ANNUAL ENVIRONMENTAL REPORT 2008

Wyeth

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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 outlines the environmental performance of Wyeth Nutritionals Ireland activity during 2008 and also sets out a programme of work to be completed during 2009.

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 2008 are included Appendix 1.

_____
Brian Shiel
EHS Manager

2.0 REPORT

2.1 INTRODUCTION

This is the third 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 *AER Guidance Note* issued by the Environmental Protection Agency (EPA) and summarises the company's environmental performance from January 1, 2008 to December 31, 2008.

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 added with amendment A made during 2006 and Technical Amendment B made 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 550 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 via an evaporator to dryers. The evaporator and dryer increases the solids content producing an agglomerated powder. Steps of this process are shown in *Fig. 1* below.

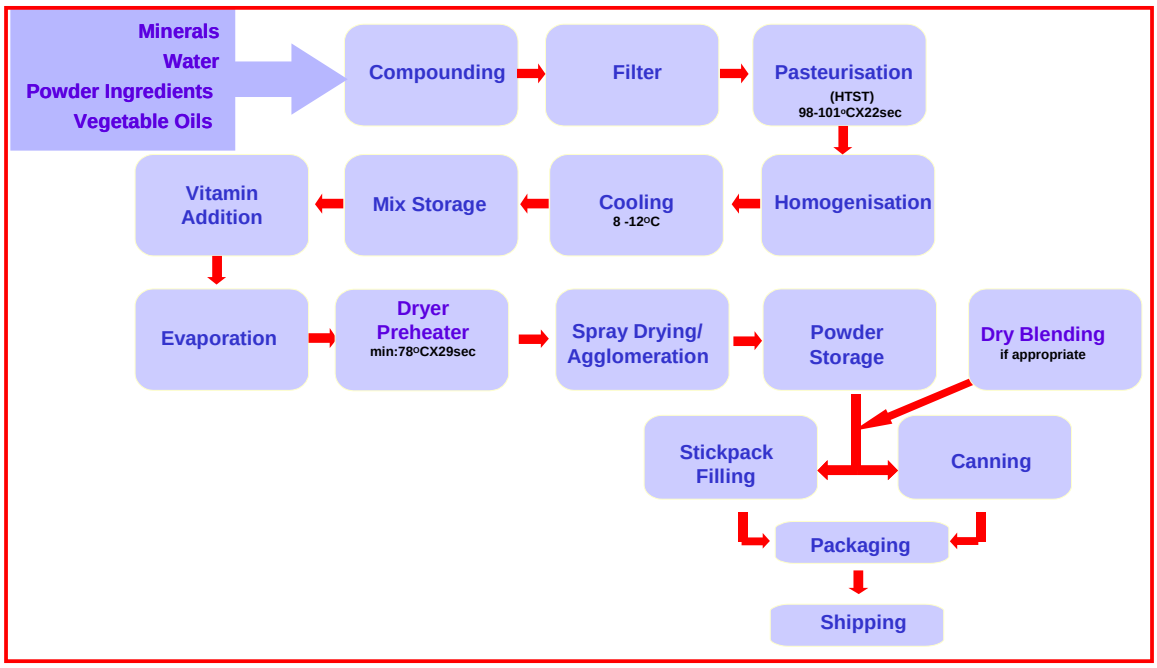

Figure 1: Powder production process

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 blend 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.

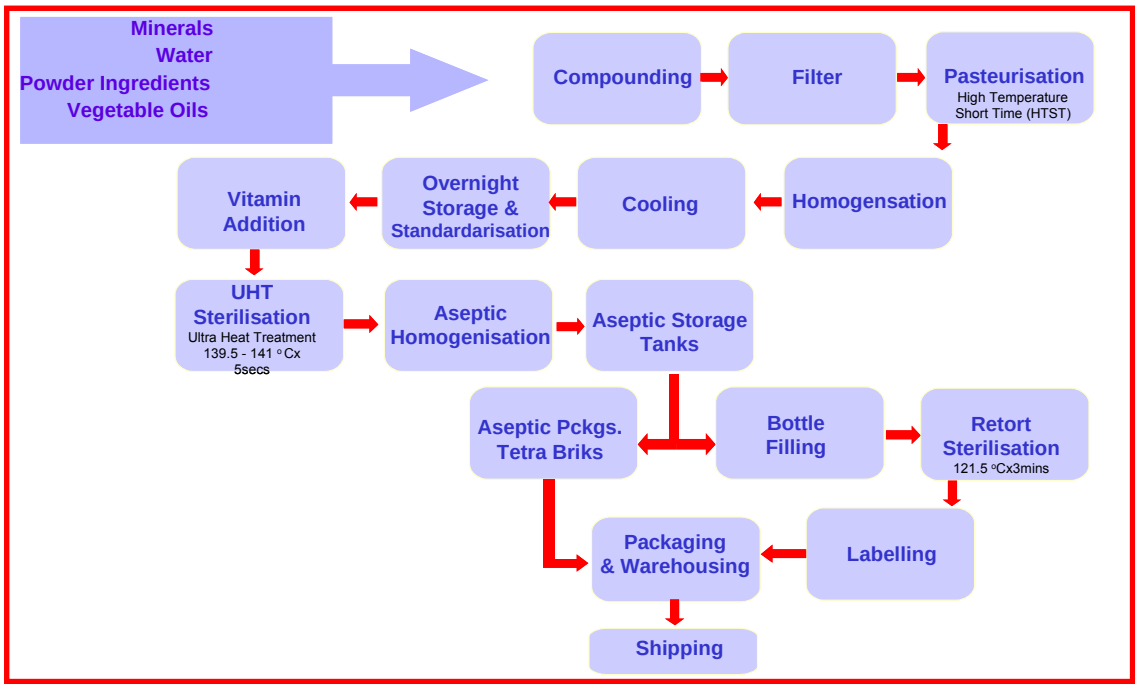

Figure 2: Liquid production process

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 generate electricity and raise steam from natural gas.

2.1.6 Environmental Policy

Wyeth

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: _____ Date: 05/07/06

Jim Shorten
Managing Director

The above elements are in line with the Wyeth Corporate EHS Policy, which can be viewed at:
http://www.wyeth.com/aboutwyeth/citizenship/ehs/governance?rid=/wyeth_html/home/aboutwyeth/corporate_citizenship/ehs/governance/ehspolicy.html.

