

ANNUAL ENVIRONMENTAL REPORT 2009



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1.0 OPENING COMMENTS

The site's Integrated Pollution Prevention and Control licence requires that an Annual Environmental Report is submitted to the Environmental Agency each year.

This report for 2009 outlines the environmental performance of Wyeth Nutritionals Ireland and also sets out a programme of work to be completed during 2010.

It is submitted along with additional data required under S.I. No. 123 of 2007, *European Communities (European Pollutant Release and Transfer Register) Regulations 2007*, requiring the reporting of data through a web-facilitated reporting system.

Copies of the web-facilitated reports for 2009 are included Appendix 1.

Brian Shiel	
EHS Manager	



2.0 REPORT

2.1 INTRODUCTION

This is the fourth Annual Environmental Report (AER) submitted by Wyeth Nutritionals Ireland in compliance with Condition 2.9.2 of its Integrated Pollution and Prevention Control (IPPC) Licence Register No. P0395-02. Previous reports were submitted in compliance with conditions of its Integrated Pollution Control (IPC) licences Register No's. 678 and 395.

The report is compiled with regard to the *Guidance Note for Annual Environmental Report* issued by the Environmental Protection Agency (EPA) and summarises the company's environmental performance from January 1, 2009 to December 31, 2009.

Since the report frequently refers to conditions and schedules contained in the IPPC licence, it is recommended that it be read in conjunction with the licence and amendments, which can be obtained from the Environmental Protection Agency web site at: http://www.epa.ie/.

2.1.1 Licence Register Number

P0395-02 (The initial IPC licence for the site {Reg No. 395} was issued on October 27th, 2000. IPC licence Reg. No. 678 was issued on January 23rd, 2004 and two amendments have been made with amendment A added during 2006 and Technical Amendment B added during 2007.

2.1.2 Classes of Activity

Principle Class of Activity

- The manufacture of dairy products where processing capacity exceeds 50 million gallons of milk equivalent per year.

Other Classes of Activity

- The burning of any fuel in a boiler or furnace with a nominal heat output exceeding 50 MW.

2.1.3 Site Name

AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland

2.1.4 Address

Askeaton Co. Limerick Ireland

2.1.5 Activities at the Site

Wyeth Nutritionals Ireland commenced operations with a staff of just 70 employees in 1974 and since then over ten major expansion projects have been implemented across the site resulting in a 400,000 sq. ft. production facility on a 36-acre site today.

It's a state of the art manufacturing facility and the constant upgrading over the years has kept the manufacturing process as one of the most sophisticated operations of its kind. The plant is highly automated from Warehousing through Processing, Drying and Packaging and is operated by a team of around 600 highly skilled and trained people.

Wyeth produces a full line of nutritional products, including infant formulas, follow-on formulas, growing-up milks, and prenatal and adult supplements. The nutritional products are manufactured to pharmaceutical standards, and research is carried out to develop new and



improved products to meet the needs of both the healthy and nutritionally compromised infants the world over. The site at Askeaton currently has a capacity to manufacture approximately 52 million kilograms of powdered formula on an annual basis.

Products are produced in powder and liquid form and come in different pack presentations:

- Powdered formula in cans
- Powdered formula in sachets
- Liquid nutritional products in bottles
- Liquid nutritional products in Tetra bricks.

The liquid nutritional products or ready-to-feed (RTF) formulas are mainly supplied to Maternity Hospitals all over the world and are used either to supplement breast-feeding or, as the main source of nutrition.

Manufacturing at the site is divided into (1) Powder Production and Packaging, and (2) Liquid Production and Packaging.

(1) Powder Production

Powder manufacturing involves the eduction of batches of dry powders into compounding tanks where they are reconstituted with fat blend, water and added essential minerals. The compounded formula is filtered, homogenised, pasteurised, cooled and stored for a period in holding tanks where water-soluble vitamins are added before pumping through an evaporator and into a dryer. The evaporator and dryer increases the solids content producing an agglomerated powder. Steps of this process are shown in *Fig. 1* below.

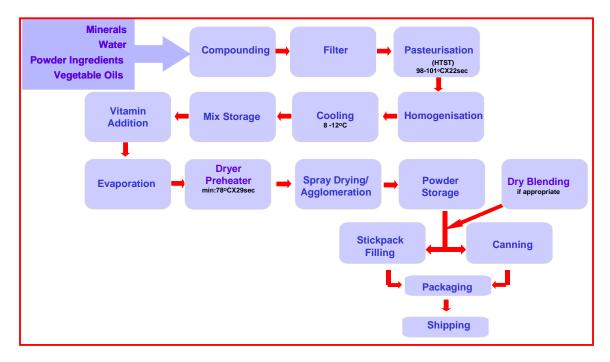


Figure 1: Powder production process

The powder is filled into easy-open cans along with a plastic scoop. Air in the can is removed and replaced with nitrogen before each can is hermetically sealed and packaged for shipment. In addition to filling into cans, the powder is also packaged in sachets.

Most of the cans used to package the product are produced on site from sheets of tin plate.



(2) Liquid Production

Liquid formula production starts by adding skim milk powder to deionised water in a compounding tank. Fat oil blends and bulk powder ingredients are added in a defined sequence and the mix is agitated at high speed. The compounded mix is pasteurised and cooled prior to double homogenisation.

After overnight storage the mix is standardised to desired total solids and vitamins are added before being sterilised, homogenised and stored in aseptic storage tanks.

The sterilised product is either filled into 250ml aseptic tetra packs or 100ml pre-sterilised glass bottles, which are labeled, boxed and palletised for shipping. The steps of this process are shown in *Fig. 2* below.

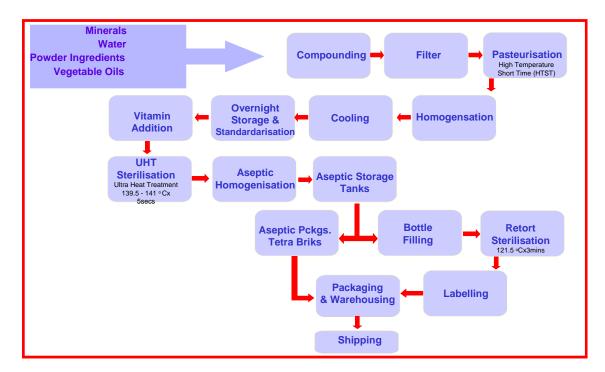


Figure 2: Liquid production process

Support Activities

To support the manufacturing operations on the site, a number of on-site utilities are required to provide the raw materials, special conditions and services necessary for the manufacturing process. These include: Water Treatment, Steam Raising, Chilled Water, Waste Water Treatment, HVAC, Compressed Air and Nitrogen Storage. In addition, there is a Combined Heat and Power (CHP) Plant on the site to efficiently generate electricity and raise steam from natural gas.



2.1.6 Environmental Policy



Wyeth Nutritionals Ireland, Environmental Policy

Wyeth Nutritionals Ireland recognises its responsibility to reduce the environmental impact of its activities and to ensure the sustainability of its operations. It is committed to conducting its activities in an environmentally responsible manner.

This is achieved by developing its environmental stewardship towards best practice and minimising any adverse impacts of its operations on the environment while developing, manufacturing and distributing high quality Nutritional Products.

To fulfill this commitment Wyeth Nutritionals Ireland will:

- continually improve raw material utilisation efficiency through modifying process design, materials elimination, substitution, minimisation, reuse and recycling;
- encourage resource conservation and waste avoidance;
- comply with or exceed applicable legal requirements and other requirements that relate to the environmental aspects of its activities, products and services;
- use energy responsibly and efficiently;
- sustain and develop emergency preparedness and response capability;
- maintain and enhance an environmental management programme for continual improvement, set objectives and, perform regular evaluation and verification of environmental performance;
- prevent pollution through emission minimisation, abatement, monitoring and control;
- through awareness and training, promote environmental responsibility across all levels of the organization to ensure that personnel working for and on its behalf are aware of this policy and individual obligations.

This policy will be made available to members of the public and other interested parties.

Signed: Jim Shorten

Managing Director

Date: 04/07/06



2.1.7 Environmental Management Organisation

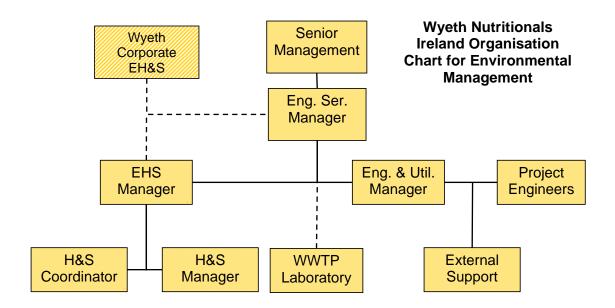


Figure 3: Organisation chart for environmental management



2.2 SUMMARY INFORMATION

2.2.1 Comparative Analyses

Data for emissions to both water (effluent) and atmosphere in 2009 are compared below with data from 2002 to 2008 (inclusive). In all other cases, year-to-year comparisons are made over as many years as possible.

2.2.2 Emissions to Water

Wyeth's emission to surface water consists of waste from its process operations and site sewage, which is treated prior to discharge to the River Deel. Monitoring of control parameters in the Waste Water Treatment Plant (WWTP) is carried out in accordance with Schedule 2(ii) of the IPC licence.

At final discharge, parameters such as flow and pH are monitored continuously. A flow proportional composite sample is taken each day over a 24-hour period and analysed in accordance with *Schedule 2(iii)* of the licence, which identifies parameters to be monitored and their monitoring frequency.

The average daily value for physical parameters and the annual mass emissions to water for the reporting period are summarized below in *Table 1* and *Table 2*, respectively. All values are corrected to one place of decimal (where possible).

