BRAUN



Annual Environmental Report

For

Braun Oral-B Ireland Limited Dublin Road, Carlow

January 2008 – December 2008

Licence Reg. No. 287

Cont	ents		2
List	of appe	endices	3
List	of table	es	4
1.0	INTR	ODUCTION	5
	1.1 E	nvironmental Policy	6
2.0	SITE		
	2.1 C	7	
	2.2 C	Changes in the year 2004	8
	2.3 P	roposed changes for 2005	9
3.0	DATA	4	
	3.1	Emissions to Sewer	9
	3.2	Emissions to Surface Water	10
	3.3	Emissions to Atmosphere	10
	3.4	Waste Management Report	12
	3.5	Noise	16
	3.6	Energy, Water and Resource Usage	18
	3.7	Environmental Complaints	20
	3.8	Spending on Environmental Protection	20
	3.9	Bund Integrity Report	22
	3.10	Groundwater monitoring	22

ENVIRONMENTAL MANAGEMENT PROGRAMME

4.0

23

APPENDICES

LIST OF APPENDICES

Appendix No. 1

Surface water daily inspection checklists

Appendix No. 2

Quarterly surface water sample analysis reports

Appendix No. 3

Environmental noise survey

Appendix No. 4

Annual test reports for AGW1 (Groundwater)

Appendix No. 5

Bund integrity test report

LIST OF TABLES

Table 3.2 (a) Surface water discharge monitoring results for SW1	Page	10
Table 3.2 (b) Surface water discharge monitoring results for SW2	Page	10
Table 3.3 (a) Combustion Gas emissions from the Boiler (A1-2)	Page	11
Table 3.4 (a) Annual waste arising 2008 – Hazardous waste	Page	13
Table 3.4 (b) Annual waste arising 2008 – Non-hazardous waste	Page	14
Table 3.4 (c) National waste database report sheet	Page	15
Table 3.6 (a) Energy usage 1998-2008	Page	18
Table 3.6 (b) Water usage 1998-2008	Page	19
Table 3.6 (c) Oil usage 1998-2008	Page	19
Table 3.6 (d) Gas usage 1998-2008	Page	20
Table 3.8 (a) Summary of revenues from metal recovery 2008	Page	21
Table 3.8 (b) Summary of spending on Environmental Protection 2008	Page	21
Chart 3.6 (a) Electrical usage 1998 - 2008	Page	18
Chart 3.6 (b) Water usage 1998 - 2008	Page	19
Chart 3.6 (d) Gas usage 1998 - 2008	Page	20

1.0 INTRODUCTION

This Annual Environmental Report (AER) has been drafted in accordance with the EPA Guidance Note for AER's and is submitted in order to comply with the requirements of Schedule 5(i), "Recording and Reporting to the Agency", of the Braun Ireland Ltd. IPC Licence, Reg. No. 287.

The following items are included in this report:

- Summary of emissions to atmosphere
- Summary of emissions to water
- Waste management report
- Electrical, gas & water consumption data
- Complaints summary
- Environmental management programme report and proposal
- Noise survey results summary
- Bund integrity report
- Copies of all external consultant and analytical reports

The company has achieved certification to ISO 14001 Environmental Management Systems Standard. Braun Oral-B Ireland Ltd., hereafter referred to as Braun Oral-B, has a written environmental policy. This policy is outlined in this section of the AER.

1.1 Environmental Policy

Braun Oral-B Ireland Limited, Plant Carlow

Environmental Policy

The core business of Braun-Oral B Ireland Limited, is the manufacture of gas powered hair-care products, gas cartridges, ethanol cartridges, Temperature Probe CoversToothbrush Replacement heads and dental floss. Braun-Oral B Ireland management and staff recognise the importance of environmental protection as an essential requirement of its operations. Among the stated values of Braun-Oral B Ireland Limited are the following:

- Our products will be safe to make and to use.
- Braun Oral-B will conserve natural resources.
- Braun Oral-B will continue to invest in a better environment for all.
- Braun Oral-B will undertake to conduct its business in a manner, which protects the environment of the customers, employees and community in which it operates.