2.1.7 Environmental Management Organisation

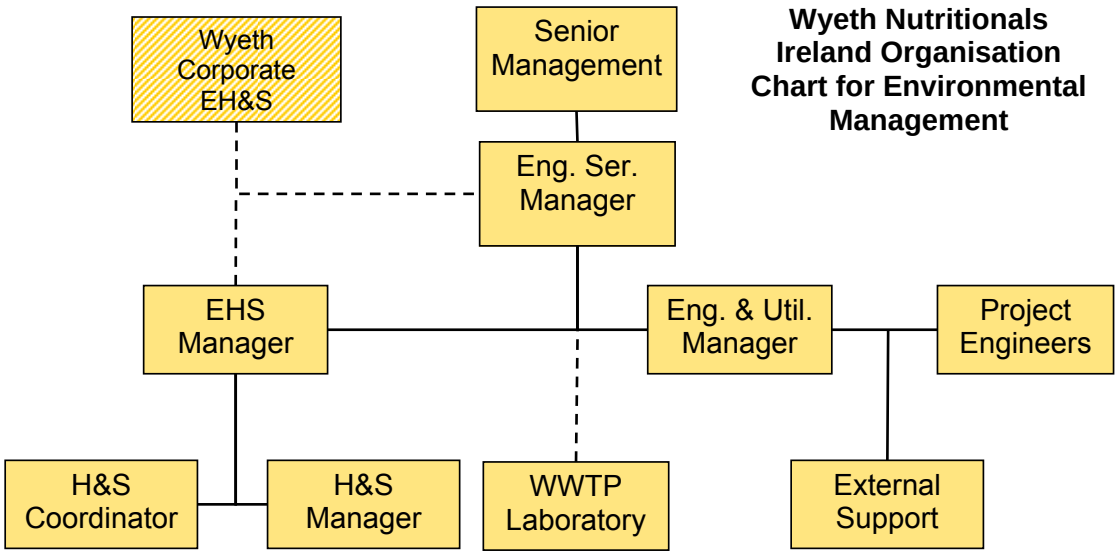

Figure 3: Organisation chart for environmental management

2.2 SUMMARY INFORMATION

2.2.1 Comparative Analyses

Data for emissions to both water (effluent) and atmosphere in 2008 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).

Parameter	Year							Emission Limit Value
	2002	2003	2004	2005	2006	2007	2008	
Avg. Volume (daily) (m^3)	1423	1409	1368	1730	1868	1875	2017	2800
pH	8.2	8.4	8.3	7.9	7.9	7.9	7.9	6-9

Table 1: Average daily value of physical parameters since 2002

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

*[1] no data available
*[2] 10mg/l limit of detection was used to estimate result.
Table 2: Summary of annual mass emissions to surface water since 2002.

The above information is depicted graphically in *Fig. 4*

In addition to the above results, Wyeth provided a sample of its final effluent for compliance toxicity testing. In November of the reporting period, samples were sent to a nominated laboratory. A summary of the test report is in Section 2.4.3 and the resultant toxicity, expressed as the number of toxicity units (TU) for the most sensitive species, is in *Table 3* below.

Toxicity	Emission Limit Value
<2.2 TU	5 TU

Table 3: Annual toxicity test result for 2008.

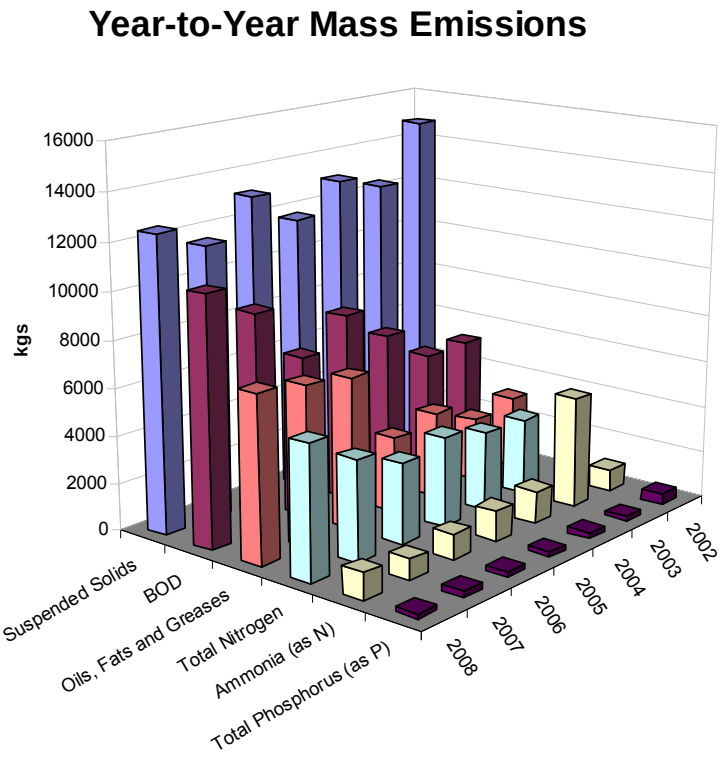

Figure 4: Effluent mass emissions to surface water since 2002 (7 years).

Comparing the results for 2008 with those of previous years shows no significant change in the physical parameters while BOD, oils, fats & greases, and total nitrogen have increased, suspended solids, ammonia and total phosphorus have reduced. These changes were due to an increase in production with a corresponding increase in the volume of waste water discharged.

All results for oils, fats and greases during 2006, 2007 and 2008 were below the level of detection of 10mg/l, which was used to estimate the emissions for those years.

There was one non-compliance for emissions to water that occurred during the 24-hour period between January 23rd – 24th of the reporting period. This non-compliance was due to an exceedence of the emission limit value for total nitrogen (42 mg/l versus an emission limit value (ELV) of 15 mg/l).

The cause of the non-compliance was investigated and corrective actions have been put in place to prevent a re-occurrence.

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

Parameter	Mass Emissions (kg x 10^3)						
	2002	2003	2004	2005	2006	2007	2008
NOx (as NO_2)	286.97	199.26	91.16	52.45	47.11	34.88*[3]	41.00
Total Particulates	61.23	9.20	*	17.16	33.96	54.63	50.98
CO	6.13	4.17	0.26	15.88	*	19.19*[1]	18.27*[1]

* no data available
*[1] Measured boiler emissions combined with estimated CHP Plant emissions
*[3] Corrected, quantity was over reported in the 2007 report.

Table 4: Summary of annual mass emissions to atmosphere since 2002.

