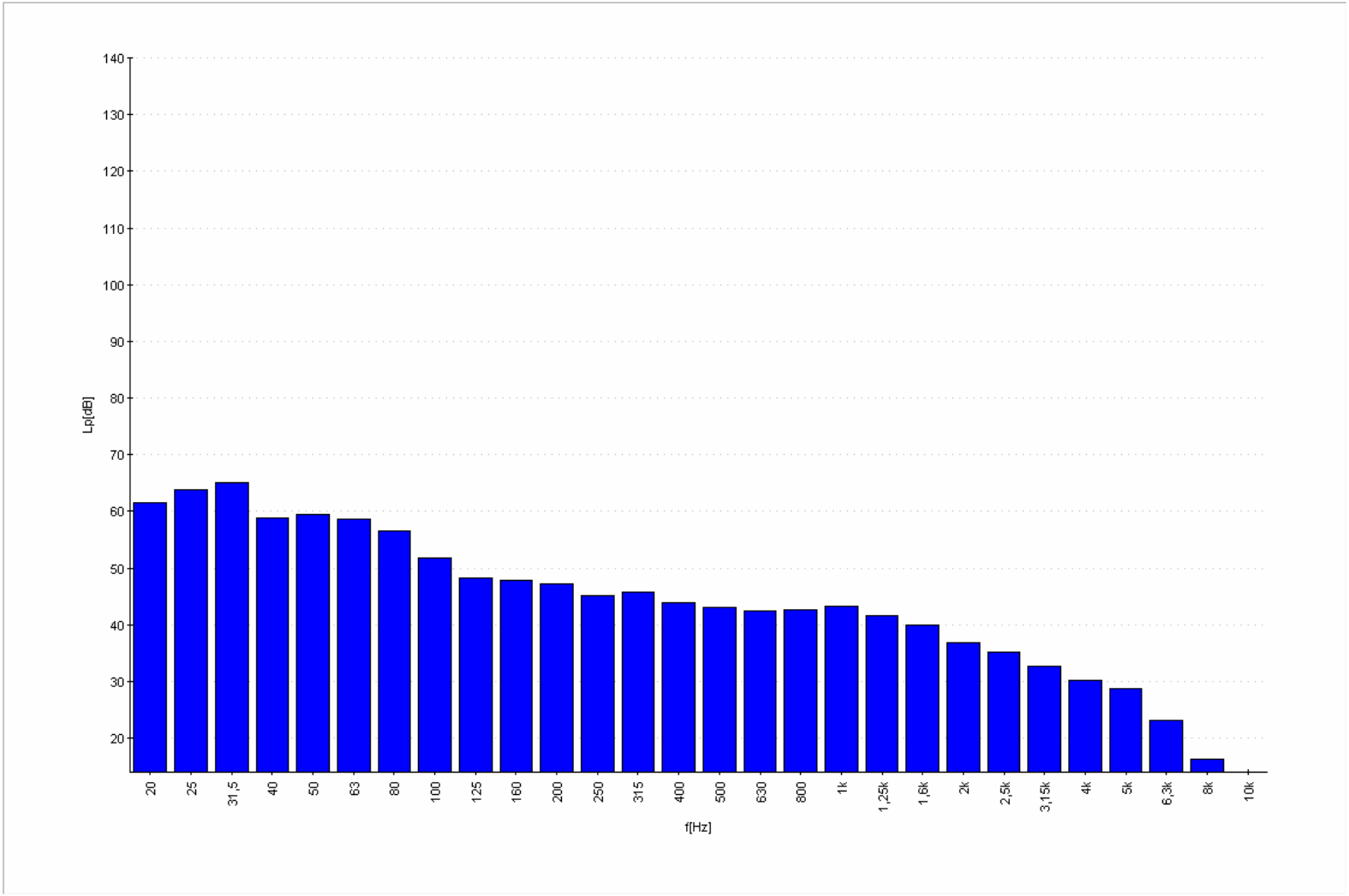


Figure 4: NB 4 - Daytime

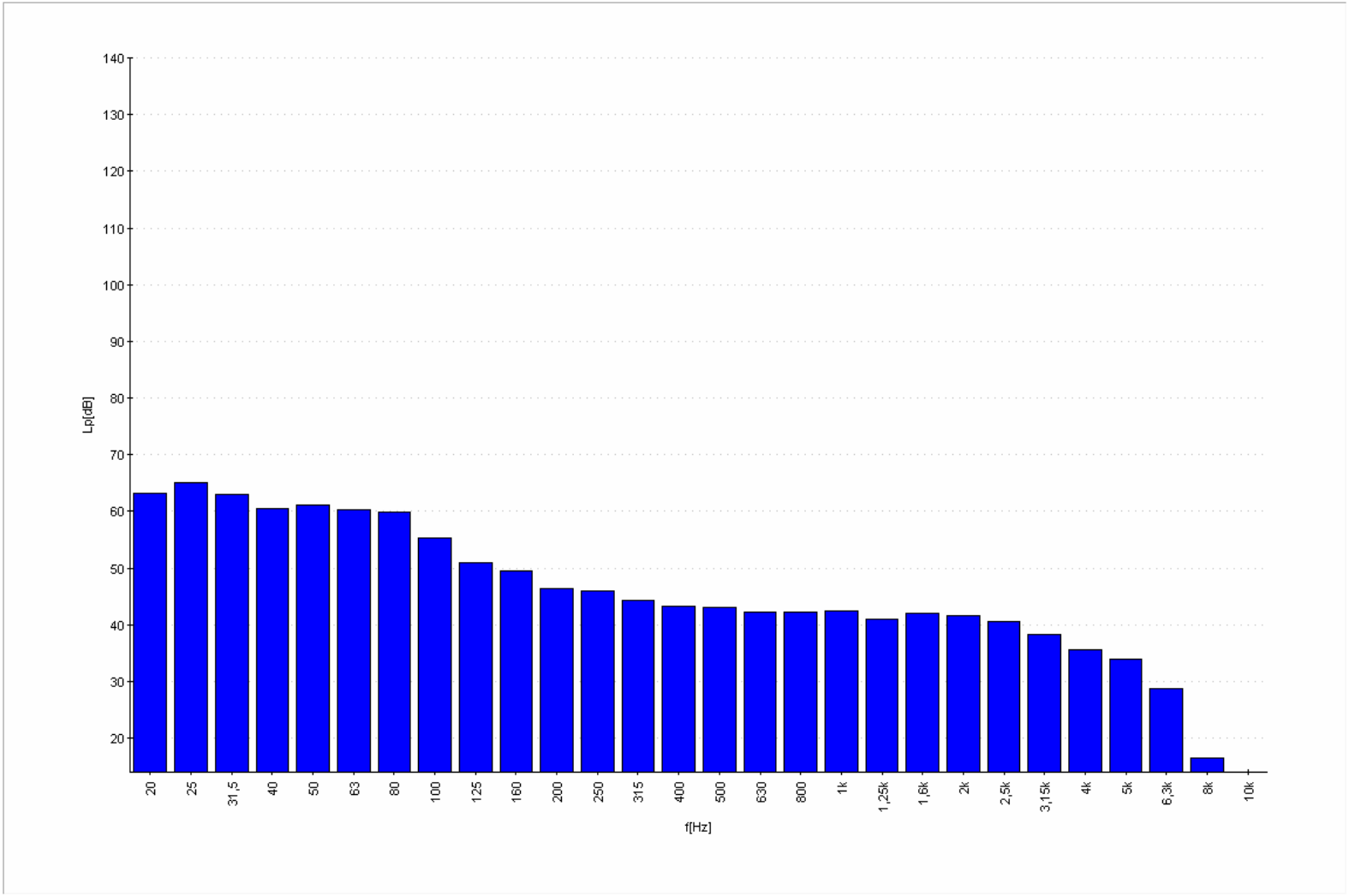


Figure 5: NSL 1 – Day time

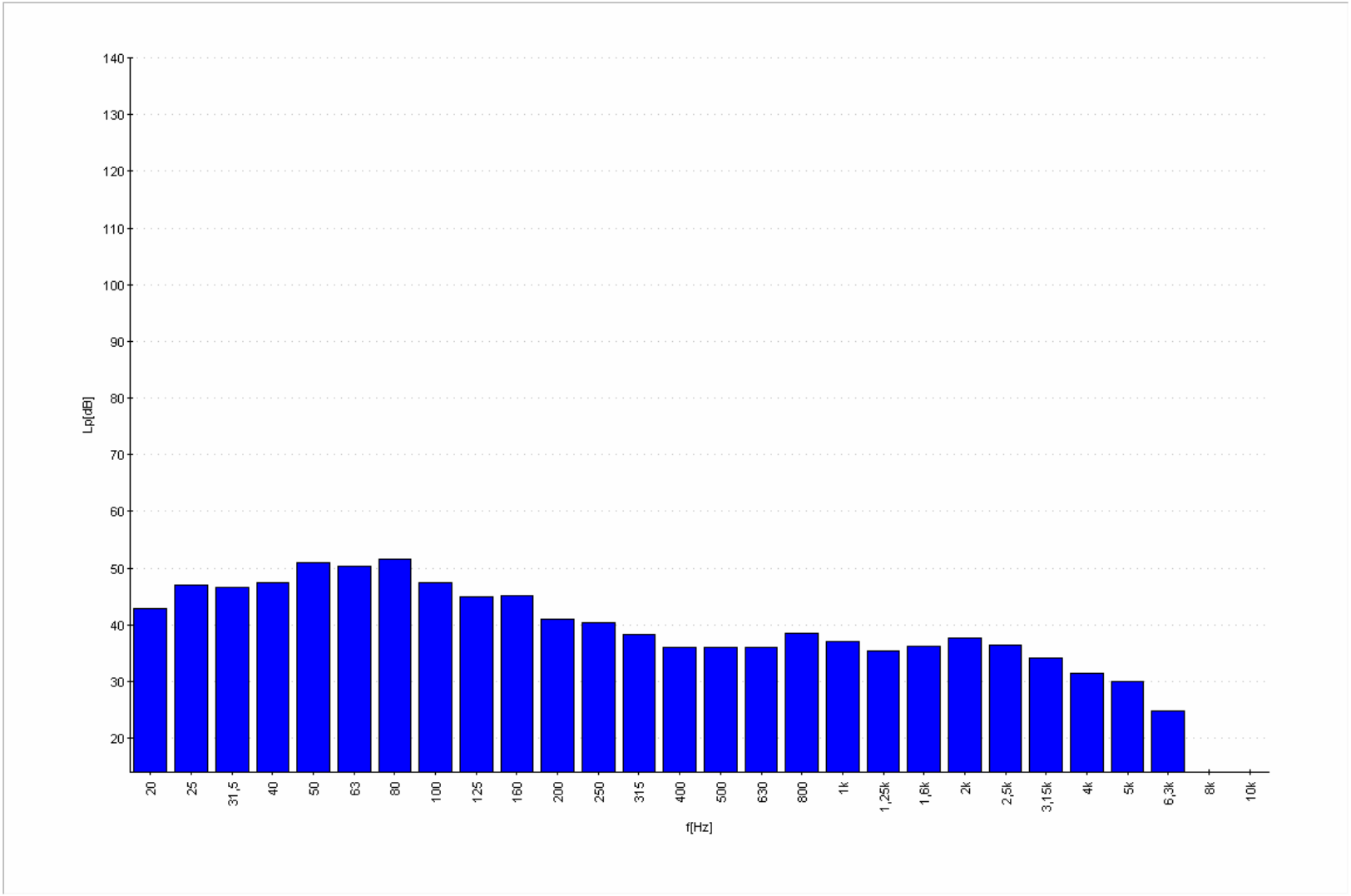
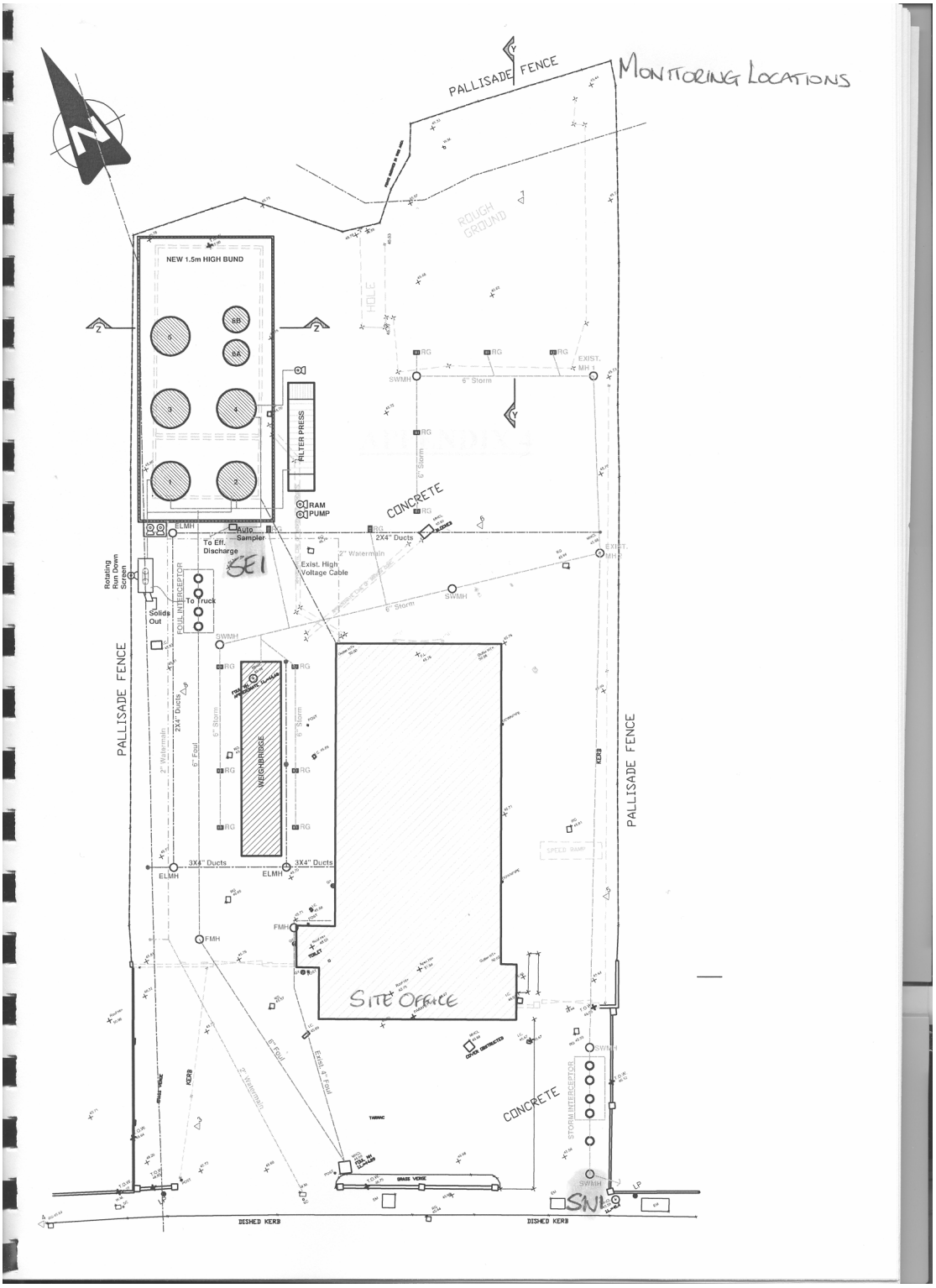


Figure 6: NSL 1 – Night time


MONITORING LOCATIONS
PALLISADE FENCE
NEW 1.5m HIGH BUND
ROUGH GROUND
HOLE
FILTER PRESS
RAM PUMP
CONCRETE
Auto Sampler
To Eff. Discharge
SE1
Exist. High Voltage Cable
2X4" Ducts
2" Watermain
6" Storm
SWMH
EXIST. MH
Rotating Run Down Screen
FOUL INTERCEPTOR
To Truck
Solids Out
PALLISADE FENCE
WEIGHBRIDGE
3X4" Ducts
ELMH
FMH
SITE OFFICE
6" Foul
Exist. 4" Foul
STORM INTERCEPTOR
GRASS VERGE
SW1
DISHED KERB
DISHED KERB