	Year							Emission	
Parameter	2002	2003	2004	2005	2006	2007	2008	2009	Limit Value
Avg. Volume (daily) (m³)	1423	1409	1368	1730	1868	1875	2017	2072	2800
Avg. pH	8.2	8.4	8.3	7.9	7.9	7.9	7.9	8.1	6-9

Table 1: Average daily value of physical parameters since 2002



Parameter	Mass Emission (kg)								
	2002	2003	2004	2005	2006	2007	2008	2009	(kg)
BOD	5149	5143	6591	8014	6771	9162	10475	9183	36500
Sus. Solids	14803	12343	12977	11713	13096	11538	12476	12214	51100
Total Nitrogen	_* 1	3261	3345	3833	3420	4258	5578	4702	15330
Total Phosphorus (as P)	416	206	250	229	202	248	193	210	2044
Oils, Fats and Greases	3064	2725	3645	3216	6425*2	6714* ²	7039*2	7230* ²	15330
Ammonia (as N)	4726	1389	1298	1077	860	1111	881	864	10220

Table 2: Summary of annual mass emissions to surface water since 2002.

The above information is depicted graphically in Fig. 4

Year-to-Year Mass Emissions

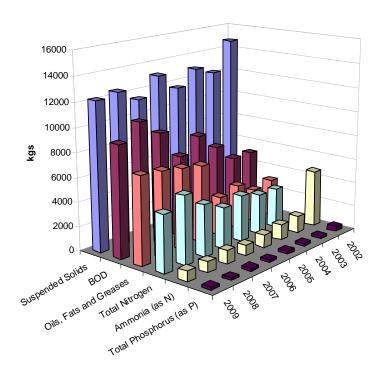


Figure 4: Effluent mass emissions to surface water since 2002 (8 years).



^{*1} no data available
*2 10mg/l limit of detection was used to estimate result.

Comparing the results for 2009 with those of previous years shows no significant change in the physical parameters while total phosphorus and oils, fats & greases have increased, BOD, suspended solids, total nitrogen and ammonia (as N) have reduced. These changes were due to a variation in production output.

All results for oils, fats and greases during 2006 to 2009 inclusive were below the level of detection of 10mg/l, which was used to estimate the emissions for those years.

There were three non-compliances for emissions to water during the reporting period. The first occurred during the 24-hour period beginning at 8:00 am on June 17th and was due to an exceedence of the emission limit value for BOD (54.94 mg/l versus an emission limit value [ELV] of 40 mg/l).

The second non-compliance occurred during the 24-hour period beginning at 8:00 am on June 20th and was also due to an exceedence of the ELV for BOD (60.25 mg/l versus an ELV of 40 mg/l).

The third non-compliance occurred during the 24-hour period beginning at 8:00 am on November 16th and was due to an exceedence of the ELV for Ammonia (as N) (16.0 mg/l versus an ELV of 10 mg/l).

The causes of the non-compliances were investigated and corrective actions have been put in place to prevent re-occurrences.

2.2.3 Emissions to Atmosphere

Emissions to atmosphere consist of process emission and emissions from combustion plant. These are discharged through the emission points listed in *Schedule 1 (i-iii)* of the IPC licence and are broken down into the products of combustion and particulates.

Table 3 summarises these mass emissions to atmosphere. The values given are corrected within two places of decimal.

Parameter	Mass Emissions (kg x 10 ³)									
raiailletei	2002	2003	2004	2005	2006	2007	2008	2009		
NOx (as NO ₂)	286.97	199.26	91.16	52.45	47.11	34.88	41.00	44.86		
Total Particulates	61.23	9.20	*	17.16	33.96	54.63	50.98	39.28		
CO	6.13	4.17	0.26	15.88	*	19.19* ¹	18.27* ¹	18.15* ¹		

^{*} no data available

Table 3: Summary of annual mass emissions to atmosphere since 2002.

The above information is depicted graphically in Fig. 5 below.



^{*1} Measured boiler emissions combined with estimated CHP Plant emissions

Year-to-Year Mass Emissions

Figure 5: Mass emissions to atmosphere since 2002 (8 years).

Comparing NOx emissions for 2009 with previous years shows an increase over 2008 emissions but is significantly lower than the previous years reported.

Particulate emissions are lower than those measured during 2008 and CO emissions while mostly estimated, show a decrease over those reported during 2007.

There was one non-compliance for emissions to atmosphere during the reporting period. The non-compliance was due to an exceedence of the emission limit value for particulates (52.3 mg/Nm³ versus an ELV of 50 mg/Nm³) and was detected during routine emission monitoring on one of the process exhaust outlets during February.



2.2.4 Waste Management

Non-Hazardous Waste

A total of 7518 tonnes of non-hazardous waste was generated from normal site operations during the reporting period. Approximately 67% (5017 tonnes) was sent off site for recovery and the remaining 33% (2500 tonnes) was landfilled. A record of the data relating to this type of waste from site operations (Condition 7 of the IPC licence) and information concerning the management of this waste is presented in *Tables 4-6*.



	EWC Code		EWC Code Haz Description of (Y/N) Waste		Quantity (Tonnes/annum)	Method of Disposal/ Recovery	Location of Disposal/ Recovery	Name of Disposal/ Recovery Contractor			
2	0	0	1	0	1	N	Paper	17.87	R3	(b) Dublin	DMG Services
2	0	0	1	0	1	N	Cardboard and plastic packaging	544.23	R3	(b) Limerick	Veolia Environmental Services Ltd.
2	0	0	1	0	1	N	Plastic packaging	50.95	R3	(b) Limerick	Veolia Environmental Services Ltd.
2	0	0	1	0	1	N	Cardboard	27.90	R3	(b) Limerick	Veolia Environmental Services Ltd.
2	0	0	1	4	0	N	Metal	721.88	R4	(b) Limerick	Veolia Environmental Services Ltd.
1	5	0	1	0	7	N	Glass Packaging	19.86	R5	(b) Limerick	Veolia Environmental Services Ltd.
0	2	0	5	0	2	N	Sludge	3133.44	R3	(b) Waterford	Molaisin Compost Ltd.
2	0	0	1	4	0	N	Metal	42.64	R4	(b) Limerick	Hegarty Metal Recycling
0	2	0	5	9	9	N	Waste liquid product incl. packaging	156.16	R3	(b) Carlow	Mr. Joeseph Waddock
2	0	0	3	0	1	N	General food and office waste	659.47	D1	(b) Limerick	Veolia Environmental Services Ltd.
2	0	0	3	0	1	N	Waste product and raw materials	1841.24	D1	(b) Limerick	Veolia Environmental Services Ltd.
2	0	0	1	2	5	N	Used cooking oil	2.08	R1	(b) Galway	Frylite (Ireland) Ltd.
0	2	0	3	0	4	N	Waste veg. oil	116.26	R3	(b) Cork	McGill Env. Systems (Irl.) Ltd.
1	9	0	9	0	1	N	C & D Waste	178.4	R3	(b) Limerick	Veolia Environmental Services Ltd.
2	0	0	1	3	8	N	Timber	6.18	R3	(b) limerick	Veolia Environmental Services Ltd.

Table 4: AER Summary of non-hazardous waste generated on site during 2009



Waste Transporters	Permit / Licence Details	Issuing Authority	Issue/Review Date
DMG Services T/A Shred-It	WCP/LK/021/08d	Limerick Co. Council	12/12/08
Veolia Environmental Services Ltd.	WCP-DC-08-1120-01	Dublin City Council	01/05/09
Hegarty Metal Recycling	WCP-LK-08-589-01	Limerick Co. Council	25/02/09
Frylite (Ireland) Ltd.	WCP/MO/090624/01	Mayo Co. Council	20/06/07
Agrilife Ltd.	WCP/LK/128/08d	Limerick Co. Council	05/08/08
STL Logistics	WCP/LK/447/07(b)	Limerick Co. Council	14/12/07
County Wide Drain Services Ltd.	WCP/LK/558/08(b)	Limerick Co. Council	03/07/08

Table 5: Waste Transporter permit details

Waste Contractor	Permit / Licence Details	Issuing Authority	Issue/Review Date
DMG Services T/A Shred-It	WFP-DC-09-0011-01	Dublin City Council	17/12/09
Veolia Environmental Services Ltd.	W0082-02	EPA	06/11/03
Hegarty Metal Recycling	WP 05-04	Limerick City Council	01/01/07
Frylite (Ireland) Ltd.	WR/77	Galway Co. Council	10/01/05
Molasin Compost Ltd.	WP 66/08	Waterford Co. Council	11/09/08
Mr. Joeseph Waddock	W.P. 02/08	Carlow Co. Council	25/06/08
McGill Environmental Systems (Irl) Ltd.	W0180-01	EPA	17/02/04

Table 6: Waste Contractor permit details



Hazardous Waste

During the reporting period a total of 50.4 tonnes of hazardous waste was generated on site. A record of the data relating to this type of waste, as outlined under *Condition 7* of the IPC licence and information concerning the management of this waste is presented in *Tables 7-9*.



			Haz (Y/N)	Description of Waste	Quantity (Tonnes/annum)	Method of Disposal/ Recovery	Location of Disposal/ Recovery	Name of Disposal/Recovery Contractor			
2	0	0	1	3	5	Υ	WEEE	2.685	R4	(b) Kildare	Irish Lamp Recycling
2	0	0	1	2	1	Υ	Fluorescent lamps	0.554	R5	(b) Kildare	Irish Lamp Recycling
2	0	0	1	3	3	Υ	Batteries	0.090	R11	(b) Kildare	Irish Lamp Recycling
0	7	0	1	0	4	Υ	Mixed solvents	2.079	R1	(c) Germany	Enva
1	5	0	1	1	0	Υ	Used drums	2.122	D9, R1, R3, R4	(b) Shannon (c) Germany	Enva
1	5	0	2	0	2	Υ	Used filters and wipes	0.950	R1	(c) Germany	Enva
1	6	0	5	0	4	Υ	Aerosol cans	0.016	R4	(b) Portlaoise	Enva
1	6	0	5	0	6	Υ	Waste laboratory chemicals	2.809	R1, D9,	(b) Shannon (c) Germany	Enva
1	6	0	5	0	7	Υ	Water treatment chemicals	1.109	D9, R1	(b) Shannon (c) Germany	Enva
2	0	0	1	2	5	N	Edible oil and fat	4.181	R1	(c) Germany	Enva
2	0	0	1	2	6	Υ	Vegetable fat	3.382	R1, R3	(c) Germany	Enva
1	8	0	1	0	3	Υ	Sharps	0.012	D9	(b) Dublin	Sterile Technologies Ireland.
1	5	0	1	0	2	Y	Used drum	0.001	D9	(b) Shannon	Enva
1	6	0	5	0	9	Υ	Vitamins and Minerals	8.406	R1, D9	(c) Germany (b) Shannon	Enva
2	0	0	1	3	0	Υ	Detergent	0.026	R1	(c) Germany	Enva
0	6	0	2	0	5	Υ	Waste chemical	0.843	R1	(c) Germany	Enva
0	8	0	3	1	2	Υ	Waste ink	0.010	R1	(c) Germany	Enva
0	8	0	4	0	9	Υ	Waste adhesive	0.012	R1	(c) Germany	Enva
1	3	0	1	1	3	Υ	Waste oil	0.298	R1	(c) Germany	Enva
1	6	0	5	0	8	Υ	Vitamins and minerals	2.845	R1	(c) Germany	Enva
1	3	0	2	0	8	Υ	Waste oil	8.039	R9	(b) Portlaoise	Enva
1	3	0	8	0	2	Υ	Waste oil	0.111	R9	(b) Portlaoise	Enva
1	3	0	7	0	3	Υ	Waste oil	9.569	R9	(b) Portlaoise	Enva