Braun Oral-B Ireland is committed to the following:

- Determine the significant aspects of it's operations.
- Continual assessment and monitoring of our activities to prevent any release of a polluting substance to the environment.
- Comply with all Irish and EU environmental laws/regulations, local Town Council requirements and to Gillette's environmental policy.
- Maintaining continuous improvement programs by setting and reviewing environmental objectives and targets.
- Conservation of energy.
- Maintain an Environmental Management System in accordance with ISO14001.
- Review the Environmental Management System by way of internal audit and Management Review.
- Provide the necessary training to Braun employees to ensure that they have the knowledge, resources and authority to implement this policy.
- Initiating and encouraging communication to foster responsible environmental management.
- Ensuring the company environmental policy is available to the public.

Corporate Environmental Policy:

PROCTER & GAMBLE ENVIRONMENTAL QUALITY POLICY

Procter & Gamble is committed to providing products of superior quality and value that best fill the needs of the world's consumers. As part of this, Procter & Gamble continually strives to improve the environmental quality of its products, packages and operations around the world.

To carry out this commitment, it is Procter & Gamble's policy to:

• Ensure our products, packaging and operations are safe for our employees, consumers and the environment.

- Reduce or prevent the environmental impact of our products and packaging in their design, manufacture, distribution, use and disposal whenever possible. We take a leading role in developing innovative, practical solutions to environmental issues related to our products, packaging and processes. We support the sustainable use of resources and actively encourage reuse, recycling and composting. We share experiences and expertise and offer assistance to others who may contribute to progress in achieving environmental goals.
- Meet or exceed the requirements of all environmental laws and regulations. We use environmentally sound practices, even in the absence of governmental standards. We cooperate with governments in analyzing environmental issues and developing cost-effective, scientifically-based solutions and standards.
- Continually assess our environmental technology and programs and monitor progress toward environmental
 goals. We develop and use state-of-the-art science and product life cycle assessment, from raw materials through
 disposal, to assess environmental quality.
- Provide our consumers, customers, employees, communities, public interest groups and others with relevant and appropriate factual information about the environmental quality of P&G products, packaging and operations.

 We seek to establish and nurture open, honest and timely communications and strive to be responsive to concerns.
- Ensure every employee understands and is responsible and accountable for incorporating environmental considerations in daily business activities. We encourage, recognize and reward individual and team leadership efforts to improve environmental quality. We also encourage employees to reflect their commitment to environmental quality outside of work.
- Have operating policies, programs and resources in place to implement our environmental quality policy.

2.0 SITE DESCRIPTION

2.1 Company Profile

Max Braun founded the Braun Company in 1921 in Frankfurt, Germany. Originally engaged in mechanical engineering, Braun soon began the production of plastic components for the fledgling radio industry. This move was to prove the basis for Braun's growth into the worldwide company it is today. Of pivotal importance to this growth, was the teamwork concept, which began in 1954 with leading advocates of "functional" design from the Bauhaus movement. Braun's growth into a major multinational force was backed by the power of the Gillette organisation in 1967. Braun presently employs some 8,000 people worldwide.

Braun production is distributed among nine plants located in Germany, Ireland, Spain, Mexico, France, India and China. Braun products are distributed worldwide through an integrated sales marketing and distribution team, through our parent company Procter and Gamble.

Braun commenced manufacturing in Ireland 33 years ago and now employs approximately 300 people. The Braun Oral-B facility in Carlow produces personal care products. These products include:

- Hair Curling & Styling products. Gas powered.
- Replacement "foils" for Braun electric shavers.

- Replacement caps for ear thermometers (Thermoscan).
- Replacement cleaning cartridges for the shaver cleaning centre. These are filled with an Ethanol based cleaning, lubricating and disinfecting preparation.
- Replacement gas cartridges for portable hair curling tongs.
- Toothbrush Replacement heads.

Production volumes can vary according to market demands. The output from the facility for January to December 2007 is estimated as follows:

- Approximately 0.46 million curlers/stylers
- Approximately 0.88 million shaving foils
- Approximately 6.19 million gas cartridges
- Approximately 729 million lens filter caps *
- Approximately 0.37 million Flex Synchro's
- Approximately 14.4 million ethanol cartridges
- Approximately 47.6 million Powered toothbrush heads
- Altogether over 106.35 million assembled units or an average of 452,553 assembled units per day.

2.2 Changes in the year 2008

Procter and Gamble

Again in 2008 Gilletts integration into the P&G company was the main focus from a corporate point of view. This involves an array of different systems from IT to safety, environments etc. From an environmental perspective the corporate requirements are extremely tight and well defined so we would expect an improved performance.