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

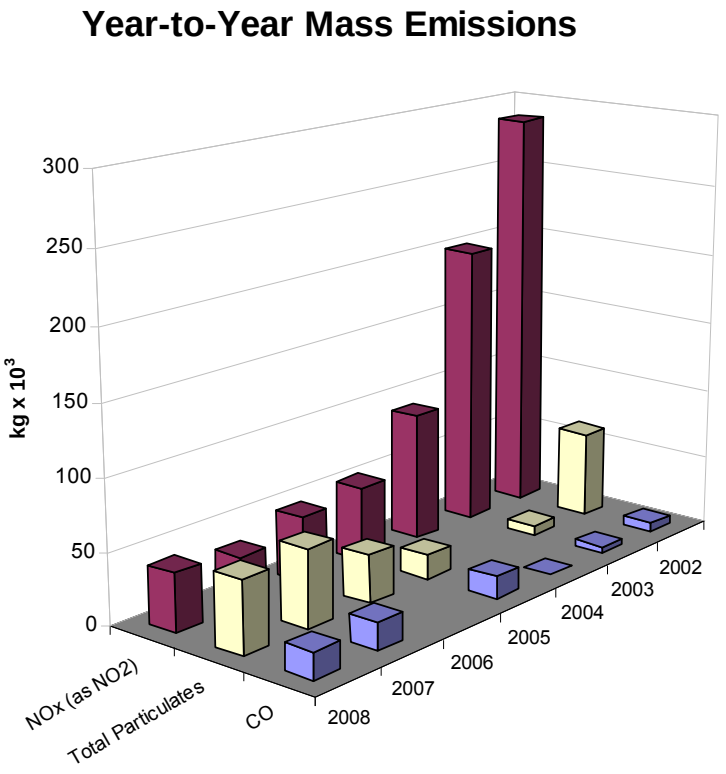

Figure 5: Mass emissions to atmosphere since 2002 (7 years).

Comparing NOx emissions for 2008 with previous years shows an increase over 2007 emissions but is significantly lower than the previous years reported. This can be attributed to increased production output with an increase in the operating hours of the on-site Combined Heat and Power Plant.

Particulate emissions are slightly higher than those measured during 2007 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 (60.86 mg/Nm^3 versus an ELV of 50 mg/Nm^3) and was detected during routine emission monitoring on one of the process exhaust outlets during November.

2.2.4 Waste Management

Non-Hazardous Waste

A total of 5948 tonnes of non-hazardous waste was generated from normal site operations during the reporting period. Approximately 83% (4935 tonnes) was sent off site for recovery and the remaining 17% (1013 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 5-7.*

EWC Code						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	0	1	N	Paper	16.43	R3	(b) Dublin	DMG Services
2	0	0	1	0	1	N	Cardboard and plastic packaging	453.99	R3	(b) Limerick	Veolia Environmental Services Ltd.
2	0	0	1	0	1	N	Plastic packaging	63.50	R3	(b) Limerick	Veolia Environmental Services Ltd.
2	0	0	1	0	1	N	Cardboard	49.06	R3	(b) Limerick	Veolia Environmental Services Ltd.
2	0	0	1	4	0	N	Metal	450.25	R4	(b) Limerick	Veolia Environmental Services Ltd.
1	5	0	1	0	7	N	Glass Packaging	7.00	R5	(b) Laois	Midland Scrap Metal
0	2	0	5	0	2	N	Sludge	3347.9	R3	(b) Waterford	Molaisin Compost Ltd.
2	0	0	1	4	0	N	Metal	298.08	R4	(b) Limerick	Hegarty Metal Recycling
0	2	0	5	9	9	N	Waste liquid product incl. packaging	247.04	R3	(b) Carlow	Mr. Joeseph Waddock
2	0	0	3	0	1	N	General food and office waste	506.14	D1	(b) Limerick	Veolia Environmental Services Ltd.
2	0	0	3	0	1	N	Waste product and raw materials	506.92	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.

Table 5: AER Summary of non-hazardous waste generated on site during 2008

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/LK/051/07d	Limerick Co. Council	31/10/07
Hegarty Metal Recycling	WCP/LK/08/859/01	Limerick Co. Council	02/03/09
Frylite (Ireland) Ltd.	WCP/LK/174/07c	Limerick Co. Council	20/06/07
Agrilife Ltd.	WCP/LK/128/08d	Limerick Co. Council	05/08/08
Johnston Logistics Ltd.	WCP/LK/056/07c	Limerick Co. Council	30/10/07

Table 6: Waste Transporter permit details

Waste Contractor	Permit / Licence Details	Issuing Authority	Issue/Review Date
DMG Services T/A Shred-It	WP98102	Dublin City Council	03/07/06
Veolia Environmental Services Ltd.	82-2	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

Table 7: Waste Contractor permit details

Hazardous Waste

During the reporting period a total of 28.8 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 8-10*.

EWC Code						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	Y	WEEE	2.638	R4	(b) Kildare	Irish Lamp Recycling
2	0	0	1	2	1	Y	Fluorescent lamps	0.376	R5	(b) Kildare	Irish Lamp Recycling
2	0	0	1	3	3	Y	Batteries	0.193	R11	(b) Kildare	Irish Lamp Recycling
0	7	0	1	0	4	Y	Mixed solvents	1.628	R1	(c) Germany	Enva
0	8	0	1	1	1	Y	Waste lacquer	0.480	R1	(c) Germany	Enva
1	3	0	8	9	9	Y	Waste oil and wipes	2.652	R1	(c) Germany	Enva
1	5	0	1	1	0	Y	Used drums	0.801	R1,R3,R4	(b) Shannon	Enva
1	5	0	2	0	2	Y	Used filters and wipes	0.359	R1	(c) Germany	Enva
1	6	0	5	0	4	Y	Aerosol cans	0.040	D10	(c) Germany	Enva
1	6	0	5	0	6	Y	Waste laboratory chemicals	0.884	R1, D9, D10	(c) Germany	Enva
1	6	0	5	0	7	Y	Waste water treatment chemicals	2.000	R1	(c) Germany	Enva
2	0	0	1	2	5	N	Edible oil and fat	11.220	R1	(c) Germany	Enva
2	0	0	1	2	6	Y	Vegetable fat	5.603	R1	(c) Germany	Enva
1	8	0	1	0	3	Y	Sharps	0.014	D9	(b) Dublin	Sterile Technologies Ireland.