Table 7: Summary of hazardous waste generated on site during 2009



Waste Receiver	Permit / Licence Details	Issuing Authority	Issue Date
Irish Lamp Recycling	WFP-KE-08-0348-01	Kildare Co. Council	25/02/09
Enva	W0041-1	EPA	05/05/00
Enva	W0184-1	EPA	16/01/04
Sterile Technologies Ireland Ltd.	W0055-02	EPA	01/08/03

Table 8: Waste Broker permit details

Waste Transporter	Permit / Licence Details	Issuing Authority	Issue Date
Irish Lamp Recycling	WCP-DC-08-1115-01	Dublin City Council	03/03/09
Enva Ireland Ltd.	WCP-DC-08-1116-01	Dublin City Council	07/04/09
Sterile Technologies Ireland Ltd.	WCP/LK/117/07(c)	Limerick Co. Council	20/07/07
Tradaree Transport	WCP-LK-08-0405-02	Limerick Co. Council	22/01/09

Table 9: Waste Transporter permit details



2.2.5 Surface Water Discharge Monitoring

Surface water discharged from the site is monitored weekly in accordance with *Schedule 4(i)* of the IPC Licence. All site surface water is discharged to the River Deel and a sample is taken from a single point (agreed with the EPA) and analysed.

A summary of the monitoring results for surface water pH, BOD, Total NH₃ and Total N with the highest, lowest and average pH and concentrations recorded is in *Tables 10*, below.

	рН		BOD (mg/l)		Total NH ₃ (mg/l)		Total N (mg/l)	
High	Low	Avg.	High Avg.		High	Avg.	High	Avg.
8.6	7.2	7.9	50.0	11.0	1.1	0.3	4.5	1.8

Table 10: Summary of surface water pH, BOD, Total NH₃ and Total N.

There were a number of exceedences of the internal action limit for BOD (15 mg/l) during the reporting period. Towards the beginning of the year, the exceedences were as a result of incorrect sampling methodology which was corrected. Towards the end of the year the exceedences of the action limit was thought to be as a result of natural organic matter deposited and breaking down in various locations of the drainage system. An action to correct this was implemented at the beginning of 2010.

2.2.6 Summary of Agency Monitoring and Enforcement

EPA representatives paid a number of visits to Wyeth Nutritionals during 2009. The purposes of each visit are given in *Table 11* below.

Visit Date	Purpose
February 3 rd	To sample emissions to water
March 6 th	To perform a site inspection
May 19 th	A reconnaissance visit for emissions to atmosphere monitoring.
August 25 th	To sample emissions to water
November 11 th	To sample emissions to atmosphere

Table 11: Summary of visits to WNI by the Agency (EPA) during 2009.

For emissions to water sampling, there was a difference in results for BOD between the analysis carried out be the site and the analysis carried out by the Agency. The difference in BOD results has been investigated and a revised analytical methodology by the in-house laboratory is currently being drafted.

No report has been received from the Agency for the emissions to atmosphere sampling.



2.2.7 Energy and Water Use

Wyeth primarily used electricity and natural gas to provide energy for its operation during the reporting period. A summary of energy consumption per source for is provided in *Table 12*.

Energy Source	Consumption
Natural Gas	229,274 MWh
Electricity	37,783 MWh

Table 12: Energy consumption summary for 2009.

Electricity

The site's annual electricity consumption since 2002 is shown in Fig. 6.

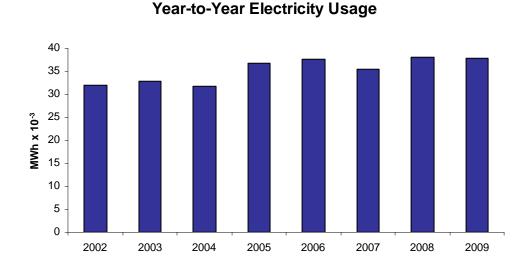


Figure 6: Annual electricity consumption since 2002 (8 years)

Natural Gas

In 2005 natural gas was introduced to the site as a primary source of energy. Natural gas is combusted in a Combined Heat and Power (CHP) Plant on site that uses a gas turbine to generate electricity. The exhaust gasses from the turbine are supplementary fired in a boiler with additional natural gas to generate steam for use in the manufacturing process.

In addition, one of the existing boilers on site was decommissioned and the remaining two boilers were converted from burning HFO to natural gas and are now mainly used to supplement steam demand provided by the CHP Plant.

The site's annual natural gas consumption since 2004 is shown in *Fig.* 7 and shows a decrease in consumption of 3.3% (due to a decrease in production output) over 2008.



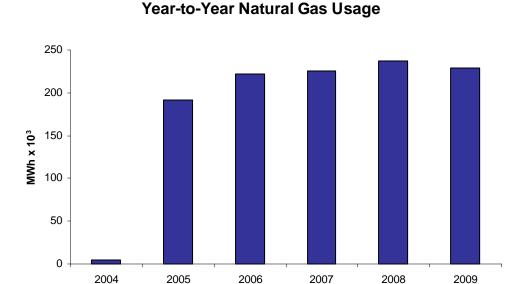


Figure 7: Annual natural gas consumption since 2004 (6 years)

Water

Water for site operations is abstracted from the River Deel upstream from the site and is pumped to the on-site Water Treatment Plant where it is treated to potable water standards. Softening of water also takes place to prevent the build up of lime scale on heated surfaces of the manufacturing process equipment.

A total of 939,240 $\rm m^3$ of water was used on site during the reporting period, a decrease of 1.5% when compared with 2008. Annual water usage since 2003 is shown in *Fig. 8*.

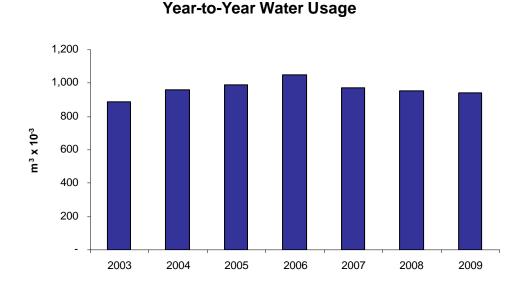


Figure 8: Annual water usage since 2003 (7-years)



2.2.8 **Environmental Incidents and Complaints**

Incidents

Four incidents were recorded during the reporting period and are listed in *Table 13* below.

Incident	Date	Actions Taken	Authorities Contacted
Emission point A2-1; Particulates exceedence (52.3 mg/Nm³ vs ELV of 50.0 mg/Nm³)	February 24, 2009	Incident investigation and changes made to operations.	EPA
Emission point SW1; BOD exceedence (54.94 mg/l vs ELV of 40.0 mg/l)	June 17 th , 2009	Incident investigated and laboratory analytical methodology reviewed.	EPA, LCC, SRFB.
Emission point SW1; BOD exceedence (60.25 mg/l vs ELV of 40.0 mg/l)	June 20 th . 2009	Incident investigated and laboratory analytical methodology reviewed.	EPA, LCC, SRFB.
Emission point SW1; Ammonia (as N) exceedence (16.0 mg/l vs ELV of 10 mg/l)	November 11 th , 2009	Incident investigated and procedures put in place for control modification changes.	EPA, LCC, SRFB.

EPA = Environmental Protection Agency LCC = Limerick County Council

SRFB = Shannon Regional Fisheries Board

Table 13: Summary of incidents

Complaints

There were seven complaints received during the reporting period, see Table 14 below.

Complaint Class	Noise	Odour	Water	Dust	Procedural	Miscellaneous
Total	7	None	None	None	None	None

Table 14: Summary of complaints.



2.3 MANAGEMENT OF THE ACTIVITY

2.3.1 Schedule of Environmental Objectives and Targets for 2009

The schedule of objectives and targets for the reporting period is in *Table 15* below:

No.	Objective	Target
1	Improve internal material transport and storage to reduce risk.	Review internal hazardous material transfer and storage, and implement recommendations to reduce risk.
2	Improve monitoring and control of emissions to atmosphere	Improve data collection and control of emissions to atmosphere.
3	Improve control of emissions to water	Improve the robustness of waste water discharge sampling arrangements and improve WWTP control.
4	Maintain the integrity of the underground drainage networks.	Inspect, test and remediate as necessary the underground drainage networks to ensure integrity is maintained.
5	Increase energy efficiency and reduce carbon dioxide emissions.	Reduce the normalised direct and indirect emissions of carbon dioxide by 10% by 2012 over the 2007 normalised emissions
6	Reduce waste generation and divert waste from landfill.	Reduce the normalised net waste by 10% over the 2007 normalised value by 2012
7	Reduce water consumption.	Reduce the normalised annual consumption of water by 10% by 2012 over the 2007 normalised consumption volume.
8	Reduce site noise.	Identify and implement measures necessary to ensure a noise nuisance does not arise.

Table 15: Schedule of objectives and targets for 2009

2.3.2 Environmental Management Programme (EMP) Report

Objective No. 1 Improve internal material transport and storage to reduce risk.

Target: Review internal hazardous material transfer and storage to reduce

risk.