ENVA Ireland Ltd., Dublin OBJECTIVES TARGETS

OBJECTIVE:				ACHIEVE BY:
GP-01-2008	**Provide a high level of Emergency Preparedness on the Enva site.**			**31/12/2011**
RATIONALE:	While there is a high level of strong HSE management throughout Enva more focus is now possible for potential emergency situations.			
TARGET:				ACHIEVE BY:
GP-01-01	**Develop Site Specific Emergency Procedures and create appropriate awareness**			**31/12/2009**
STEP	IMPLEMENTATION PROGRAMME	RESP.	Target Date	STATUS
1	All Enva sites to review/develop an appropriate and consistent site specific emergency prepardness plan.	HSE & Operations	31/12/2008	Site emergency preparedness is in place for the site.
2	Carry out training and emergency drills for all staff.	HSE & Operations	30/12/2009	Ongoing
TARGET:				ACHIEVE BY:
GP-01-02	**Fire risk assessment are to be carried out for the site and all high risk areas to have fire detection/alarms and ensure appropriate segregation/compartmentalisation.**			**31/10/2009**
STEP	IMPLEMENTATION PROGRAMME	RESP.	Target Date	STATUS
1	Fire risk assessment to be completed.	HSE	31/12/2008	Risk assessment in place for the site
2	Install fire detectors in all area identified in relevant fire risk assessments if required.	HSE & Operations	31/10/2009	Adequate fire protection is currently inplace. Fire detection system was put in place in June 2008
TARGET:				ACHIEVE BY:
GP-01-03	**Install spill/level alarms in all bunds greater than 50,000 litres capacity.**			**31/12/2011**
STEP	IMPLEMENTATION PROGRAMME	RESP.	Target Date	STATUS
1	Identify relevant bunds greater than 100,000 lt capacity and install level alarms.	HSE & Operations	31/12/2011	
2	Identify relevant bunds greater than 50,000 lt capacity and install level alarms.	HSE & Operations	31/12/2011	
COMMENTS / REVIEW DETAILS				

OBJECTIVE:				ACHIEVE BY:
GP-02-2008	**Improve the management of waste arisings from both commercial and internal activities in line with the revised 5 step waste hierarchy.**			**30/12/2010**
RATIONALE:	Improved waste management is one of the aims stated on the group HSE Policy document. Management of interna waste is highly visible to employees and can therefore help reinforce the strong environmental culture within Enva.			
TARGET:				**ACHIEVE BY:**
GP-02-01	**Establish the baseline of waste production and set measurable improvement targets for landfill diversion/disposal and increased recovery/recycling.**			**30/12/2010**
STEP	**IMPLEMENTATION PROGRAMME**	**RESP.**	**Target Date**	**STATUS**
1	Gather baseline data on types and volumes of wastes arising from commercial and internal sources and the costs associated with these.	HSE	31/09/2009	
2	Identify priority target wastes based on volume arising, cost to Enva, ease of recovery/recycling.	HSE	30/12/2009	
3	Perform preliminary investigation into feasibility of landfill diversion / improved recovery.	HSE	30/06/2010	
4	Establish targets based on estimated approximate improvement achievable.	Operations	31/09/2009	
5	Implement measures to achieve targets	ALL	30/12/2010	
COMMENTS / REVIEW DETAILS				

OBJECTIVE:				ACHIEVE BY:
GP-03-2008	**Ensure we are efficient in our use of energy & resource consumption.**			31/03/2012
RATIONALE:	As an environmental service company we need to demonstrate good practice in this regard to our customers and also to our employees so as to assist in promoting a strong HSE conscience and culture.			
TARGET:				ACHIEVE BY:
GP-T03-1	**Increase awareness towards the efficient use of resources & energy.**			31/12/2010
STEP	IMPLEMENTATION PROGRAMME	RESP.	Target Date	STATUS
1	Develop an internal awareness campaign including erecting posters/reminders across all sites.	HSE	31/12/2008	
2	Establish on each site an energy team to lead the Energy reduction programme.	HSE	31/12/2008	Energy awareness teams have been developed through out Enva however due to the low business activity this target will have to be re-assessed in the 2009 annual report.
3	Develop operations and office based initiatives relating to energy & resource use to promote efficiency culture.	Energy team	31/12/2010	
TARGET:				ACHIEVE BY:
GP-T03-2	**Identification and Assessment of Energy consumption on each Enva site.**			31/03/2012
STEP	IMPLEMENTATION PROGRAMME	RESP.	Target Date	STATUS
1	Establish current energy sources and assess the annual spend on energy.	Energy team	31/03/2012	
2	Develop a register of energy aspects which can be used to develop an energy management programme and assess the critical users of energy	Energy team	31/03/2012	
3	Review of existing tariffs in use through out all sites.	Energy team	31/03/2012	
4	Establish Energy performance indicators applicable for use in Enva to allow for monitoring of annual consumption	Energy team	31/03/2012	
5	Establish an Energy reduction target.	Energy team	31/03/2012	
6	Implement energy reduction measures to achieve 40% of target	Energy team	31/03/2012	
7	Implement energy reduction measures to achieve 80% of target	Energy team	31/03/2012	
8	Implement energy reduction measures to achieve 100% of target	Energy team	31/03/2012	Energy consumption within Enva Dublin has been limited to office usage, this target is therefore been re-assessed and will be reviewed for inclusion in 2009 annual report
TARGET:				ACHIEVE BY:
GP-T03-3	**Identification and Reduction in water consumption**			31/12/2010
STEP	IMPLEMENTATION PROGRAMME	RESP.	Target Date	STATUS
1	Establish the water usage for each site	Energy team	31/12/2008	
2	Establish a register of water uses on site and identify the high demand users of water.	Energy team	21/12/2008	
3	Develop targets for reduction in water usage	Energy team	31/06/2009	Up to December there was insignificant usage of water on site due to process requirements, This target will be reassessed for inclusion in the 2009 annual report. In 2008 there was only 743 Euro paid in Water charges, therefore water usage is limited to basic running of the site i.e. drinking and sanitary purposes.
4	Implement water use reduction measures to achieve 50% of target	Energy team	31/12/2009	
5	Implement water use reduction measures to achieve 100% of target	Energy team	31/12/2010	
COMMENTS / REVIEW DETAILS				