Table 8: Summary of hazardous waste generated on site during 2007

Waste Receiver	Permit / Licence Details	Issuing Authority	Issue Date
Irish Lamp Recycling	WFP-KE-08-0348-01	Kildare Co. Council	25/02/09
Enva	41-1	EPA	05/05/00
Enva	184-1	EPA	16/01/04
Sterile Technologies Ireland Ltd.	55-2	EPA	01/08/03

Table 9: Waste Broker permit details

Waste Transporter	Permit / Licence Details	Issuing Authority	Issue Date
Johnston Logistics Ltd.	WCP/LK/056/07c	Limerick Co. Council	30/10/07
Irish Lamp Recycling	WCP/LK/057/06c	Limerick Co. Council	15/02/06
Enva Ireland Ltd.	WCP/LK/052/08d	Limerick Co. Council	23/05/08
Transafe Ltd.	WCP/LK/007/02b	Limerick Co. Council	17/10/07
Tradaree Transport	WCP/LK/405/06b	Limerick Co. Council	25/09/06

Table 10: Waste Transporter permit details

2.2.5 Surface Water Discharge Monitoring

Surface water discharged from the site is monitored weekly – *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 NH_3 and Total No with the highest, lowest and average pH and concentrations recorded is in *Tables 11,* below.

pH			**BOD** (mg/l)		**Total NH_3** (mg/l)		**Total N** (mg/l)	
High	**Low**	**Avg.**	**High**	**Avg.**	**High**	**Avg.**	**High**	**Avg.**
8.6	7.4	7.9	19	6.73	0.31	0.12	2.5	1.06

Table 11: Summary of surface water pH, BOD, Total NH_3 and Total N.

There was one high result (19 mg/l) for BOD on March 26th of the reporting period, which exceeded the action limit. The cause of this high concentration was investigated but nothing was found that may have caused the increase. In the next sample taken five days later on March 31st the BOD concentration was recorded at 9 mg/l.

2.2.6 Summary of Agency Monitoring and Enforcement

EPA representatives paid a number of visits to Wyeth Nutritionals during 2008. The purposes of each visit are given in *Table 12* below.

Visit Date	Purpose
February 8th	To sample emissions to atmosphere
April 15th	To sample emissions to water
May 16th	To investigate a spill incident
November 19th	To sample emissions to water

Table 12: Summary of visits to WNI by the Agency (EPA) during 2008.

For emissions to water monitoring, there were significant differences in results for three parameters (BOD, Total nitrogen and Suspended solids) between the monitoring carried out be the site and the monitoring carried out by the Agency. The causes of the differences are currently being investigated.

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 13*.

Energy Source	Consumption
Natural Gas	237.107 MWh
Electricity	38,089 MWh

Table 13: Energy consumption summary for 2006.

Electricity

There was an increase of 7% in electricity consumption for the site when compared with 2007 (due to increased production output). The site's annual electricity consumption since 2002 is shown in *Fig. 6*.

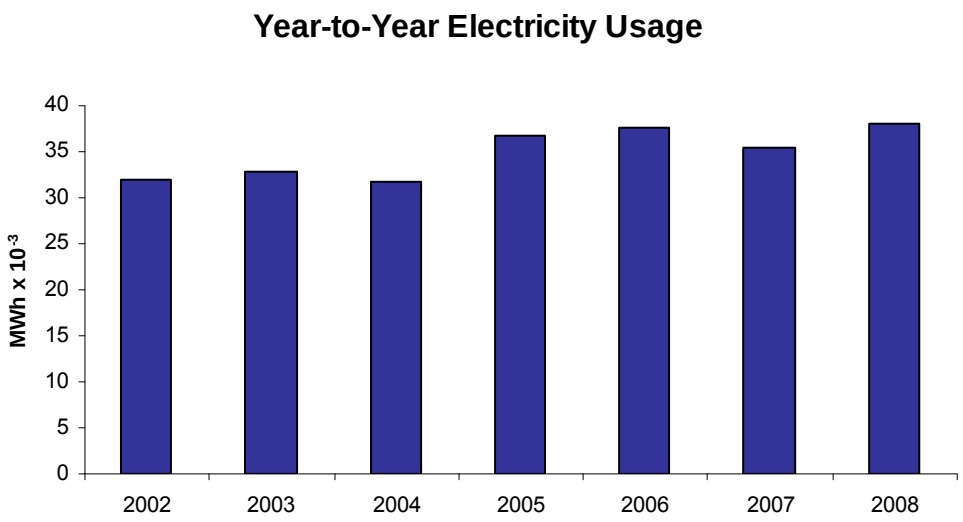

Figure 6: Annual electricity consumption since 2002 (7 years)

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 an increase in consumption of 4.7% (due to increased production output) over 2007.

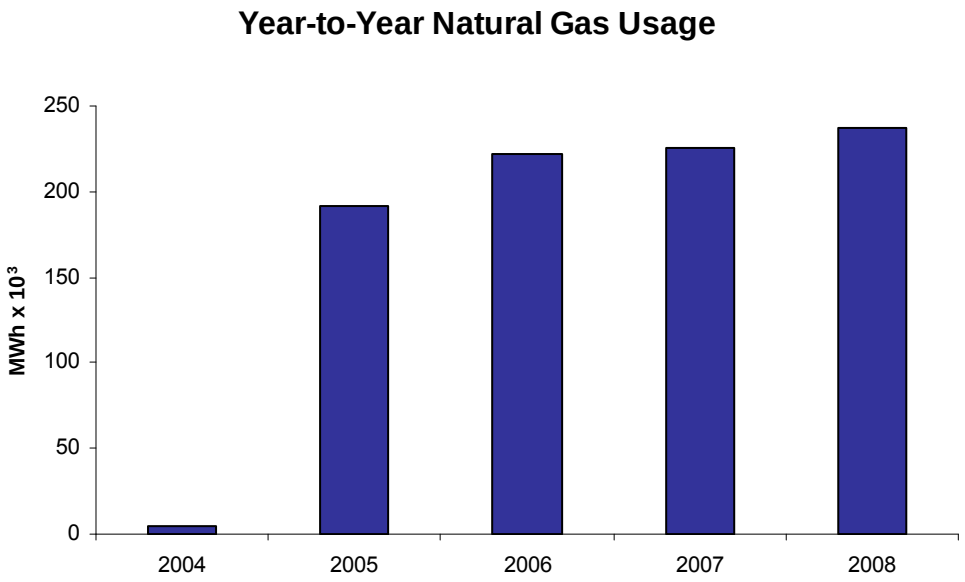

Figure 7: Annual natural gas consumption since 2004 (5 years)

Water

Water for site operations is abstracted from the River Deel upstream from Wyeth 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 954,033 m^3 of water was used on site during the reporting period, a decrease of 7.1% when compared with 2007. Annual water usage since 2003 is shown in *Fig. 8*.