Programme:

- Confirm the absence of PCBs in oil in the oil-filled circuit breakers.
- 2. Complete an asbestos survey and implement necessary precautions for any asbestos contained in materials on site.
- 3. Continue the installation of high level alarms consisting of an alarm system and automatic fill shut-off on the main chemical storage tanks.
- 4. Implement the new delivery system for disinfectant to the process areas that will reduce vapour emissions and risk of spillage.



5. Develop a plan to install a new delivery system for CIP chemicals to one of the wet process areas to reduce the hazards from transporting and storing in drums.

Programme Report:

- 1. The oil-filled circuit breakers were sampled and the analysis results were negative for the presence of PCBs.
- A type 2 asbestos survey was carried out in all accessible parts of the plant. The survey identified asbestos containing materials and made recommendations on how to manage the material.
- The bulk chemical storage tanks and delivery systems were surveyed to determine how to retrofit high level alarms with automatic shut-off on each tank.
- 4. A new delivery system for the delivery of disinfectant to the process areas was designed and installed. This new system eliminated the risks associated with the storage, handling and transport of 200 liter drums of the material.
- The process area was surveyed and a scope of work, and plan was developed to install a new delivery system for CIP chemicals to one of the wet process areas.

Objective No. 2. Improve monitoring and control of emissions to atmosphere.

Target: Improve data collection and control of emissions to atmosphere.

Programme:

- 1. Proceed with the development of plans to install continuous measuring instrument for particulate emissions from the dryers and establish the benefits of installing such instrumentation.
- Upgrade the direct digital combustion controls (DDCC) on Boiler No. 3 to reduce emissions by increasing combustion efficiency.

Programme Report:

- Plans were developed to install continuous measuring instruments for particulate emissions from the dryers, however, an analysis of the benefits did not justify the cost of such a project at this time.
- It was decided not to proceed with an upgrade of the DDCC on Boiler No. 3 as the operating hours of this equipment was reduced and plans are to reduce them further during 2010.

Objective No. 3 Improve control of emissions to water.

Target: Improve the robustness of waste water discharge sampling arrangements and improve WWTP control.



Programme:

- 1. Replace the water composite sampler with a refrigerated composite sampler including the capability to store more than one sample at any time.
- Assess all self-monitoring compliance data, onsite procedures and quality controls for the waste water laboratory to ensure that the quality of all self monitoring data submitted to the EPA is in accordance with the relevant conditions of the site's IPPC licence.

Programme Report:

- The replacement of the flow proportionate composite sampler has been deferred due to budget constraints and instead will be included in the EMP for 2010.
- The assessment of all the self-monitoring compliance data, on-site procedures and quality controls for the wastewater laboratory started during the reporting period. A report on the assessment will be issued during 2010.

Objective No. 4 Maintain the integrity of the underground drainage networks.

Target: Inspect, test and remediate as necessary the underground drainage network to ensure their integrity is maintained.

Programme:

- 1. Remediate the sections of the underground drainage network that have been highlighted as having deficiencies during the phase 2 of inspection and testing.
- 2. Remediate the single outstanding deficiency from phase 1.
- 3. Continue with the next phase of testing and inspection of the underground drainage network once phase 2 is completed.

Programme Report:

- 1. Inspection, testing and remediation of sections of the underground drainage network continued and focused on the drains in the liquid product manufacturing area.
- 2. The single outstanding deficiency from phase 1 was completed during the summer shutdown.
- 3. Phase 2 of the testing and inspection of the underground drainage network is not completed and this work will continue as part of the EMP in 2010.

Objective No. 5 Increase energy efficiency and reduce carbon dioxide emissions.

Target: Reduce the normalised direct and indirect emissions of carbon dioxide by 10% by 2012 over the 2007 normalised emissions.

Programme:

1. Complete the assessment of identified process equipment energy conservation projects.



- 2. Continue with the replacement of old steam traps with the new type traps.
- Continue to improve energy use reporting and information by installing new electrical metering, connected to the energy monitoring system to facilitate the measuring of electricity use by each business unit.
- 4. Gather and analyse all of the current energy management initiatives with a view to implementing and building a formal energy management system for the site.

Programme Report:

- 1. The assessment of the identified process equipment energy conservation is not completed.
- 2. Two steam trap surveys were completed to assess the condition of the steam traps during the reporting period. The assessment estimated that almost 3000 tonnes of steam was being lost through the older-type traps and the installation of the new-type steam traps continued. About 10% of the total number of steam traps on site have now been replaced.
- Additional electrical metering was installed and connected to the central monitoring system. This is the first phase of metering that measure electricity use that will eventually be used to measure the quantity of electricity used by each individual business unit.
- 4. The current energy management initiatives were examined to determine if a formal energy management system should be implemented. From the analysis it was decided not to introduce a formal system and to continue to set energyrelated objectives as part of the EMP.

Objective No. 6 Reduce waste generation and divert waste from landfill.

Target: Reduce the normalised net waste by 10% over the 2007 normalised value by 2012.

Programme:

- Identify alternative outlets to divert waste from landfill.
 Obtain agreement from the EPA and Wyeth Corporate to use any new outlets.
- Review he new waste categories introduced since the start of the year and ensure optimum methods are used for recycling.

Programme Report:

- Alternative outlets were identified for two categories of waste and three sites were visited to ensure they could meet expectations. Two of these sites were selected and agreement was obtained from the EPA and Wyeth Corporate to use them.
- 2. The recycling of new waste categories was reviewed to ensure the optimum methods for recycling are used. The



review found an alternative method of recycling for one category that is more environmentally benign and has a reduced cost.

Objective No. 7 Reduce water consumption.

Target: Reduce the normalised annual consumption of water by 10% by

2012 over the 2007 normalised consumption volume.

Programme:

1. Carry out the planned upgrades to the water treatment plant to improve its water treatment efficiency.

- 2. Modify the pipework and begin fitting water meters to the distribution network to aid in measuring water use per individual business unit.
- 3. Install new controls at the water abstraction pump station to improve flexibility in operation.

Programme Report:

- 1. Upgrades to the water treatment plant started during the reporting period and are scheduled to finish in 2010. Tie-ins were installed during the summer shutdown to accommodate the new infrastructure.
- 2. There was no work carried out on the water distribution system to facilitate the installation of water meters.
- 3. New controls to improve the flexibility of operating the water abstraction pumps are planned for completion during 2010 as part of the water treatment plant upgrade project.

Objective No. 8 Reduce site noise.

Target: Identify and implement measures necessary to ensure a noise

nuisance does not arise.

Programme:

 Review outdoor equipment that may be a potential source of noise nuisance.

2. Implement measures to prevent potential nuisance noise.

Programme Report:

- 1. Outdoor equipment was reviewed and those that could be a potential source of noise were identified.
- Measures were identified to reduce the source of noise from outdoor equipment and work on implementing these measures begun at the end of the reporting period and will continue as part of the EMP in 2010.



2.3.3 Environmental Management Programme Proposal

The proposed schedule of objectives and targets for 2010 is in *Table 16* below:

No.	Objective	Target
1	Improve control of emissions to water	Improve the robustness of waste water discharge sampling arrangements and improve WWTP control.
2	Maintain the integrity of the underground drainage networks.	Inspect, test and remediate as necessary the underground drainage networks to ensure integrity is maintained.
3	Increase energy efficiency and reduce carbon dioxide emissions.	Reduce the normalised direct and indirect emissions of carbon dioxide by 10% by 2012 over the 2007 normalised emissions
4	Reduce waste generation and divert waste from landfill.	Reduce the normalised net waste by 10% over the 2007 normalised value by 2012
5	Reduce site noise.	Identify and implement measures necessary to ensure a noise nuisance does not arise.

Table 16: Proposed schedule of objectives and targets for 2010.

Objective No. 1 Improve control of emissions to water.

Target: Improve the robustness of waste water discharge sampling arrangements and improve WWTP control.

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Programme:

- 1. Review available technology for use in monitoring the quality of the influent to the wastewater treatment plant that is capable of indicating when shock chemical and organic loads occur.
- 2. Investigate available technology to measure activated sludge bacterial performance for process optimization, toxicity tracking and to monitor sludge health.
- 3. Replace the water composite sampler with a refrigerated composite sampler including the capability to store more than one sample at any time.
- 4. Implement any recommendations from the report on the assessment of all the self-monitoring compliance data, on-site procedures and quality checks in the wastewater laboratory.

Objective No. 2 Maintain the integrity of the underground drainage networks.

Target: Inspect, test and remediate as necessary the underground drainage network to ensure their integrity is maintained.

Programme:

- 1. Remediate the sections of the underground drainage network that have been highlighted as having deficiencies during the phase 2 of inspection and testing.
- 2. Continue with the next phase of testing and inspection of the underground drainage network once phase 2 is completed.



Objective No. 3

Increase energy efficiency and reduce carbon dioxide emissions.

Target:

Reduce the normalised direct and indirect emissions of carbon dioxide by 10% by 2012 over the 2007 normalised emissions.

Programme:

- 1. Review boiler operation requirements to identify and implement operation changes to reduce fuel use.
- 2. Review boiler operation settings and implement changes to reduce the number of 24-hour cycles when the boiler(s) are in hot stand-by.
- 3. Change the controls of the refrigeration compressors to enable compressor operation to match the refrigeration demand.
- 4. Review the operation of the refrigeration plant to identify areas where improvements could be made that will improve the plants coefficient of performance.

Objective No. 4

Reduce waste generation and divert waste from landfill.

Target:

Reduce the normalised net waste by 10% over the 2007 normalised value by 2012.

Programme:

- Where possible, identify recycle outlets for waste currently landfilled. Assess the capability of these outlets to comply with the legal and inhouse requirements. Obtain corporate and EPA agreement to use these identified sites.
- 2. Where possible, identify improved recycle outlets with reduced environmental impact for materials that are currently recycled. Obtain corporate and EPA agreement to use these identified sites.

Objective No. 5

Reduce site noise.

Target:

Identify and implement measures necessary to ensure a noise nuisance does not arise.