^{*} Note: lens filter caps are divided by 20 being the number od caps per box

2.3 Proposed changes for 2009 :

During 2008 it is anticipated that there will be a further downturn in production output so the levels of waste generated on the site should reduce likewise. It is planned that the between mid 2009 and the end of 2010 all operations from this plant will be transferred to another building close to the Oral-B plant in Newbridge There is a major drive on the corporate level to improve the overall sustainability profile of the company, to this end it is planned to target our opportunities in the renewable energy area and improve our overall energy efficiency targets.

3.0 DATA

This section contains a summary of discharges to waters, air emissions, waste management, noise, energy & water usage and environmental incidents/complaints.

3.1 Emissions-to-Sewer

Due to the ending of the shaver foil plating process in 2003 the actual discharge point SE1 no longer exists. This information was communicated to the EPA on the March 4th 2005. Therefore actual discharge data is no longer available.

3.2 Emissions to Surface Waters

Braun Oral-B Ireland Ltd. discharges non-process water at discharge points SW1 and SW2 in accordance with Condition 9 and schedule 4(I) of the IPC Licence (Reg. No. 287).

Non-process water consists of:

- Storm water run-off from roofs.
- Surface water run-off from car parks and paved areas.

Surface water discharges at SW1 and SW2 are measured on a quarterly basis for COD, Chromium and Nickel. A visual inspection takes place daily. The daily inspection sheets are included in appendix 2. A summary of the surface water discharge monitoring results is presented in table 3.2 (a) and table 3.2 (b). Due to a lack of sufficient surface water during the summer month no results are available for this period.

Parameter	Sample Date (SW1 Backyard)							
Parameter	12/03/08	06/06/08	30/07/08	20/3/09				
PH	7.7	7.3	7.6	7.8				
COD (mg/L)	9	14	3	3				
Cr (mg/L)	<2	<0.01	<0.01	<0.01				
Ni (mg/L)	2	<0.01	<0.01	<0.01				

Table 3.2 (a): Surface Water Discharge Monitoring Results for SW1

Davamatav	Sample Date (SW2 on Dublin Road)							
Parameter	12/03/08	06/06/08	30/07/08	20/03/09				
PH	*	7.6	7.4	7.7				
COD (mg/L)	*	34	16	19				
Cr (mg/L)	*	<0.01	<0.01	<0.01				
Ni (mg/L)	*	<0.01	<0.01	<0.01				

Table 3.2 (b): Surface Water Discharge Monitoring Results for SW2

3.3 Emissions to Atmosphere

Sources, Nature and Monitoring of Air Emissions

The main air emission from Braun is the natural gas fired boiler and associated combustion gases. Monitoring of combustion gases is carried out in accordance with Schedule 1 (ii) on

^{*} No water flow available for sample

an annual basis. A summary of the monitoring results for the boiler emission point (A1-2) is included in Table 3.3 (a).

Combustion gas emissions from the boiler A1-2 were measured in accordance with Schedule 1 (ii) of the Braun IPC Licence (Reg. No. 287). There are no emission limit values specified in the Braun IPC Licence.

Test results for main gas boiler were taken over a 15 minute test period.

Time:	11.06	11.08	11.10	11:12	Average
CO ₂ %	1.6%	2.0%	1.7%	1.5%	1.7%
O ₂ %	18.1%	17.5%	17.9%	18.3%	17.95
CO ppm	97	131	132	134	123.50
So ₂ ppm	3	4	4	4	3.75
No ₂ ppm	0	0	0	1	0.25
No ppm	8	11	10	9	9.50
qa	20.7%	27.5%	32.3%	21.0%	25.37
Efficiency	79.30	72.50	67.7	79.0	74.62

Table 3.3 (a) Combustion gas emissions from the boiler (A1-2).

Summary of test readings

Sample	Test Parameter	Test Result	TA Luft Limits	Units
Natural Gas	Combustion efficiency	67.7-79.30	-	%
Boiler	Average NO _x	0.25	200	ppm
A1-2	Average SO _x	3.75	35	ppm

3.4 Waste Management Report.

Braun Oral-B Ireland Ltd. maintains full details and records of all waste arising on site in accordance with Condition 7 of the IPC Licence. This section of the Annual Environmental Report (AER) provides comprehensive information regarding these wastes. Hazardous waste disposal is carried out in accordance with Schedule 3(i) of the IPC Licence

Hazardous Waste

The main types of hazardous waste generated on-site include waste ethanol, contaminated ink wipes, waste oil, fluorescent tubes, ion exchange resin and isobutane cartridges.