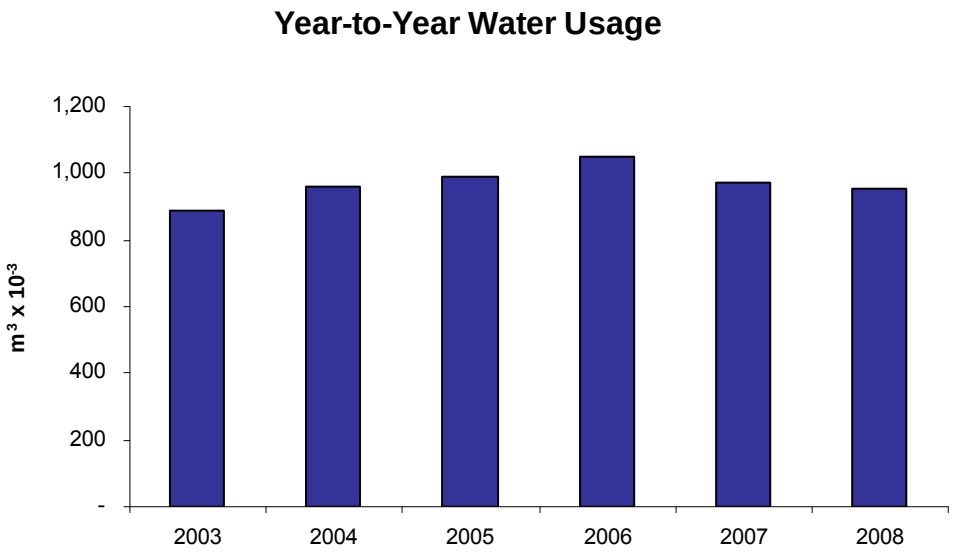

Figure 8: Annual water usage since 2003 (6-years)

2.2.8 Environmental Incidents and Complaints

Incidents

Incidents that occurred during the reporting period are listed in *Table 14* below. Three incidents were recorded during the reporting period.

Incident	Date	Actions Taken	Authorities Contacted
Emission point SW1; Total nitrogen exceedence (42 mg/l *vs* ELV of 15 mg/l)	January 23, 2008	Incident investigation and changes made to operations.	EPA, LCC, SRFB
Underground waste water pipe leak	May 15, 2008	Incident was investigated and the root cause established. A failure of sump pumps and activation of the alarm system has been addresses along with the remediation of manholes.	EPA, LCC, SRFB.
Emission point A2-1; Particulates exceedence (60.86 mg/Nm^3 *v's* ELV of 50 mg/Nm^3)	November 11, 2008	Exceedence investigated but No conclusive cause was found.	EPA

EPA = Environmental Protection Agency
LCC = Limerick County Council
SRFB = Shannon Regional Fisheries Board

Table 14: Summary of incidents

Complaints

There were four complaints received during the reporting period (two were received in 2007), see *Table 15 below*.

Complaint Class	*Noise*	*Odour*	*Water*	*Dust*	*Procedural*	*Miscellaneous*
Total	4	None	None	None	None	None

Table 15: Summary of complaints.

The noise complaints were received during November and December. The cause of the complaints was found to be from faulty outdoor equipment.

2.3 MANAGEMENT OF THE ACTIVITY

2.3.1 Schedule of Environmental Objectives and Targets for 2008

The schedule of objectives and targets for the reporting period is in *Table 16* 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 their 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	Improve raw material use efficiency.	Assess the usage efficiency of raw materials in all processes.

Table 16: Schedule of objectives and targets for 2008

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:

1. Review the transport of hazardous material by forklift and implement recommendations.
2. Complete and test the installation of secondary containment for the mix process tanks at Process 2 and Process 2X.
3. Set-up the MSDS register so to have a searchable database accessible to all.
4. Sample the oil in the oil-filled circuit breakers to confirm there are no PCBs present.
5. Complete a survey to identify and asbestos containing material on site.

6. Install automatic monitoring and dosing of water treatment chemicals, and blow down on the evaporative condensers.

7. Ensure all storage tanks containing hazardous materials are fitted with a means of determining the volume stored in the tank and have high level alarms consisting of an alarm system and automatic fill shut-off.

8. Develop and plan a new delivery system for disinfectant to the process areas to reduce vapour emissions and risk of spillage.

Programme Report:

1. Hazardous materials transfer and storage was reviewed and two materials were identified where alternative transfer arrangements may reduce risk. Plans to implement these alternative transfer arrangements were developed.

2. Secondary containment was installed for the mix process tanks at Process 2 and Process 2X.

3. A web-based MSDS register including search facilities was set up for all materials used on site.

4. Oil samples were obtained from the oil-filled circuit breakers on the high voltage electricity network and analysed for the presence of PCBs. However, the results were misplaced by the specialist contractor.

5. The survey for asbestos on the site was deferred until 2009.

6. Automatic monitoring, dosing of water treatment chemicals and blowdown of the evaporative condensers on the refrigeration system for was installed. Benefits from this are a reduction in risk from the transfer and storage of chemicals along with a reduction in water use.

7. High level alarm with automatic shut-off of the fill lines were installed on the two main oil storage tanks.

8. A plan for a new delivery system for disinfectant delivery directly to the process to reduce vapour emissions was developed.

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

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

Programme:

1. Investigate the possibility of using a continuous measuring instrument for particulate emissions from the dryers.

2. Upgrade the direct digital combustion controls on Boiler No. 3 to reduce emissions by increasing combustion efficiency.

3. Incorporate the new requirements for Phase 2 of the European Union's Emissions Trading Scheme into controlled procedures.

Programme Report:

1. Instrumentation to facilitate the continuous monitoring of particulates from the process was identified.

2. A direct digital control system for Boiler No. 3 was investigated, however, this boiler was taken off line earlier in the year for maintenance and is not planned to be placed back in service until later in 2009 when this project may proceed.

3. All new requirements for Phase 2 of the European Unions Emission Trading Scheme were identified and incorporated into new controlled procedures.

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. Revise the automatic sampler arrangement on the final waste water discharge to improve sample storage conditions and secure chain of custody.