Programme:

1. Implement noise reduction measures on outdoor equipment that have been identified as potential noise sources.



2.3.4 Pollution Emission Register (PER)

All materials used or generated on site during the reporting period were compared with the PERL (Pollution Emission Register List). These are listed in *Table 17* below along with their corresponding threshold limits from the European Pollution Emission Register (EPER).

Pollutants/Substances	Identification	Emissions from WNI in 2009		EPER Thresholds	
Foliulants/Substances	Identification	Atmos. kg/year	Water kg/year	Atmos. kg/year	Water kg/year
CO ₂		42,804,674	-	100,000,000	-
NOx	as NO ₂	44,860	-	100,000	-
Total – Nitrogen	as N	-	4702	-	50,000
Total – Phosphorus	as P	-	210	-	5,000

Table 17: PERL of substances emitted during 2009 compared with EPER thresholds.

A comparison of emissions since 2002 for each of the substances listed above with the exception of CO_2 is made in *Table 2* and *Table 4* for emissions to water and emissions to atmosphere respectively.

Annual CO_2 emissions since 2002 are shown in *Fig.* 9 below which shows an overall decrease of 30% when the 2007 emissions are compared with the CO_2 emissions in 2002. The negative emissions shown for 2007, 2008 and 2009 represent CO_2 from exported electricity.

Annual CO₂ Emissions

80,000 60,000 tonnes of CO₂ 40,000 20,000 0 2002 2003 2004 2005 2006 2007 2008 2009 -20,000 ■ Indirect CO2 Emissions (t) ■ Direct CO2 Emissions (t)

Figure 9: Annual CO₂ direct and indirect emissions since 2002 (8 years).



2.3.5 Other Significant Environmental Aspects and Audits

Wyeth Nutritionals continues to operate its Environmental Management System (EMS) to the ISO 14001 Standard. Surveillance audits conducted by SGS Ireland Ltd. took place in during April and October of the reporting period and the audit findings were that the site could continue to be registered.

Wyeth Nutritionals Ireland remains as a participant in the Eco-management and Audit Scheme. An audit of its environmental statement took place on September 24th 2009.

A total of five waste management sites used by Wyeth Nutritionals were visited to observe their operation and check documentation to ensure their compliance with Wyeth requirements.



2.4 LICENCE SPECIFIC REPORTS (Summaries)

2.4.1 Noise Monitoring

In accordance with the requirements of its IPC Licence, Wyeth Nutritionals is required to carry out a noise survey of the site operations annually.

Noise measurements were recorded at six representative noise sensitive locations (houses) and at a boundary reference position (west) during the daytime and nighttime on the 9th/10th June 2009. The site was operating normally during this period.

The survey methodology followed the Environmental Protection Agency *Environmental Noise* Survey Guidance Document (2003), Environmental Protection Agency Guidance Note for Noise in Relation to Scheduled Activities (2006) and ISO 1996 Description and measurement of environmental noise.

The measurement parameters L_{Aeq} , L_{A90} , L_{A50} and L_{A10} are reported for all locations.

During the survey the specific noise levels due to noise emissions from the site were established, based on the noise level statistics. This was supplemented, when necessary, by examination of the noise profile (noise levels logged at 10 second intervals). The method of determining the specific noise level is summarized in *Table 18* below.

Description of the Noise	Parameter best representing specific noise from the site		
Plant noise dominant, no other significant noise sources.	L _{Aeq}		
Intermittent interfering noise (e.g. traffic, birds, wind), with underlying plant noise audible.	L _{A90} if plant noise steady and audible in lulls in traffic/interference. or L _{A50} if plant not audible and slowly varying, with occasional interference from other noise sources.		
Plant barely audible (I.e. not immediately noticeable, unless actively listening)	<l<sub>A90 (up to 5 dB lower)</l<sub>		
Plant not audible.	<<L _{a90} (more than 5dB lower than L _{A90})		
The plant specific noise is established during the survey by correlating the live sound meter			

The plant specific noise is established during the survey by correlating the live sound meter readings with the audible sounds, as described above. The plant specific noise is verified by examining the profile of logged noise levels.

Table 18: Methodology for determination of plant specific noise.

Measurement Locations

Noise measurements were recorded at six house locations and one reference boundary location. These are indicated in *Fig. 10* below.



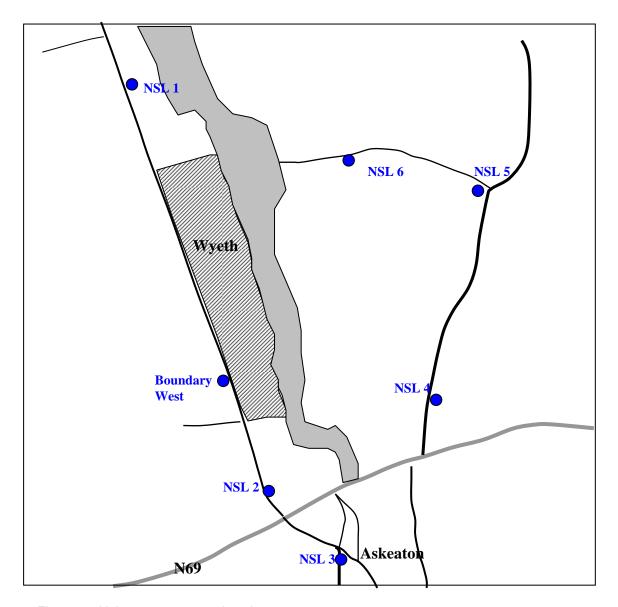


Figure 10: Noise measurement locations

Summary of Results Assessment

The noise level during the day period, 0800 to 2200 hours, and night period 2200 to 0800 hours, is summarised in *Table 19* below.



			Measure	ed Noise			
Location	Time	L _{Aeq}	L _{A90}	L _{A50}	L _{A10}	Specific Noise*1	Comments, Audible Sounds
Daytime							
NSL 1	12.40	56	28	32	41	34	Occasional local sounds,
INOL I	12.55	52	31	34	42	34	birds, occasional car, very low level plant noise
NSL 2	13.20	55	44	49	57	46	Local and distant traffic, low
NOL Z	13.35	61	46	54	61	40	level plant noise
NSL 3	13.30	65	39	47	66	<<39	Local and distant traffic,
NOL 3	13.45	64	39	49	66		Wyeth not audible
NSL 4	15.35	57	44	53	59	49	Continual traffic, birds, low
NOL 4	15.50	58	49	56	61	40	level plant noise
NSL 5	14.40	53	37	40	49	37	Local traffic, aircraft, birds,
NOL 3	14.55	42	37	39	43	37	very low level plant noise
NSL 6	14.25	55	36	40	48	40	Low level plant noise, farm
NOL 0	14.40	52	36	38	46	40	machinery, birds, aircraft
Boundary	12.30	57	48	50	54	50	Plant noise, occasional local
West	12.45	57	47	49	52		traffic
Nighttime							
NSL 1	22.35	47	30	33	42	<30	Two cars, voices, industrial noise from northwest, distant
INOL I	22.50	32	29	31	34	<30	traffic, Wyeth not audible
NSL 2	23.20	49	42	44	51	43	Distant traffic, occasional local
NOL Z	23.35	53	43	45	52	43	traffic, plant noise
NSL 3	23.25	57	43	46	57	43	Occasional local traffic, distant
NOL 3	23.40	50	43	45	48	43	traffic, plant noise
NSL 4	01.00	52	45	48	55	45	Occasional traffic, dogs, plant
NOL 4	01.15	51	45	47	54	43	noise
NSL 5	00.10	41	39	40	42	41	Plant noise, two cars
INOL 0	00.25	44	39	41	43	41	i iaiit iiuise, two cais
NSL 6	00.15	44	43	44	46	44	Plant noise
NOL 0	00.30	43	41	43	44	44	FIAIIL HUISE
Boundary	22.30	63	50	51	57	51	Plant noise, occasional
West	22.45	59	50	51	53	31	vehicles

^{*&}lt;sup>1</sup> Specific noise level attributable to Wyeth (higher noise level of two readings *Table 19:* Measured noise levels on 9th/10th June 2009.

Comparison with Previous Surveys

A comparison of nighttime noise levels (specific industrial component of noise (dB (A)) attributable to Wyeth Nutritionals site operations) since 2003 is in *Table 20* below.



Loc	ation	Nighttime Specific Noise Levels									
Туре	Label	Label 2004 2005 2006		2006	2007	2008	2009				
	NSL 1	<31	42	33	40	39	<30				
	NSL 2	43	<40	45	43	45	43				
Noise Sensitive	NSL 3	45	40	45	42	38	43				
Location	NSL 4	36	40	30	41	30	45				
	NSL 5	-	-	43	<34	41	41				
	NSL 6	-	-	-	-	-	44				
Boundary	Boundary West	52	52	50	49	52	51				

Table 20: Comparison of nighttime specific noise levels since 2003.

The historical comparison is confined to nighttime specific noise levels, due to the difficulty detecting plant noise during the daytime surveys.

Changes of a few dB can be expected from survey to survey, due to measurement precision and variations in site operating conditions. For measurement locations distant from the site there can be larger variations due to differing wind and atmospheric propagation conditions.

The noise levels at the noise sensitive locations were in general consistent with levels measured in previous surveys, with plant noise generally within the historical range.

The significant changes relative to 2008 were a reduction at NSL 1 (house to north) in excess of 9 dB and an increase of 7 dB at NSL 4 (southeast Ballysteen Road).

However, these variations can be explained by meteorological conditions. There was no significant change at the other noise sensitive locations and no significant change at the boundary reference position. Overall there is no evidence of a systematic change in plant noise since 2008.

Overall Assessment

The daytime noise limit of 55 dB(A) was complied with at all noise sensitive locations (houses). The specific noise from site operations component ranged from 34 dB(A) to 49 dB(A) at the noise sensitive locations.

The nighttime noise limit of 45 dB(A) was complied with at all noise sensitive locations. The specific noise from site operations component ranged from <30 dB(A) to 45 dB(A) at the noise sensitive locations.

(A 2 dB margin is permitted in the licence in interpreting limit exceedences.)

There was no noticeable measurable tonal, or impulsive component in the noise at the noise sensitive locations.