Braun retains copies of all waste disposal licences/permits issued to its waste disposal contractors. C1 forms are used to track hazardous waste taken off-site for recycling or disposal. TFS movement documents are used to track shipments going directly to waste disposal companies abroad.

A summary of the hazardous waste quantities generated at the Braun plant is included in Table 3.4 (a). All hazardous wastes generated are stored in designated hazardous waste storage areas.

Most hazardous waste is incinerated on mainland Europe. However fluorescent tubes, waste oil and waste batteries are sent for recycling/recovery via hazardous waste disposal contractors based in Ireland.

Braun use the services of DEE Environmental Services Ltd, Irish Lamps and Veolia Environmental Services to ensure that all waste is handled correctly and shipped safely to its final destination.

Table 3.4 (a): Annual Waste Arisings 2008 - Hazardous Waste

Waste Material	EWC	Source	(000)	Disposal or recovery?				
			Kgs	Method	Location	Contractor		
Ethanol	160213	Production	29.5	D10	Off-site	Dee		
Isobutane	160214	Production	5.46	D10	abroad Off-site abroad	Dee		
Waste machining oil	i 130208 li		7.5	D9	Off-site ROI	Enva		
Contaminated wipes/resin	150202	Assembly	1.15	D10	Off-site abroad	Dee		
Empty drums	150110	Plant Wide	0.5	D9	Off-site ROI	Rialta		
Electronic Equipment	200135	Plant wide	0.4	R5	Off-site abroad	Irish Lamps		
Fluorescent tubes	200121	All Areas/ Maintenance	0.2	R4	Off-site ROI	Irish Lamps		
			44.71					

Table 3.4 (b) Annual Waste Arisings 2008 Non-hazardous Waste

Waste Material	EWC	Source	(000)	Disposal or recovery?			
			Kgs	Method	Location	Contractor	
Cardboard (for recycling)	200101	Production/ Warehouse	130.71	R5	Off-site ROI	Veolia	
Aluminium Cans	200140	Canteen	0.1	R4	Off-site ROI	Veolia	
General Waste Skip	200301	Plant wide	140.20	D1	Off-site ROI	Veolia	
Plastics (hard & film)	200139 Moulding & assembly		80.16	R5	Off-site ROI	Veolia	
Wooden pallets	20012501	Warehouse	11.10	R0	Off-site ROI	Veolia	
Toothbrush Heads	200139	Production	15.10	R5	Off-site ROI	Veolia	
Compost	200201	Restaurant	22.00	R5	Off-site ROI	Veolia	
General waste metals 120103 Assembly		Assembly	3.10	R4	Off-site abroad	Cork Metal	
			402.47				

Non-Hazardous Waste

Braun Oral-B Ireland has put in place a comprehensive waste management system for monitoring and recording, the disposal and recovery of non-hazardous wastes. The main non-hazardous wastes generated at Braun include general refuse, restaurant waste, cardboard, scrap plastic and scrap metal.

These are managed in the following manner:

- General waste skips as well as restaurant waste skips are disposed of to Carlow landfill, which is managed by Carlow County Council.
- Plastic waste including PE sheeting, sprues and reject moulded parts are handled as follows.
 - All waste plastic, both hard & soft was recycled with Thorndale Recycling, acting as agents for Veolia Environmental Services.
 - To reduce the amount of plastic generated, granulators have been installed for grinding the sprues. The granulated sprue is then automatically fed into the next cycle as regrind.
 - Aluminium cans are sent to a local national school for recycling.
 - Mixed steel waste from the metal waste skip is sent for recycling via Violia Ireland Ltd.

Summary of waste figures

A summary of the total quantities of waste produced and recovered during 2006 is included in Table 3.4 (c) below. This information is included for the purposes of the National Waste Database and in accordance with the EPA Draft Guidance Note for an Annual Environmental Report (AER).

Table 3.4 (c) National Waste Database Report Sheet

Industrial Sector NACE1 Code	DG

Reporting period	1/1/08 to 31/12/08
Number of employees (for reporting period)	275
Total tonnage of Waste Produced	
Hazardous	44.71
Non-Hazardous	402.47
Total tonnage of Waste Recovered	
Hazardous	42.46
Non-Hazardous	247.17

3.5 Noise

The annual noise survey report was completed on Feb. 22nd/23rd 2007, in accordance with Condition 8.2 of its IPC Licence (report number 03047A revision 0).