2. Review the analysis arrangements for waste water to ensure methodologies are correct and sampling methods are robust.

3. Design and implement the installation of controls to monitor the influent to the waste water treatment plant and warn of shock loads.

Programme Report:

1. The automatic sampler arrangement on the discharge stream from the waste water treatment plant was reviewed and recommendations to improve sample storage conditions with clear chain of custody were made.

2. Analysis arrangements for waste water were examined to ensure methodologies were suitable resulted in recommendations in the assay of two parameters.

3. Instrumentation to continuously monitor the influent to the waste water treatment plant to warn against shock loads was identified.

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 remaining sections of the underground drainage network that have been highlighted as having deficiencies.

2. Continue with the next phase of testing and inspection of the underground drainage network.

3. Install a new surface water sampling chamber to allow representative sampling of surface water.

Programme Report:

1. All deficiencies identified in phase 1 of the underground pipework survey with the exception of one were remediated.

2. There was a change of plan for the next phase of inspection and testing of the underground pipework due to an incident. Work began on phase 3 instead of phase 2 during the reporting period.

3. A new chamber to facilitate the sampling of surface water was constructed on site.

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 implementation of the identified energy saving project at the CHP Plant.

2. Review the three additional energy saving projects for the process areas and if found feasible, plan their implementation.

3. Evaluate the performance of the new type steam traps and if results are positive, develop a plan to replace all of the conventional steam traps across the site with the new type.

4. Improve energy use reporting and information by installing new metering and analysing data using the updated energy monitoring system.

Programme Report:

1. The identified energy saving project at the CHP Plant was implemented. The estimate savings are 2700 tonnes of steam per annum.

2. Additional energy saving projects for processing that were identified were analysed to determine their cost-benefit.

3. The installation of new-type steam traps that provide energy savings with a significant reduction in maintenance continued. To date, the estimated energy savings from this project is 947 tonnes of steam per annum.

4. New meters to facilitate the use of steam by individual process areas were installed and connected to the energy monitoring system to facilitate the recording and analysing the data collected.

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:

1. Implement additional waste segregation at individual production lines to segregate at source.
2. Review the make-up of waste sent to landfill to identify wastes that can be diverted for recycling and develop methods to segregate identified recyclables.
3. Review all waste generated on site to determine if the generation of any individual fractions can be avoided.
4. Audit selected waste disposal contractor sites to confirm they conform to Wyeth requirements.

Programme Report:

1. Waste that could be segregated at individual production lines was identified.
2. The diversion of materials for recycle from general waste increased from 149 tonnes in 2007 to 227 tonnes during the reporting period. However, the overall net waste generated increased due to the addition of new materials that were previously not classified as waste.
3. Waste generated on site was examined and waste that could be avoided in any significant quantity was not identified.
4. A total of six waste contractor sites were visited and operating permits or licences along with other operating documentation was examined to ensure they conform to Wyeth requirements.

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. Complete the project to establish the cost per cubic meter to abstract and treat water for the site.
2. Identify and fit water meters to the distribution network to aid in determining where water is being used.
3. Using the data from the new water meters, develop and implement water conservation measures.
4. Implement automatic water quality monitoring and dosing of the evaporative condensers.

Programme Report:

1. The project to establish the cost per cubic meter to abstract and treat the water for use on site was completed.

2. The entire internal water distribution system was examined and plans were developed to modify the network to install water meters that will facilitate the measurement of water usage for each business unit.

3. Water conservation measures will be introduced once a water balance has been completed. However, this cannot be completed until the water meters have been installed.

4. Automatic water quality monitoring and dosing was installed on the water system for the evaporative condensers.

Objective No. 8 Improve raw material use efficiency.

Target: Assess the usage efficiency of raw materials in all processes.

Programme:

1. Agree a protocol to assess the efficiency of use of raw materials in all processes with the EPA.

2. Select a single raw material to carry out the assessment having particular regard to the reduction in waste generated. Carry out the assessment and list any improvements identified.

3. Change the assessment protocol if necessary to apply to other raw material used across the operation.

Programme Report:

Raw materials are a significant part of the overall business cost for the operation and their efficient use is monitored to ensure minimum waste and their most efficient use.

To ensure efficient use, the following are closely monitored and controlled:

- Production losses
- Waste generated
- Energy usage
- Water usage
- Production yield

In addition, Wyeth operates an *Operational Excellence* programme to train employees to use a variety of tools for use in improving efficiency and reducing waste. This programme is based around the *Lean and Environment Toolkit* by the USEPA that offers practical strategies and techniques to lean implementers about how to improve lean results – waste elimination, quality enhancement and delivery of value to customers – while achieving environmental performance goals.

2.3.3 Environmental Management Programme Proposal

The proposed schedule of objectives and targets for 2009 is in *Table 17* 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 17: Proposed schedule of objectives and targets for 2008.

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

Target: Review internal hazardous material transfer and storage to reduce risk.

Programme:

1. 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.

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.

2. Upgrade the direct digital combustion controls on Boiler No. 3 to reduce emissions by increasing combustion efficiency.

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.

2. 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.

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.

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.

3. 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.

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:

1. Identify alternative outlets to divert waste from landfill. Obtain agreement from the EPA and Wyeth Corporate to use any new outlets.

2. Review he new waste categories introduced since the start of the year and ensure optimum methods are used for recycling.

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.

Objective No. 8 Reduce site noise.

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

Programme:

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

2. Implement measures to prevent potential nuisance noise.

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 18* below along with their corresponding threshold limits from the European Pollution Emission Register (EPER).

Pollutants/Substances	Identification	Emissions from WNI in 2008		EPER Thresholds	
		Atmos. kg/year	Water kg/year	Atmos. kg/year	Water kg/year
CO_2		44,124,102	-	100,000,000	-
NOx	as NO_2	41,004	-	100,000	-
Total – Nitrogen	as N	-	5579	-	50,000
Total – Phosphorus	as P	-	193	-	5,000

Table 18: PERL of substances emitted during 2008 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 and 2008 represent CO_2 from exported electricity.