2.4.2 Groundwater Monitoring

In accordance with its IPC Licence, Wyeth Nutritionals is required to monitor groundwater on its site on a biannual basis. These monitoring events normally take place around March – April and September – November each year. However, following spill incidents 2006 where the corrective action included the monitoring of total and fecal coliforms in groundwater, the EPA requested that sampling the river upstream and downstream of the site and the discharge from the wastewater treatment plant.

During the monitoring period groundwater samples were extracted from five monitoring wells at various locations around the site. One well (101) was installed in 1998 as part of a due diligence assessment project and the remaining four wells (201 to 204) were installed in 2001 for the purpose of groundwater monitoring.

Samples were also taken from the nearby River Deel upstream and downstream of the site and from the wastewater discharge point. The locations of the wells and other sample locations are shown in *Fig. 11* below.

Sampling took place on the dates listed in the *Table 21* below:

Sample Period Number	Date
1	30 th March
2	7 th September

Table 21: Dates for groundwater sampling in 2009.



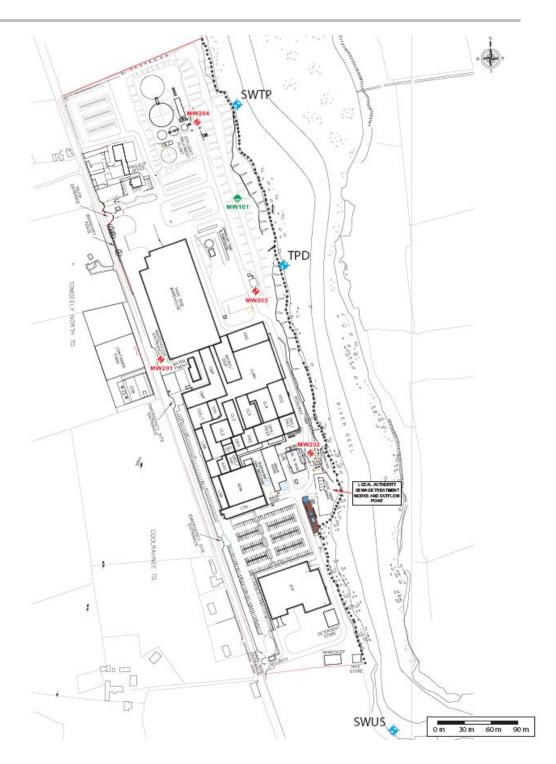


Figure 11: Locations of the monitoring wells and other sample points around the site.



Samples were obtained from each of the wells on both occasions and the results of field measurements and analysis are in Tables 22 - 24 below.

Parameter	Poriod	Period Sample ID							
Farameter	Period	101	201	202	203	204			
Nitrate as NO ₃	1	6.1	1.4	-	0.3	-			
(mg/l)	2	6.9	2.8	0.7	0.4	0.8			
Chloride (mg/l)	1	365	49	59	34	351			
Chloride (mg/l)	2	536	61	113	33	376			
Sodium (mg/l)	1	148	28	28	360	374			
Socialii (ilig/i)	2	267	37	87	23	429			
Calcium (mg/l)	1	227	67	82	32	33			
Calcium (mg/i)	2	234	91	67	129	39			
Fluoride (mg/l)	1	0.2	0.1	0.1	0.1	0.2			
r idoride (mg/i)	2	<0.1	0.1	0.1	0.1	0.2			
Magnesium (mg/l)	1	39	8	12	6	6			
wagnesium (mg/i)	2	45	9	11	10	6			
Sulphate (soluble)	1	82	17	15	-	17			
(mg/l)	2	101	21	27	13	18			
Iron (mg/l)	1	-	-	-	-	-			
non (mg/i)	2	<0.5	<0.5	1.4	7.2	<0.5			
Manganese (mg/l)	1	0.075	0.012	0.035	3.19	0.307			
Wanganese (mg/i)	2	0.074	0.015	1.38	2.190	0.251			
Nitrite as NO ₂	1	-	-	-	-	-			
(mg/l)	2	<0.1	<0.1	<0.1	<0.1	0.8			
Ortho-Phosphate	1	5.1	0.8	0.2	-	-			
as PO ₄ (mg/l)	2	<0.1	<0.1	0.2	<0.1	<0.1			
Potassium (mg/l)	1	13	4	15	27	28			
i otassium (mg/l)	2	16	5	9	12	24			
Total Alkalinity	1	523	239	245	310	655			
(CaCO ₃) (mg/l)	2	526	224	241	408	544			
COD (mg/l)	1	26	50	-	-	32			
CCD (IIIg/I)	2	47	<20	<20	<20	31			

⁻ below the limit of detection

Table 22: Inorganic analysis and COD results for samples

Parameter	Period	Sample ID							
Farailletei	renou	101	201	202	203	204	SWUS	SWTP	TPD
BOD (mg/l)	1	NA	NA	NA	NA	NA	NA	NA	NA
BOD (IIIg/I)	2	-	_*	8	-	-	_*	6	-*
Total Coliforms	1	9	9	9300	93	9	230	93	90
(mpn/100 ml)	2	6	4	9330	44	50	41060	20140	1733
Faecal Coliforms	1	-	-	9300	-	-	40	93	90
(mpn/100 ml)	2	-	-	63	-	-	2660	2420	-

⁻ below the limit of detection

Table 23: BOD and bacteriological results for samples.



^{-*}indicates BOD not detected above lower detection limit of 2 mg/l

Sample ID	Period	Depth to Water (mbtoc)*1	Well Casing Elevation (mASD)* ²	Total Depth (mbtoc)* ¹	Groundwater Elevation (mASD)* ²	Purged Volume (L)	Dissolved Oxygen (mg/l)	рН	Redox Potential (mV)	Electrical Conductivity (µS/cm)	Temp.
101	1	11.43	15.92	15.5	4.49	24	3.9	7.21	88	1809	10.5
101	2	10.88	15.92	15.5	5.04	30	3.63	7.25	68	2135	11.5
201	1	4.74	18	19.9	13.26	90	3.1	7.84	82	524	12.5
201	2	4.24	10	19.9	13.76	105	4.72	8.12	43	250	14.6
202	1	11.38	15	14.72	3.62	18	2.6	7.72	10	547	13.5
202	2	11.84	15	14.72	3.16	20	0.70	7.84	-142	759	14.9
203	1	8.45	14.8	14.08	6.35	63	1.42	7.37	77	713	12.2
203	2	6.53	14.0	14.00	8.28	95	1.24	7.95	-112	530	12.3
204	1	3.21	8.44	7.18	5.23	24	1.89	7.68	68	1704	12.5
204	2	2.77	0.44	7.10	5.68	33	0.52	8.17	-72	1848	14.4
014/110	1	NA	NA	NA	NA	NA	2.19	7.71	11	2818	8.6
swus	2	NA	NA	NA	NA	NA	5.7	8.7	54	1159	13.9
outo	1	NA	NA	NA	NA	NA	3.7	6.65	101	>3999	8.5
swtp	2	NA	NA	NA	NA	NA	5.48	8.7	46	1984	14.0
TPD	1	NA	NA	NA	NA	NA	4.98	7.90	91	756	18.5
ואט	2	NA	NA	NA	NA	NA	5.41	8.42	7	1695	23.3

*1 meters below top of casing
*2 meters above site datum
NA = Not Applicable
Table 24: Results of field measurements taken at each sample location.

Summary of Report Conclusions

Water levels during the reporting periods were consistent with previous monitoring data from the site and the inferred groundwater flow pattern remains from west to east across the site.

While there was expected variance in the levels for the different parameters measured, the combined sampling and analysis of groundwater and surface water samples illustrates the interaction between the groundwater and surface water along the site's eastern boundary.

There is considered to be a degree of mixing between groundwater and surface water close to the tidal River Deel estuary. During high tide in the river, the gradient of water flow is expected to be from the river outwards into the surrounding limestone aquifer, reversing under low tide conditions.

There appears to be a negative impact on the groundwater quality adjacent to the river in terms of bacteriological quality, due to a discharge from local authority sewage treatment facility within the WNI site.

This influence on groundwater quality is illustrated by the elevated total and faecal coliforms results for groundwater from well BH202, adjacent to the outfall from this sewage facility.

2.4.3 Bund Test Inventory

Bunds on the site are regularly tested in accordance with Condition 9 of the IPC licence. An inventory of retention facilities for the storage of potentially polluting substances, including bunds, is in *Table 25* below along with dates of previous testing and due dates for future testing.



No.	Description	Last Recorded Test		Test Due	Comment		
1	Nitric Acid/HCL Bund	February, 2009	Pass	February, 2012	-		
2	Main Caustic Storage Bund	October, 2008	Pass	October, 2011	-		
3	RTF Acid Bund	October, 2007	Pass	October, 2010	-		
4	RTF Acid Bund (SS Lined)	October, 2007	Pass	October, 2010	-		
5	Ferric Sulphate Bund (WWTP)	October, 2007	Pass	October, 2010	-		
6	Urea Storage Bund (WWTP)	October, 2007	Pass	October, 2010	-		
7	Phosphoric Acid Bund	N/A	N/A	N/A	Decommissioned		
8	RTF Products	N/A	N/A	N/A	Vessels used to store water and area is remotely connected to the foul sewer network		
9	Effluent Waste Products Tank	N/A	N/A	N/A	Remote containment through connection to foul sewer network		
10	Oil Storage Tanks Bund	May, 2007	Pass	October, 2010	-		
11	DI Plant (Boilers)	N/A	N/A	N/A	Remote containment through connection to foul sewer network		
12	Mix Process Tanks - Process 1	August, 2007	Pass	August, 2010	New bund constructed		
13	Mix Process Tanks - Process 2	December, 2007	Pass	December, 2011	New bund constructed		
14	Mix Process Tanks - Process 2X	December, 2007	Pass	December, 2011	New bund constructed		
15	Mix Process Tanks - Process 3	Andret 2007		August, 2010	New bund constructed		

Table 25: Retention facilities on site for the storage of potentially polluting substances.

2.4.4 Closure Restoration and Aftercare Management Plan (CRAMP)

In accordance with Condition 14 of the IPPC licence, the CRAMP was reviewed taking into account any changes in infrastructure, productivity and waste disposal costs which may have occurred during the calendar year of 2009.