OBJECTIVE:				ACHIEVE BY:
GP-04-2008	**Develop a positive environmental & safety competent culture within Enva**			**31/12/2010**
RATIONALE:	A strong environmental & safety culture benefits staff, the organisation and the environment.			
TARGET:				**ACHIEVE BY:**
GP-04 -T01	**Development of a robust training programme for Enva activities**			**31/12/2009**
STEP	**IMPLEMENTATION PROGRAMME**	**RESP.**	**Target Date**	**STATUS**
	Establish roles and task specific training requirements for Enva personnel	HSE	21/09/2008	Role specific training has been establsihed for operatives
	Develop existing Logix training software to implement all identified training requirements for each department.	HSE	31/09/2008	This was developed in September & October 2008 in conjunction with Enva PL
	Develop roles and training requirements on remaining Enva sites and populate training software.	HSE	31/12/2008	Relevant Enva Dublin staff have been placed on the logix software
	Develop common training courses for use across Enva.	HSE	31/06/2009	
	Consider accrediting training through FAS training programme.	HSE	31/12/2009	
TARGET:				**ACHIEVE BY:**
GP- 04-T02	**Increase the HSE awareness and participation of senior members of staff.**			**31/03/2010**
STEP	**IMPLEMENTATION PROGRAMME**	**RESP.**	**Target Date**	**STATUS**
	Identify HSE training requirements for Super visors and Managers	HSE	31/03/2009	Training requirements for Super visors have been identified these include
	Develop training for senior staff to improve competency	HSE	31/07/2009	
	All senior members of staff to receive general HSE training	HSE	31/03/2010	
	All Directors to conduct two HSE site inspections per year and produce a brief report on the inspection.	Directors	31/03/2010	
TARGET:				**ACHIEVE BY:**
GP- 04-T03	**Assessment of safety culture within Enva**			**31/12/2010**
STEP	**IMPLEMENTATION PROGRAMME**	**RESP.**	**Target Date**	**STATUS**
	Develop appropriate HSE KPIs to monitor the trends in HSE performance across Enva and on individual facilities.	AP, CH	31/12/2008	This Objective has been moved to the 31/12/10
	Investigate methods of good safety culture measurement	AP, CH	31/03/2010	
	Implement preferred safety culture assessment methodology to assess each Enva site.	AP,CH	31/12/2010	
COMMENTS / REVIEW DETAILS				

OBJECTIVE:				ACHIEVE BY:
PL 05-2008	**Improvement in enironmental performance and compliance.**			**31/12/2010**
RATIONALE:	To ensure that activities from the site do not impact on the environment.			
TARGET:				**ACHIEVE BY:**
PL65T01	**Establish monitoring as per site licence requirements**			**31/12/2008**
STEP	**IMPLEMENTATION PROGRAMME**	**RESP.**	**Target Date**	**STATUS**
1	Establish monitoring well on site and monitoring requirements for the site.	HSE	31/12/2008	Ground water monitoring well establsihed on site.
2	Carry out ELRA and Cramp for site to establish financial liabilties.	HSE	30.06.09	This objecitve has not been completed and the target date has been moved to 30.06.09
3	Seek approval for the acceptance of addiational packaged wastes on site.	HSE/Operations	30.06.09	This is currently ongoing with the Agency.
4	Put in place procedures to enable a degree of analysis to be carried out on site.	HSE	30.06.09	This is currently ongoing.
5	Put in place metal triabgle on yard to identify the surface water gulleys, reducing the need to continually paint the gulleys.	Operations	31/03/2010	
COMMENTS / REVIEW DETAILS				

1.0 PURPOSE

The purpose of this procedure is to ensure that environmental, health & safety information is communicated effectively to all external bodies and other parties and to ensure that environmental, health & safety concerns are effectively communicated and appropriately dealt with.

2.0 SCOPE

This procedure relates to any external environmental, health & safety communication with members of the public or with regulatory authorities or any requests for information regarding the environmental, health & safety performance of site operations within any of the Enva facilities in the Republic of Ireland.

It does not cover reporting of incidents/accidents/emergencies or training. These are dealt with under separate procedures. Customer complaints or dealing with customer requests is outside the scope of this procedure also.