Summary of noise survey report.

Site Location

The Braun Ireland site is located in the townland at Rathnapish, in between the N9 & N80 roads, on the eastern outskirts of Carlow town. The plant covers an area of 22,000 m² approximately. As the site is located adjacent to the main Carlow to Dublin Road, traffic is the main contributor to background noise levels in the vicinity of the plant.

Noise Sources

There are a limited number of environmental noise sources on-site. The main source of noise on-site are the chiller & compressor units situated at the rear of the plant. Traffic entering and leaving the plant also contributes to the noise levels. However, the main source of noise in the area is due to traffic on the adjacent main road. During this year we did have one noise complaint from a neighbour, this was traced to a faulty pump coupling and was immediately stopped and repaired.

Assessment of Noise Levels

(a) Noise Sensitive Locations

Noise measurements were taken at the nearest noise sensitive location (i.e. a dwelling located at the site boundary NSL1 which, is situated within 50 meters of the plant on the Dublin Road).

Noise levels measured during the daytime near the dwelling at NSL1 were $47.4dBA\ L_{95}$ (52.2dBA L_{Aeq}). Heavy vehicular traffic was present on the main road at the time. Night-time noise levels were $42.2dBA\ L_{95}$ ($48.9dBA\ L_{Aeq}$). Traffic was audible from N80.

A frequency analysis was also carried out at NSL1 and the results indicate that there is no tonal or impulsive noise emanating from the plant. Hence, Braun is in compliance with Condition 8.3 of the IPC Licence.

(b) Boundary Noise Levels

A number of boundary points were monitored for noise levels. Results indicated that daytime noise levels ranged from 43.8 to 61.8dBA L_{95} (50 to 69dBA L_{Aeq}). The higher noise levels were measured at the boundary points nearest the Dublin Road roundabout.

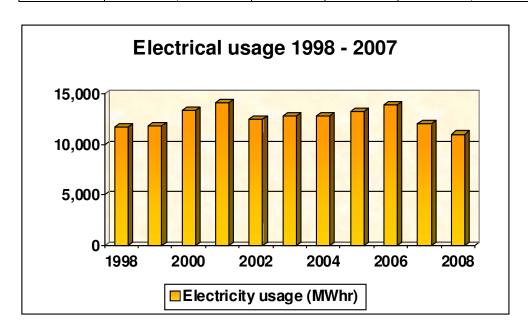
Results indicated that night-time noise levels ranged from 43 to 54.2dBA L_{90} (41.3 to 65.1dBA L_{Aeq}). The noise survey report concluded that noise level exceedances in the vicinity of the plant are due to traffic noise on the adjacent Carlow to Dublin & Carlow to Waterford roads. Noise sources on-site are not causing elevated noise levels at noise sensitive or boundary locations and there are no tonal impulses emanating from the plant.

3.6 Energy, Water & Resource Usage.

This section of the AER provides a summary of energy and water usage in accordance with the requirements of Schedule 5(i) of the IPC Licence which requires a "resource consumption summary" to be included in the AER.

Energy usage

	2002	2003	2004	2005	2006	2007	2008
Electricity usage (kWh)	12,488,404	12,802,730	12,944028	13,221,723	13,915,027	11989253	11000000
Units produced	45,695,952	*73560000	52560000	58750000	138900000	129050000	106350000
Usage / Unit (kW/units)	0.273	0.174	0.246	0.2250	0.100	0.09	0.10
Avg. cost €/unit	0.0173	0.011	0.01736	0.0184	0.0088	0.01135	0.01234



* FOR 2007 INCLUDES PRODUCTION OF LENS FILTER(divided by 20) f Table 3.6 (a)

Chart 3.6 (a)

Water Usage

	2000	2001	2002	2003	2004	2005	2006	2007	2008
*Usage in m ³	35,830	30,409	22,928	21,526	16,450	20.000	18500	2828	10000

Table 3.6 (b)

^{*} Includes well water and town water supply.