A summary of the review is as follows:

There were no structural changes or process changes on the site during 2009.

One new piece of equipment (chemical distribution system) was installed and no existing equipment was decommissioned during 2009.



The following cost updates were included in the CRAMP for the calendar year 2009:

- Quantities and costs for the removal of non-hazardous waste were reviewed and revised to reflect realistic current rates;
- An asbestos survey carried out the reporting period provided the basis for a more accurate estimate for asbestos removal and disposal.
- An estimate for the removal of waste oil was removed as it is considered that
 waste oil is included in the costs associated with hazardous waste disposal.
- Cost for the removal and disposal of fluorescent tubes was revised to reflect current pricing.

From the revised plan it was estimated that, in the very unlikely event of site closure involving complete cessation of all production activities by Wyeth Nutritionals, an allowance of €2, 079,182 would be required to confirm the site to an environmentally safe (inert) condition.

The CRAMP is reviewed annually.

2.4.5 Environmental Liabilities Risk Assessment (ELRA)

In accordance with Condition 15 of the IPPC licence, the ELRA was reviewed to reflect changes on the site during 2009.

There were no significant structural changes or process changes to the site nor any significant changes to abatement systems or other environmental protection systems took place. On this basis, no new risks were identified.

The existing risks were re-assessed and several changes were made both to occurrence ratings and severity ratings. These changes were made in order to increase consistency between risks. For example, for similar types of environmental impacts, the same severity rating should be given. Also, ratings were compared for different risks, for example, various hazardous chemical/fuel spills related risks had the same severity rating as dust/odour risks. However, a dust/odour nuisance event would have a much lower impact on the environment than would a chemical or fuel spill and so the severity risk should be lower. These changes did not result in a shift in any risk level so no additional environmental protection measures are required.

Other minor changes were made to the document to reflect the site's change of ownership, non-compliances that occurred during the reporting period and groundwater monitoring results which were added to the document.

After considering the changes outlined above no changes to the current financial provisions were deemed necessary.

2.4.6 Tank and Pipeline testing and Inspection Report

Following surveys of the foul sewer network during the years 2004 to 2006 inclusive, it was decided that from 2007 on, future surveys should not only include a CCTV survey but also include a hydrostatic test.

The underground foul sewer network on the site consists of several hundred meters of pipework, including manholes and floor gullies. However, there are only short windows of opportunity throughout the year when breaks in production allows for such work to be carried out safely and hygienically. With this in mind, it was decided to break the network into three distinct areas, with one area scheduled for inspection and testing each year over a three-year rotation.



During the July-August plant shutdown of the reporting period, additional outstanding remediation work was completed on section 2 of the network.

More work has to be completed on areas of the network in section 2 identified during the survey and it is planned to continue this during 2010.



Appendix 1





 $|\ PRTR\#: P0395\ |\ Facility\ Name: AHP\ Manufacturing\ B.V.\ t/a\ Wyeth\ Nutritionals\ Ireland\ |\ Fliename: P0395_2009\ xls\ |\ Return\ Year: 2009\ |$

23/03/2010 16:29

AER Returns Worksheet

	Version 1.1.10					
REFERENCE YEAR 2009						
	,					
1. FACILITY IDENTIFICATION						
Parent Company Name	AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland					
Facility Name	AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland					
PRTR Identification Number	P0395					
Licence Number	P0395-02					

Waste or IPPC Classes of Activity

vvaste or IFFC classes of Activity		
No.	class_name	
	The treatment and processing of milk, the quantity of milk received	
	being greater than 200 tonnes per day (average value on a yearly	
7.2.1	basis).	
	The operation of combustion installations with a rated thermal input	
2.1	egual to or greater than 50MW	

Address 1	Askeaton
Address 2	County Limerick
Address 3	
Address 4	
Country	Ireland
Coordinates of Location	
River Basin District	
NACE Code	
	Operation of dairies and cheese making
AER Returns Contact Name	
AER Returns Contact Email Address	
AER Returns Contact Position	
AER Returns Contact Telephone Number	
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	
Production Volume Units	
Number of Installations	
Number of Operating Hours in Year	
Number of Employees	
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
8(c)	Treatment and processing of milk
1(c)	Thermal power stations and other combustion installations

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

3. SULVENTS REGULATIONS (S.I. NO. 343 OT 2002)
Is it applicable? No
Have you been granted an exemption ? No
If applicable which activity class applies (as per
Schedule 2 of the regulations) ?
Is the reduction scheme compliance route being
used?



Section A above)

4.1 RELEASES TO AIR PRTR#: P0395 | Facility Name: AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland | Filename: P0395_2009.xls | Return Year: 2009 | 23/03/2010 16:29 28 SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS ADD EMISSION POINT A (Accidental) (Fugitive) No. Annex II Designation or Description Emission Point 1 Emission Point 2 Emission Point 3 Emission Point 4 0.0 0.0 0.0 0.0 OTH ETS ISO 10849 ISO 12039 17766.0 0.0 0.0 0.0 Carbon monoxide (CO) 373.5 8.87 18148.37 Carbon dioxide (CO2) Nitrogen oxides (NOx/NO2) 0.0 42805000.0 42805000.0 0.0 0.0 43679.0 891.42 295.37 44865.79 ADD NEW ROW DELETE ROW * * 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 ADD EMISSION POINT No. Annex II ADD NEW ROW DELETE ROW* 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 ADD EMISSION POINT (Accidental) F (Fugitive) M/C/E Method Code Pollutant No. 14006.0 14188.0 ADD NEW ROW DELETE ROW * * 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 left methane (CH4) emission to the environment under Tota(a) KGY for Section A: Sector specific PRITA pollutaris above. Please complete the table below: Landfill: AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland Please enter summary data on the quantities of methane flared and / or utilised Designation or Facility Total Capacity T (Total) kg/Year m3 per hour Total estimated methane generation (as pe site model I.O (Total Flaring Capacity)
I.O (Total Utilising Capacity) Methane flared Methane utilised in engine/s Net methane emission (as reported in



4.2 RELEASES TO WATERS

ADD NEW ROW DELETE ROW *

 $| PRTR\#: P0395 | Facility Name: AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland | Filename: P0395_2009.xls | Return Year: 2009 | PRTR\#: P0395_2009.xls | Return Year: 2009 | PRTR\#: P0395_2009.xls | Return Year: 2009 | PRTR#: P0395_2009.xls | P0395_$

23/03/2010 16:29

SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS

SECTION AT SECTOR SI EGITICITATIVI DEEDTANTS				indicine monitorin	g or acornivadirace water or gr	ounawater, conducte	a as part	or your inconce requirer	nence, enouid not be eabl	HILLER GRIDGE MERCY FIXTH
	RELEASES TO WATERS									
		POLLUTANT			ADD EMISSION POINT		QUANTITY			
					Method Used	SW1		`	`	
No	o. 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
					Colorimetric-Hach Method					
12		Total nitrogen	M	PER	1007		4702.0	4702.0	0.0	0.0
					Colorimetric-Hach Method					
13		Total phosphorus	M	PER	8190		210.0	210.0	0.0	0.0
		* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button								
ADD NEW ROW	DELETE ROW*									

	RELEASES TO WATERS							
POLLUTANT					ADD EMISSION POINT		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

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

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

	RELEASES TO WATERS							
POLLUTANT					ADD EMISSION POINT		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
				Colorimetric-Hach Method				
301	Acetate	M	PER	10031	864.0	864.0	0.0	0.0
303	BOD	M	PER	5-day BOD test	9183.0	9183.0	0.0	0.0
314	Fats, Oils and Greases	E	Estimate		7230.0	0.0	0.0	0.0
240	Suspended Solids	M	PER	Standard method	12214.0	12214.0	0.0	0.0



4.3 RELEASES TO WASTEWATER OR SEWER

| PRTR# : P0395 | Facility Name : AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland | Filenan

23/03/2010 16:29

SECTION A: PRTR POLLUTANTS

OFFSITE TRAM	OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER											
POLLUTANT			METHO	D	ADD EMISSION POINT	QUANTITY						
			Method Used									
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accid	dental) KG/Year	F (Fugitive) KG/Year			
					0.0		0.0	0.0	0.0			
ADD NEW ROW DELETE ROW *	* Select a row by double-clicking on the Pollutant Name (Colum	n B) then clic	k the delete button									

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

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER										
P(METHOD			ADD EMISSION POINT	QUANTITY					
		Method Used								
Pollutant No.	Name	M/C/E	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		



4.4 RELEASES TO LAND

| PRTR# : P0395 | Facility Name : AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland | Filename : P0395_2009.xls | Return Year : 2009 |

23/03/2010 16:29

SECTION A: PRTR POLLUTANTS

	RELEASES TO LAND						
P	OLLUTANT		METHO	ID .	ADD EMISSION POINT		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
ADD NEW ROW DELETE ROW *	* Select a row by double-clicking on the Pollutant Name (Colum	n B) then clic	k the delete button				