3.0 RESPONSIBILITIES

It shall be the responsibility of the HSE Department to;

- Communicate environmental, health and safety information to all members of the public and regulatory authorities as necessary.
- Retain logs and records of external communications.
- Address requests for information from the public.
- Address and report complaints which relate to HSE performance.

4.0 PROCEDURE

4.1 The following documents are used to communicate environmental health and safety information to external parties

- HSE policy
- HSE manual
- EPA Annual Environmental Report
- Waste Collection Permit Reports
- DGSA report
- EPA waste licence
- Waste Collection Permits
- Contractor inductions
- External audits

4.2. Communications with Regulatory Authorities

All communications with regulatory authorities such as the HSA, EPA, etc shall be entered into a communications log. This shall record the dates of the communication, persons involved, topic covered and close out of the communication. Copies of communications sent or received shall also be filed by the HSE Department.

4.3 Communications with other Interested External Parties

4.3.1 All enquiries regarding the environmental, health & safety performance of the site operations are to be directed to the HSE department.

4.3.2 Requests for information from the general public shall be directed to the HSE Department who shall deal with each request or enquiry as appropriate. Evna sites are required under their Waste Management licenses to maintain a file for public inspection which should as a minimum include:

- Monitoring results,
- Complaints records,
- Environmental incidents records,
- EPA communication files including audits and inspections,
- Annual Environmental Reports.

Copies of information shall only be given to the public on the authority of the Chief Operations Officer (C.O.O.) or Managing Director of Enva.

4.3.3 Any complaints relating to HSE matters (e.g. related to public safety, nuisances, environmental emissions etc) received by Enva shall be directed to the HSE department. The HSE Department shall record details of the complaint and initiate corrective action. As appropriate the complaint shall be reported to the relevant regulatory authorities (e.g. EPA/|HSA). The HSE Department shall ensure an investigation takes place and shall respond (generally in writing) within one week of the complaint being received. A Corrective Action Requirement (CAR) shall be raised in relation to any complaint. . The person/ persons who have submitted the complaint shall be kept informed of any progress made in resolving the issue that gave rise to the complaint.

4.3.4 All enquiries regarding environmental, health & safety information shall be dealt with by the HSE department. Written requests shall be filed with the response attached.

4.3.5 If the request for information cannot be fulfilled over the telephone the HSE department may if appropriate invite the enquirer to the site to review any

appropriate documentation or records available on the public file. In such cases the C.O.O. must be notified.

4.3.6 All site tours associated with an enquiry should be scheduled where possible within one working week of receipt of request. In exceptional circumstances it may be arranged at shorter notice.

5.0 RELATED DOCUMENTS

Correspondence Logs
Records of complaints

6.0 REFERENCE

ISO14001:2004 Clause 4.4.3
OHSAS 18001 Clause 4.4.3

OEE METHODOLOGY FOR DETERMINING ENFORCEMENT CATEGORY OF LICENCES

Organisation Name	**Enva Ireland**
Licence Number	**W0196-01**

Version	7.0

Full instructions for the use of this spreadsheet are contained in the accompanying documentation.
The user should attempt to fill in the spreadsheet following the order of worksheets listed below.

SHEET DESCRIPTION	INSTRUCTIONS	
1. Complexity Attributes	Guidance Document	**Reset**
2. Emissions to Air	Guidance Document	
3. Discharges to Water	Guidance Document	
4. Discharges to Sewer	Guidance Document	
5. Waste Management	Guidance Document	
6. Emissions Summary	Guidance Document	
7. Location	Guidance Document	
8. Operator Management	Guidance Document	
9. Enforcement Record	Guidance Document	
10. Enforcement Category Summary	Guidance Document	

Email queries to: rbme@epa.ie

Complexity Attributes

Organisation Name	Enva Ireland
Licence Number	W0196-01

Band	Score
G1	1
G2	2
G3	3
G4	4
G5	5

Number	Schedule 1 of Protection of the Environment Act, 2003 Schedule 3 & 4 of the Waste Management Act, 1996[1]	Description of Activity	Complexity Band	Score
1	D13	Storage prior to submission to any activity referred to in Schedule 3, other than temporary storage, pending collection on the premises where the waste concerned is produced. The quantity selected was --> Non-Hazardous(if >100,000 tpa),	G5	5
2	R13	Storage prior to submission to any activity referred to in Schedule 4, other than temporary storage, pending collection on the premises where the waste concerned is produced. The quantity selected was --> Non-Hazardous(if >100,000 tpa),	G5	5
			TOTAL	10

[1] As amended by the Protection of the Environment Act, 2003.

☐ Licensed activities have not commenced on site.

☐ Licensed activities have ceased on site.

Score	Enforcement Category
≥ 5	High
3 - 4	Medium
≤ 2	Low

COMPLEXITY ENFORCEMENT CATEGORY **High**

Comments

Emissions to Air

☑ This form was not required.

Number	Description	Quantity Emitted	Emissions Score	Total Points
☐ In the last 12 months have there been > 3 non-compliances with emission limit values for emissions to air?				

Discharges to Water

☑ This form was not required.

Number	Description	Quantity Discharged	Emissions Score	Total Points

☐ In the last 12 months have there been > 3 non-compliances with emission limit values for discharges to water?