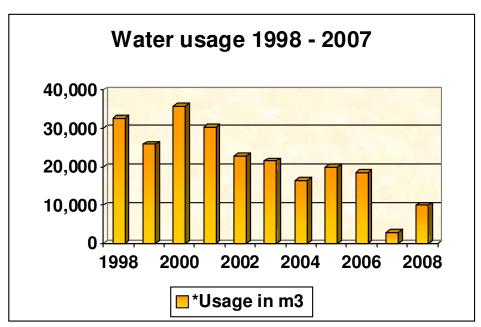


Chart 3.6 (b)

Oil Usage

	2001	2002	2003	2004	2005	2006	2007	2008
Oil Usage (litres)	5,000	Nil	5,000	5,000	3000	2000	5000	3000

Table 3.6 (c) Oil Usage 2001 - 2008

Gas Usage

	2001	2002	2003	2004	2005	2006	2007	2008
Usage in m ³	238,575	243,871	221,467	233,310	225,806	207,621	178777	166621

Table 3.6 (d) Gas usage 2001 - 2008

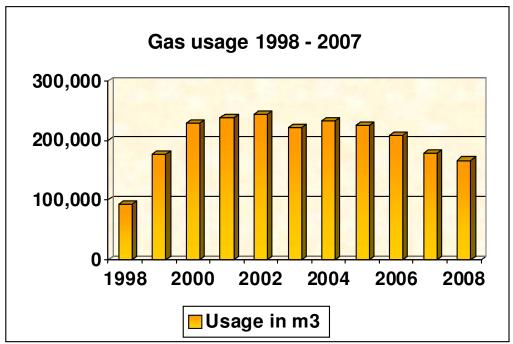


Chart 3.6 (c)

3.7 Environmental Complaints:

Braun did not receive any environmental complaints during 2008.

3.8 Spending on Environmental Protection:

Braun Ireland invested in the following areas of environmental protection and environmental management. A breakdown of spending on environmental protection is included in table 3.8 (b). These costs include regulatory fees, monitoring, training and waste costs plus special projects. Costs are also included for implementation of the environmental management system as well as compliance with the IPC Licence.

Metal and plastic recycling at Braun generated revenue for the company. This is outlined in Table 3.8 (a)

Description	Revenue (€)			
Plastic recovery	7500			
Metal Recovery	1500			

Table 3.8 (a) Summary of revenues from metal and plastic recovery for 2006.

Spending on Environmental Protection

Description	Costs (€)		
NSAI Costs	3,120		
IPC Licence Fee (EPA)	7,600		
Spill Kits	2500		
Analysis /Tests/Reports	29000		
Calibration	2000		
Hazardous Waste Disposal	52000		
Consultancy	5000		
<u>Direct Labour:</u> Recycling Cardboard/plastics/segregating hazardous Waste	16000		
Internal Auditing	7,000		
Projects:	,		
Reduction in compressed air leaks	4500		
Other energy saving activities	35000		
Total Costs	€163,720		

Table 3.8 (b): Summary of Spending on Environmental Protection 2006

3.9 Bund integrity testing

In February 2007 all bunds in the plant were tested

Summary of bund testing:

- Flex Ethanol bund : No leaking occurred during the testing of the structure ensuring this bund fully complies with BS 8007 : 1987
- 2. Ethanol Tanks 1 & 2 bund: No leaking occurred during the testing of the structure ensuring this bund fully complies with BS 8007 : 1987
- 3. Ethanol Tanks 3 bund: No leaking occurred during the testing of the structure ensuring this bund fully complies with BS 8007 : 1987
- 4. Diesel tank Bund: No leaking occurred during the testing of the structure ensuring this bund fully complies with BS 8007 : 1987
- 5. Pump House diesel tank bund (Sprinkler 1): No leaking occurred during the testing of the structure ensuring this bund fully complies with BS 8007 : 1987
- 6. Hazardous chemical storage area bund: No leaking occurred during the testing of the structure ensuring this bund fully complies with BS 8007 : 1987
- 7. Gas storage area bund: No leaking occurred during the testing of the structure ensuring this bund fully complies with BS 8007 : 1987
- 8. Oil storage area bund: No leaking occurred during the testing of the structure ensuring this bund fully complies with BS 8007 : 1987
- 9. Hazardous Waste Storage area bund: No leaking occurred during the testing of the structure ensuring this bund fully complies with BS 8007 : 1987
- Pump House diesel tank bund (Sprinkler 2): No leaking occurred during the testing of the structure ensuring this bund fully complies with BS 8007: 1987
- 11.. A copy of the Bund Test Reports are included in appendix 5.