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

RELEASES TO LAND									
POLLUTANT		METHOD			ADD EMISSION POINT		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		



Within the Country 13 07 03

9 569 Waste nil

М

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE | PRTR# : P0395 | Facility Name : AHP Manufacturing B.V. Da Wyeth Nutribonals Ireland | Filename : P0395_2009.sts | Return Year : 2009 26/03/2010 00:4 Method Used European Waste Transfer Destination Description of Waste Parkwest Ind.
Est., "Dublin,12 Ireland
Ballykeefe Townland, Dock
Road, Limerick., "Treland
Ballykeefe Townland, Dock
Road, Limerick., "Ireland
Ballykeefe Townland, Dock
Road, Limerick., "Ireland Weighed Within the Country 20 01 01 17.87 Paper М Onsite in Ireland Services Ltd., W0062-02 Within the Country 20 01 01 544.23 Cardboard and plastic packaging R3 Weighed Veolia Environmental
Onsite in Ireland Services Ltd., W0082-02
Veolia Environmental Within the Country 20 01 01 50.95 Plastic Packaging R3 Weighed Veolia Emironmental
Onsite in Ireland Services Ltd., W0082-02
Veolia Emironmental
Onsite in Ireland Services Ltd., W0082-02
Veolia Emironmental Ballykeefe Townland,Dock Road,Limerick,...Ireland Ballykeefe Townland,Dock Road,Limerick,...Ireland Ballykeefe Townland,Dock R3 м Within the Country 20 01 01 No 27.9 Cardboard Weighed Within the Country 20 01 40 721 88 Metal R4 м Weighed Veolia Emironmental
Onsite in Ireland Services Ltd., W0062-02
Molaisin Compost Ltd., WP Within the Country 15 01 07 19.86 Glass Packaging Weighed Onsite in Ireland 66/08 One51 ES Metals (irl.) Ltd.
T/A Hegarity Metals (WP)05Onsite in Ireland 04 Mr. Joeseph Waddock,W.P. Within the Country 02 05 02 No 3133.44 Sludge R3 м Weighed Wateriod, Jreland
Ballysimon
Road, Limerick, Jreland
Killamaster, Co.
Carlow, Jreland
Killamaster, Co.
Carlow, Jreland
Ballyseefic Townland, Dock
Road, Limerick, Jreland
Kickolgan, Co.
Cashway, Jreland
Kickolgan, Co.
Coom, Carignawar/Glemille
Co. Conk, Jreland
Ballyseefic Townland, Dock
Road, Limerick, Jreland
Kickolgan, Co.
Ballyskeefic Townland, Dock
Road, Limerick, Jreland
Kindeline Co.
Conk, Jreland
Ballyskeefic Townland, Dock
Road, Limerick, Jreland Within the Country 20 01 40 R4 Mr. Joeseph Waddock,W Onsite in Ireland 02/08 Veolia Environmental Onsite in Ireland Services Ltd.,W0082-02 156.16 Waste liquid product including packaging Within the Country 02 05 99 Weighed Within the Country 20 03 01 No 659.47 General food and office waste D1 м Weighed Veolia Environmental
Onsite in Ireland Services Ltd.,W0082-02 D1 2.08 Used cooking oil R1 Onsite in Ireland Frylite Ltd., WR/77 Within the Country 20 01 25 No Weighed McGill Environmental
Onsite in Ireland Systems, W0180-01
Veolia Environmental 116.26 Waste vegetable oil Within the Country 02 03 04 R3 Weighed Onsite in Ireland Services Ltd., W0082-02 Veolia Environmental Onsite in Ireland Services Ltd., W0082-02 178.4 C&D waste R3 No м Within the Country 19 09 01 Weighed Within the Country 20 01 38 No 6.18 Timber R3 Weighed Irish Lamp Recycling,WFP-KE-08-0348-01,Woodstock Ind. Est. Ashy,Co. Kildare, Jreland Irish Lamp Recycling,WFP-KE-08-0348-01,Woodstock Ind. Est. Ashy,Co. Kildare, Jreland Woodstock Ind. Est., Athy, Co. Kildare, , Ireland Irish Lamp Recycling
Onsite in Ireland Ltd.,WFP-KE-08-0348-01 Within the Country 20 01 35 Yes 0.002685 WEEE R4 м Weighed Irish Lamp Recycling
Onsite in Ireland Ltd.,WFP-KE-08-0348-01 Within the Country 20 01 21 Yes 0.000554 Fluorescent lamps R5 Weighed Woodstock Ind. Est. Athy,Co. Kildare, Ireland Irish Lamp Recycling
Onsite in Ireland Ltd.,WFP-KE-08-0348-01 0.00009 Batteries R11 Within the Country 20 01 33 Yes м Weighed , 7095037,K rombacher Strabe 42- Krombacher Strabe 42-46,57223 Kreuztal, German 46,57223 Kreuztal, Ger Smithstown Ind. Est., Shannon, Co ENVA Ireland Ltd., W0041-1 Clare, Jreland To Other Countries 07 01 04 2.079 Mixed solvents Umweltservice,E97095037,K rombacher Strabe 42-46,57223,Kreuztal, ,German Smithstown In-Est., Shannon, ENVA Ireland Ltd., W0041-1 Clare_, Ireland To Other Countries 15 01 10 Yes 0.082 Used drums Weighed Abroad 1,Smithstown Ind. Est.,Shannon,Co. Clare, Jreland ENVA Irl. Ltd.,W0184-1,Clonminam Ind. Est., Shannon,
Offsite in Ireland ENVA Ireland Ltd., W0041-1 Clare, , Ireland Est.,Shannon,Co. Clare,,Ireland Within the Country 15 01 10 2.04 Used drums D9 Yes Weighed Clonminam Ind. Est. Portlaoise Co. Laoise, Jreland Within the Country 16 05 04 0.016 Aerosol cans 1,Smithstown Ind. Est.,Shannon,Co. Clare, Jreland Lindenschmidt KG Umweltserrice,E97095037,K rombacher Strabe 42-46,57223,Kreuztal, "German Est., Shannon, Co Onsite in Ireland ENVA Ireland Ltd., W0041-1 Clare, Jreland Est.,Shannon,Co. Clare,,Ireland Within the Country 16 05 06 0.223 Waste laboratory chemicals Smithstown Ind. Est., Shannon, Co ENVA Ireland Ltd., W0041-1 Clare...Ireland To Other Countries 16 05 06 2.586 Waste laboratory chemicals Weighed y Lindenschmidt KG Urrweltservice,E97095037, K rombacher Strabe 42-Krombacher Strabe 42-K6,57223, Kreuztal, "German 46,57223, Kreuztal, "German Est., Shannon, ENVA Ireland Ltd., W0041-1 Clare, Jreland To Other Countries 16 05 07 Weighed 0.008 Waste water treatment chemicals y ENVA iri. Ltd.,W0041-1,Smithstown Ind. Est.,Shannon,Co. Clare,, Jreland Est.,Shannon,Co. Clare,,Ireland Within the Country 16 05 07 1.101 Waste water treatment chemicals Offsite in Ireland ENVA Ireland Ltd.,W0041-1 D9 Est., Shannon, ENVA Ireland Ltd., W0041-1 Clare, , Ireland To Other Countries 20 81 25 4.181 Edible oil and fat Lindenschmidt KG Umweltsenice E97095037 ,K rombacher Strabe 42-46.57223,Kreuztal, "German 46.57223,Kreuztal, "Ger Smithstown Ind. Est., Shannon, Co ENVA Ireland Ltd., W0041-1 Clare, Ireland Weighed To Other Countries 20 01 26 3.382 Vegetable fat R1 y Sterile Technologies Ireland Ltd ;W0055-02;Units 420-430 Beech Road;Western Ind. Ind. Est, Naas Road Dublin 12, ;Ireland 12, ;Ireland 12, ;Ireland Unit 420-430 Beech Road, Western Ind.
Sterile Technologies Ireland Est., Naas Road Dublin
Utd., W0055-02 12, Jreland Within the Country 18 01 03 0.012 Sharps D9 Weighed Within the Country 15 01 02 No 0.001 Used drums D9 Weighed Onsite in Ireland ENVA Ireland Ltd., W0041-1 To Other Countries 16 05 09 No 7.856 Vitamins and minerals R1 Weighed FNVA Ireland Ltd. W0041-1 Offsite in Ireland ENVA Ireland Ltd., W0041-1 Clare, Ireland Smithstown Ind. Within the Country 16 05 09 0.55 Vitamins and minerals Est., Shannon, Co ENVA Ireland Ltd., W0041-1 Clare, Jreland To Other Countries 20 01 30 Lindenschmidt KG
Umweltservice,E97095037,K
rombacher Strabe 42Krombacher Strabe 4246,57223,Kreuztal, German 46,57223,Kreuztal, German EnvA Ireland Ltd., W0041-1 Clare, , Ireland To Other Countries 06 02 05 Yes 0.843 Waste chemical Weighed Ahroad y Lindenschmidt KG Umweltserdere (£97095037 K rombacher Strabe 42-Krombacher Strabe 42-K6,57223 Kreuztal, "German 46,57223 Kreuztal, "German Est.,Shannon,Co ENVA Ireland Ltd.,W0041-1 Clare,, Ireland To Other Countries 08 03 12 indenschmidt KG Jmweltservice,E97095037,K rombacher Strabe 42- Krombacher Strabe 42-46,57223,Kreuztal, "German 46,57223,Kreuztal, "Germa Smithstown Ind. Est., Shannon, Co ENVA Ireland Ltd., W0041-1 Clare, Ireland To Other Countries 08 04 09 0.012 Waste adhesive Weighed y Lindenschmidt KG Umweltsenrice,E97096037 K rombacher Strabe 42-Krombacher Strabe 42-46,57223 Kreuztal , German 46,57223 Kreuztal , German Est., Shannon, ENVA Ireland Ltd., W0041-1 Clare, Jreland To Other Countries 13 01 13 0.298 Waste oil Yes Weighed y Lindenschmidt KG Umweltsenice,E97095037,K rombacher Strabe 42-Krombacher Strabe 42-K6,57223,Kreuztal, "German 46,57223,Kreuztal, "German Est.,Shannon,Co ENVA Ireland Ltd.,W0041-1 Clare, ,Ireland To Other Countries 16 05 08 Y NVA II. Ltd ,W0184-1,Clonminam Ind. Est. Portfacise, Co. Laoise, ,Ireland ENVA III. Ltd ,W0184-1,Clonminam Ind. Est. Portfacise, Co. Laoise , Ireland ENVA III. Ltd ,W0184-1,Clonminam Ind. Est. Portfacise, Co. Laoise , Ireland Est. Portfacise, Co. Laoise , Ireland Clonminam Ind. Est. ,Portlaoise,Co. Laoise,, ,Ireland Est., Shannon, Co Offsite in Ireland ENVA Ireland Ltd., W0041-1 Clare, Jreland Within the Country 13 02 08 8.039 Waste oil Smithstown Ind. Est.,Shannon,Co Offsite in Ireland ENVA Ireland Ltd.,W0041-1 Clare,, Ireland Within the Country 13 08 02 fi 111 Waste nil Clonminam Ind. Est.,Portlaoise.Co Offsite in Ireland ENVA Ireland Ltd., W0041-1 Clare., Ireland