Discharges to Sewer

☐ **This form was not required.**

Number	Description	Quantity Discharged	Emissions Score	Total Points
1. ENVIRONMENTAL THEMES				
1.1	Total Nitrogen (kg/yr)	Not Applicable	0	0
1.2	Total Phosphorous (kg/yr)	Not Applicable	0	0
2. METALS AND COMPOUNDS				
2.1	Total Cr (kg/yr)	Not Applicable	0	0
2.2	Total Cu (kg/yr)	Not Applicable	0	0
2.3	Total Ni (kg/yr)	Not Applicable	0	0
2.4	Total Zn (kg/yr)	Not Applicable	0	0
3. CHLORINATED ORGANIC SUBSTANCES				
3.1	Dichloromethane (DCM) (kg/yr)	Not Applicable	0	0
4. OTHER COMPOUNDS				
4.1	BOD (kg/yr)	Not Applicable	0	0
4.2	Suspended Solids (kg/yr)	Not Applicable	0	0
5. OTHER				
			TOTAL	**0**

Enforcement Category	Total Score
High ≥ 6	3
Medium 3 - 5	2
Low ≤ 2	1

☐ **In the last 12 months have there been > 3 non-compliances with emission limit values for discharges to sewer?**

DISCHARGES TO SEWER SCORE 1

Comments

There were no discharges to sewer in 2008.

Waste Management

☐ This form was not required.

Number	Description	Quantity of Waste (tonnes/annum)	Yes/No	Points Available	Points Scored
NON-HAZARDOUS WASTE (LAST 12 MONTHS)					
1	Quantity of non-hazardous waste disposed of on-site	>2,000	No	7	0
		200 - 2,000	No	5	
		<200	No	3	
		0	Yes	0	
2	Quantity of non-hazardous waste disposed of off-site	> 2,000	No	4	0
		200 - 2,000	No	3	
		< 200	No	2	
		0	Yes	0	
3	Quantity of non-hazardous waste recovered on-site	> 2,000	No	4	0
		200 - 2,000	No	3	
		< 200	No	2	
		0	Yes	0	
4	Quantity of non-hazardous waste recovered off-site	> 2,000	No	3	0
		200 - 2,000	No	2	
		< 200	No	1	
		0	Yes	0	
HAZARDOUS WASTE (LAST 12 MONTHS)					
5	Quantity of hazardous waste disposed of on-site	> 500	No	9	0
		10 - 500	No	7	
		< 10	No	5	
		0	Yes	0	
6	Quantity of hazardous waste disposed of off-site	> 500	No	7	0
		10 - 500	No	5	
		< 10	No	3	
		0	Yes	0	
7	Quantity of hazardous waste recovered on-site	> 500	No	7	0
		10 - 500	No	5	
		< 10	No	3	
		0	Yes	0	
8	Quantity of hazardous waste recovered off-site	> 500	No	4	3
		10 - 500	Yes	3	
		< 10	No	2	
		0	No	0	
LANDSPREADING					
9	Are organic wastes sent off-site for landspreading?		No	2	0
10	Is the waste stabilised or does it undergo treatment prior to landspreading?		N/A	-1	
				TOTAL	**3**

Enforcement Category	Total Score
High ≥ 9	3
Medium 5 - 8	2
Low ≤ 4	1

☑ **In the last 12 months have there been > 3 non-compliances with regard to waste management?**

WASTE MANAGEMENT SCORE 3

Comments

Emissions Summary

Sheet Reference	Score
Emissions to Air	1
Emissions to Water	1
Emissions to Sewer	1
Waste Management	3

EMISSIONS SCORE	3

Score	Enforcement Category
≥ 9	High
5 - 8	Medium
≤ 4	Low

EMISSIONS ENFORCEMENT CATEGORY	Low

Location

Number	Parameters	Yes/No	Points Available	Points Scored
	NEAREST SENSITIVE RECEPTOR			
1	a) If within 50m of the site boundary	Yes	5	5
	b) If greater than 50m but less than 250m of boundary	No	3	
	c) If greater than 250m but less than 1km of boundary	No	1	
	d) Not Applicable	No	0	
	PROTECTED ECOLOGICAL SITES			
	Distance from site boundary to protected areas designated as pNHA (Irish Wildlife Acts 1976,2000), cSAC (Habitats Directive 1992) and/or SPA (Birds Directive 1979):			
2	a) Within or directly bordering protected site	No	2	1
	b) < 1 km to protected site	Yes	1	
	c) > 1 km from protected site	No	0	
	GROUNDWATER PROTECTION			
	Aquifer Classification			
3	a) Is the site underlain by a Regionally Important Aquifer?	No	2	1
	b) Is the site underlain by a Locally Important Aquifer?	Yes	1	
	c) Is the site underlain by a Poor Aquifer?	No	0	
	Vulnerability			
4	a) Is the vulnerability of the site classified as extreme?	No	3	2
	b) Is the vulnerability of the site classified as high?	Yes	2	
	c) Is the vulnerability of the site classified as Moderate?	No	1	
	d) Is the vulnerability of the site classified as low or is no information available on the vulnerability of the site?	No	0	
	Source Protection Zones			
5	Is the subject site located within a Source Protection Zone or is any well located within 1km of the site's boundary?	No	3	0
	SENSITIVITY OF RECEIVING WATERS			
6.1	Class A River	No	3	2
	Class B River	Yes	2	
	Class C River	No	1	
	Class D River	No	0	
	Not Applicable	No	0	
6.2	Designated Coastal, Estuarine, Shellfish & Bathing Waters	No	2	0
	Potentially Eutrophic Coastal & Estuarine Waters	No	1	
	Not Applicable	Yes	0	
			TOTAL	**11**