3.10 Groundwater Monitoring

Groundwater monitoring is carried out biannually at monitoring point AGW1 in accordance with Schedule 4(ii) of the IPC Licence, (Reg. No. 287). Monitoring was performed in July & October 2003 by Independent Analytical Services Limited and Environmental Laboratory Services.

A number of parameters were tested, including: pH, COD, detergents, chlorides, chromium, nickel, cyanide, silver, barium, copper, platinum, palladium, sulphide and organic solvents

A copy of all the Groundwater Monitoring Reports are included in appendix 6. The reports didn't find any abnormal readings.

4.0 Environmental Management Programme

Braun Ireland Ltd. achieved certification to the ISO 14001 Environmental Management System (EMS) standard in December 1998. Braun has introduced ISO14001 to comply with the requirements of Condition 2.1 of the IPC Licence (Reg. 287).

The EMS consists of the following elements:

Environmental Manual

Register of Environmental Aspects

Environmental Operational Control Procedures

Register of Environmental Legislation

Environmental Management Programme (EMP)

Pollution Emissions Register (PER)

Program for Public Information

The schedule of Environmental Objectives and Targets has been developed by Braun and agreed with the EPA in accordance with Condition 2.2 of the IPC Licence. These have been included in the Environmental Management Programme, which designates responsibility for the various objectives and targets. The EMP also outlines the means by which the Objectives and Targets may be achieved and the timescale involved in accordance with Condition 2.3 of the IPC Licence. The EMP is revised and updated as required.

Programmes and procedures are in place to ensure effective communication on environmental performance with the public and the EPA, in accordance with Condition 2.9 of the IPC Licence.

Environmental Management Programme for 2006/2007

Energy conservation.

Responsible person, Eamonn Bates, Facilities, Health, Safety & Environment Manager.

The overall objective for energy conservation is to reduce the kWhr/unit produced ratio by a further 1.0% in 2009 (over 2008).

In order to achieve this target the following projects will be undertaken:

Variable speed drive on EB17 dust collector

It is planned to install a variable speed drive on the EB17 dust collector. This piece of equipment uses a 132kw motor, by installing a variable speed drive which matches the speed of the motor to the actual required speed so that the equipment runs efficiently it is estimated that a saving of approx 285700 KW's can be made on our annual electricity usage.

Reduction of landfill waste

During the coming year it is planned to focus our attention on reducing our landfill waste. This will be done through the detailed analysis of the present landfill skips so as to identify potential recycling opportunities. We will also be putting in place a waste metal recycling program throughout the plant.

Integrated work system (IWS)

During the coming year the plant will be operating in Phase 1 of the integrated work system (IWS) operating principles. This phase of the IWS journey is where we anticipate we will be seeing a greater focus on zero losses. The overall basis of the system is that we will operate in an environment where our target will be Zero losses, this will include zero losses from a safety and environmental point of view as well all other aspects of the business. We would expect that this will drive improved results to our environmental and safety results.

Summary:

If we study the table below 3.6 (a), it can be seen that the reduction in Energy per unit is on a continuous improvement curve and we anticipate in coming years that this curve will remain positive.

Summary of energy management programme

	2002	2003	2004	2005	2006	2007	2008
Electricity usage (kWh)	12,488,404	12,802,730	12,944028	13,221,723	13,915,027	11989253	11000000
Units produced	45,695,952	*73560000	52560000	58750000	138900000	129050000	106350000
Usage / Unit (kW/units)	0.273	0.174	0.246	0.2250	0.100	0.09	0.10
Avg. cost €/unit	0.0173	0.011	0.01736	0.0184	0.0088	0.01135	0.01135

Copy of table 3.6 (a) on page 22

Waste recycling/minimisation

- 1. Reduction in the usage of wooded pallets.
 - All suppliers of materials to this plant are issued with a detailed specification of the type and quality of pallet which has to be supplied with their incoming material. Whit the supply of these good pallets we can reuse these for our outgoing products, thus reducing our timber waste. This program is planned to be given even greater focus in 2008.
- 2. We will be conducting a kaizen event of our plant waste in 2008, this will concentrate on identifying the sources of waste and asking critically if it can be reduced or eliminated.

Projects planned for 2009:

- 1. Variable speed drive for EB17 dust collector
- 2. Implement an "Energy efficiency program" program through out the plant.
- 3. Reduction in landfill waste by 10%