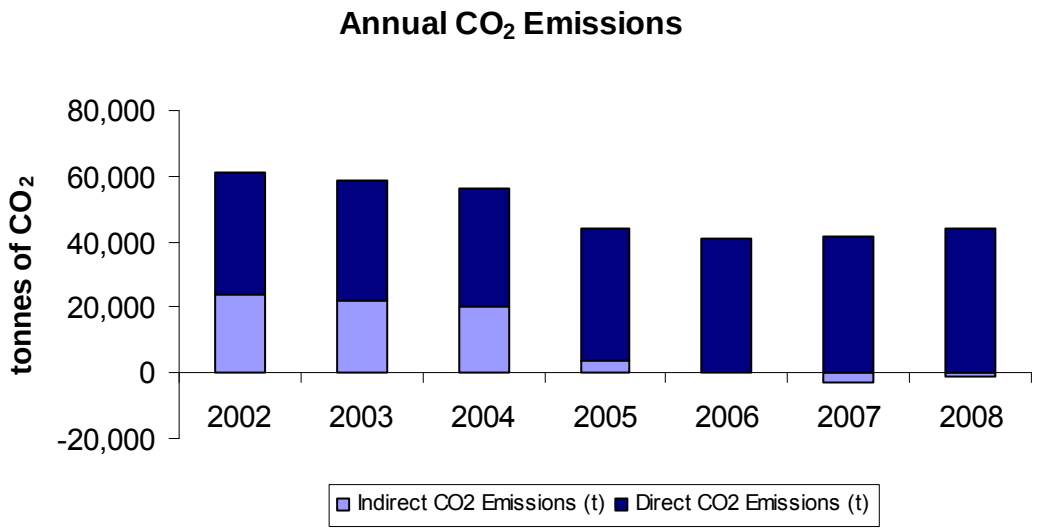

Figure 9: Annual CO_2 direct and indirect emissions since 2002 (7 years).

2.3.5 Other Significant Environmental Aspects and Audits

Wyeth Nutritionals continues to operate its Environmental Management System (EMS) to the ISO 14001 Standard. A surveillance audit conducted by SGS Ireland Ltd. took place in during 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 May 27th 2008.

A total of six 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 five representative noise sensitive locations (houses) and at a boundary reference position (west) during the daytime and nighttime on the 14th of May 2008. The site was operating normally during this period.

The survey methodology followed ISO 1996 *Description and measurement of environmental noise*, and complied with the requirements of the EPA Guidance note on environmental noise surveys (2003).

The *Environmental Noise Survey Guidance Document* issued by the EPA was also consulted regarding recommended monitoring methods and interpretation of the results for reporting.

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 estimated, based on the noise level statistics, correlation of the audible plant noise with the live sound level meter reading, and review of the noise levels logged at 10 second intervals (noise profile). The specific noise level is the component of the total measured noise that can be attributed to a specific source, i.e. the site. The method of assessing the specific noise level is described in *Table 19* 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)	$<L_{A90}$ (up to 5 dB lower)
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 readings with the audible sounds, as described above. The plant specific noise is verified, where necessary, by examining the profile of logged noise levels.	

Table 19: Methodology for determination of plant specific noise.

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 20* and *Table21* below.

Location	Time	Measured Noise Level dB(A)					Comments, Audible Sounds
		L_{Aeq} 15 mins.	L_{A90}	L_{A50}	L_{A10}	Specific Noise*[1]	
North (Boatyard)	14:50	50	36	41	48	36	Construction noise at 100 m, birds, boatyard, occasional car, Wyeth barely audible.
	16:40	40	33	37	42	33	
South (Houses)	14:40	63	47	53	66	47	Traffic, birds, Wyeth audible in traffic lulls.
	14:55	60	48	53	63	48	
	16:35	63	50	57	67	50	
South East (Houses)	15:35	60	47	56	64	<47	Traffic, birds, birds barely audible.
	17:10	60	49	56	64	<49	
East (Houses)	15:30	48	33	37	49	33	Occasional cars, birds, dogs, Wyeth occasionally barely audible.
	17:05	48	32	36	46	32	
Askeaton houses at Grotto	16:05	56	42	47	56	<42	Local and distant traffic, Wyeth occasionally barely audible.
	17:55	56	44	49	58	<44	
West (Boundary)	14:45-17:15	55	49	51	55	51	Mean. Specific noise range 49-51. Traffic, Wyeth plant noise

*[1] Specific noise: component of total noise attributable to the site. The parameter judged to best represent the specific noise is indicated by and asterisk.
Table 20: Results of daytime noise survey, May 14th, 2008.

Location	Time	Measured Noise Level dB(A)					Audible Sounds
		L_{Aeq}	L_{A90}	L_{A50}	L_{A10}	Specific Noise*[1]	
North (Boatyard)	22:00	51	36	39	48	39	Birds, occasional cars, low level Wyeth noise, distant traffic.
	00:05	42	35	37	41	37	
South (Houses)	23:35	56	44	48	59	44	Traffic, birds, low level Wyeth noise.
	00:00	54	45	49	58	45	
South East (Houses)	22:25	57	38	46	55	38	Traffic, birds, dogs, low level Wyeth noise.
	23:10	51	37	43	54	37	
East (Houses)	22:20	43	30	34	41	30	Dogs, distant traffic, Wyeth occasionally barely audible.
	23:10	40	27	30	35	27	
Askeaton (Houses at Grotto)	22:45	52	41	45	52	41	Local and distant traffic, dogs, low level Wyeth noise.
	23:40	50	40	44	52	40	
West (Boundary)	21:45-23:45	54	51	52	53	52	Mean. Specific noise range 51-53. Traffic, Wyeth plant noise.

*[1] Specific noise: component of total noise attributable to the site. The parameter judged to best represent the specific noise is indicated by and asterisk.
Table 21: Results of nighttime noise survey, May 14th 2008.

Tonal and Impulsive Analysis
The noise audible from the site was subjectively broadband in character at all residential locations with No audible tones or impulsive sounds audible from the site.

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 22* below.

Location		Nighttime Specific Noise Levels					
Type	**Label**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Noise Sensitive Location	North (House)	<31	<31	42	33	40	39
	South (Houses)	46	43	<40	45	43	45
	South East (Houses)	46	45	40	45	42	38
	East (Houses)	42	36	40	30	41	30
	Askeaton (Grotto)	-	-	-	43	<34	41
Boundary	West (Site Boundary)	54	52	52	50	49	52

Table 22: 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.

Noise levels at the houses to the North, South and South East were similar to levels measured in 2007.

The noise level at the house east was 10dB lower than in 2007, due to the north-easterly breeze during the 2008 survey, which favoured noise propagation towards the southwest. Wind conditions were calm during the 2007 survey.

The increase of 6dB in noise level at Askeaton compared with the 2007 survey is also explained by the north-easterly breeze.

Specific noise levels at the western boundary position were slightly higher than in 2007, but within the historical range.