Score	Enforcement Category
≥ 13	High
7 - 12	Medium
≤ 6	Low

LOCATION ENFORCEMENT CATEGORY **Mid**

Comments

Operator Management

Number	Description	Yes/No	Points Available	Points Scored
	ENVIRONMENTAL MANAGEMENT			
1.1	Does the facility have an Environmental Management System (EMS) in place?	Yes	-1	-1
1.2	Is the EMS subject to an external audit with a published methodology?	Yes	-3	-3
1.3	Is an Enviornmental Training Plan being implemented at the facility?	Yes	-1	-1
1.4	Is there an Environmental Committee which meets regularly at the facility?	Yes	-1	-1
			SUB TOTAL	**-6**
			MIN	**-6**

Number	Description	Frequency	Yes/No	Points Available	Points Scored
	INCIDENTS				
2.1	In the last year, has there been any release or notifiable incidents under notification condition of licence?	11 or more	No	12	4
		6 - 11	No	8	
		1 - 5	Yes	4	
		0	No	0	
				SUB TOTAL	**4**
				MAX	**12**
				TOTAL	**-2**

Score	Enforcement Category
≥ 3	High
2	Medium
≤ 1	Low

OPERATOR MANAGEMENT ENFORCEMENT CATEGORY **Low**

Comments

Enforcement Record

Number	Description	Frequency	Yes/No	Points Available	Points Scored
1	Number of complaints received by the agency within the last year?	None	No	0	
		1-5	No	1	
		6-10	No	2	
		11 or more	No	3	
2	Number of non-compliances noted by the agency within the last year?	None	No	0	3
		1-5	Yes	3	
		6-10	No	5	
		11 or more	No	9	
3	Have any Section Notices been issued within the last year?	None	No	0	
		≥ 1	No	5	
4	Are there soil or groundwater contamination issues on the site?		No	3	0
				TOTAL	3

☐ **Licensee has been successfully convicted by the Agency in the last 12 months.**

Score	Enforcement Category
≥ 12	High
6 - 11	Medium
≤ 5	Low

ENFORCEMENT RECORD CATEGORY Low

Comments

Enforcement Category Summary

Organisation Name	Enva Ireland
Case Number	W0196-01

Fixed Attributes	Enforcement Category
Complexity	High
Location	Mid

Enforcement Category due to Fixed Attributes	B3

Sheet Reference	Enforcement Category
Complexity	High
Emissions	Low
Location	Mid
Operator Management	Low
Enforcement Record	Low

OVERALL ENFORCEMENT CATEGORY	B3
	A1

Environmental Protection Agency

AER Returns Worksheet

Version 1.1.03

REFERENCE YEAR	2008

1. FACILITY IDENTIFICATION

Parent Company Name	MacAnulty Specialist Underground Services Ltd
Facility Name	MacAnulty Clear Drains
PRTR Identification Number	W0196
Licence Number	W0196-01

Waste or IPPC Classes of Activity

No.	class_name
3.7	Physico-chemical treatment not referred to elsewhere in this Schedule (including evaporation, drying and calcination) which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1. to 10. of t...
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
4.6	Recovery of components used for pollution abatement.
4.8	Oil re-refining or other re-uses of oil.
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.
3.4	Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.

Address 1	John F. Kenndy Industrial Estate
Address 2	John F. Kennedy Road
Address 3	Naas Road
Address 4	Dublin 12
Country	Ireland
Coordinates of Location	0.000
River Basin District	IEEA
NACE Code	382
Main Economic Activity	Waste treatment and disposal
AER Returns Contact Name	Anne Phelan
AER Returns Contact Email Address	aphelan@enva.ie
AER Returns Contact Position	HSE Manager
AER Returns Contact Telephone Number	086 3821830
AER Returns Contact Mobile Phone Number	0863821830
AER Returns Contact Fax Number	014568197
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	3
User Feedback/Comments	
Web Address	www.enva.ie

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?	
Have you been granted an exemption ?	
If applicable which activity class applies (as pe Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4.1 RELEASES TO AIR

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR								
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO AIR								
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence

RELEASES TO AIR								
POLLUTANT		METHOD				QUANTITY		
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: MacAnulty Clear Drains

Please enter summary data on the quantities of methane flared and / or utilised	**T (Total) kg/Year**	**M/C/E**	**Method Used**		**Facility Total Capacity m3 per hour**	
			Method Code	**Designation or Description**		
Total estimated methane generation (as per site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	

4.2 RELEASES TO WATERS

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as th

RELEASES TO WATERS								
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS								
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO WATERS								
POLLUTANT					QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.3 RELEASES TO WASTEWATER OR SEWER

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER								
POLLUTANT		METHOD			QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER								
POLLUTANT		METHOD			QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.4 RELEASES TO LAND

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND							
POLLUTANT		METHOD			QUANTITY		
			Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO LAND							
POLLUTANT		METHOD			QUANTITY		
			Method Used				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

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	17 02 04	Yes	29.4	Wood contaminated with creosote	R1	M	Weighed	Abroad	Reiling GmbH	Weetfelder Strasse 36, 59199 Bonen, Germany	Reiling GmbH	E97897324
Within the Country	**13 05 07**	**Yes**	50.98	Oily water from oil/water separators	R1	M	Weighed	Onsite in Ireland	Enva Ireland	Clonminam Industrial Estate, Portlaoise, Co Laois	Enva Ireland	W0184-01

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