Overall Assessment

The daytime noise limit of 55 dB(A) was complied with at all noise sensitive locations (houses). The specific site noise component ranged from 30 dB(A) to 50 dB(A) at these locations.

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

There was No audible or 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 October/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. The Agency also requested WNI to increase the frequency of groundwater monitoring for all wells until further agreement.

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.

Sampling was 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. 10* below.

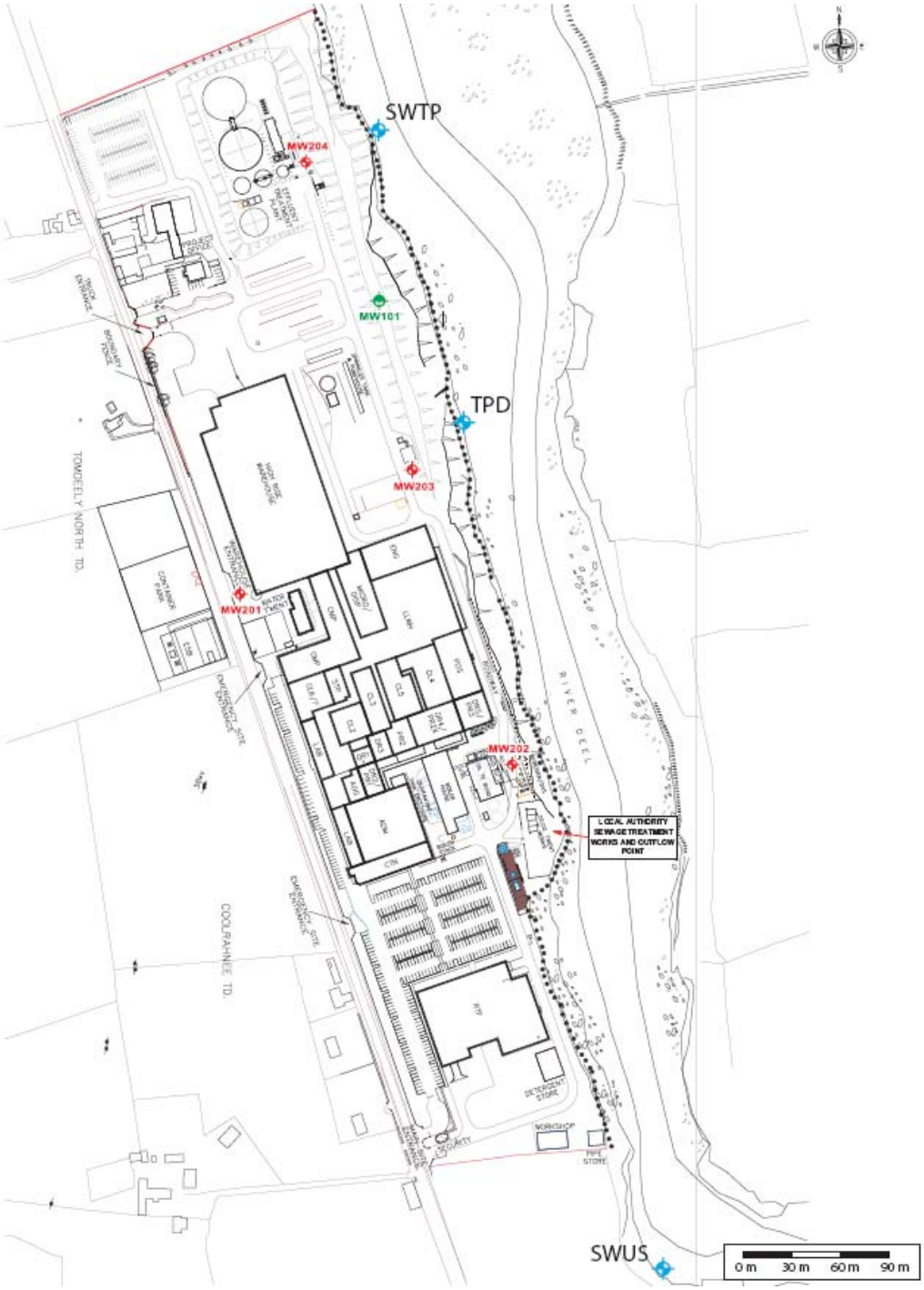

Figure 10: Locations of the monitoring wells and other sample points around the site.

Sampling took place on the dates listed in the *Table 23* below:

Sample Period Number	Date
1	February 13th
2	May 21st
3	September 1st
4	November 13th

Table 23: Dates for groundwater sampling in 2008.

Samples were obtained from each of the wells on both occasions and the results of field measurements and analysis are in *Tables 24 – 26* below.

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)	pH	Redox Potential (mV)	Electrical Conductivity (µS/cm)	Temp. (ºC)
101	1	10.98	15.92	15.56	4.94	24	4.93	6.6	147	1086	11.0
	2	11.41			4.52	18	6.4	6.9	118	2927	15.3
	3	11.03			4.89	18	6.8	6.5	11	1465	13.2
	4	10.62			5.30	24	1.55	6.77	160	1086	14.01
201	1	4.31	18.0	19.78	13.69	80	5.20	7.21	131	561	12.5
	2	4.70			13.30	75	1.5	7.7	20	601	16.0
	3	4.60			13.40	90	NM	7.5*3	NM	571*3	NM
	4	4.67				13.33	1.67	6.77	115	539	13.96
202	1	11.46	15.0	14.80	3.54	21	4.60	8.24	89	803	15.3
	2	11.86			3.14	18	3.6	8.1	-32	6294	16.7
	3	12.07			2.93	18	6.5	6.5	41	2864	16.2
	4	12.07			2.93	18	2.10	7.79	41	784	13.89
203	1	6.94	14.8	18.93	7.86	72	4.50	7.43	118	426	12.3
	2	7.25			7.55	69	1.0	8.0	70	451	14.0
	3	7.17			7.63	72	NM	7.6*3	NM	506*3	NM
	4	6.86			7.94	72	2.13	7.97	-90	454	13.5
204	1	2.64	8.44	11.81	5.80	54	2.64	7.56	1	1751	13
	2	3.27			5.17	54	0.6	7.8	-5	1925	16.2
	3	2.86			5.58	54	NM	7.9*3	NM	1890*3	NM
	4	2.48			5.96	57	1.19	7.60	-30	1885	13.86
swus	1	NA	NA	NA	NA	NA	11.27	6.52	127	530	7.2
	2	NA	NA	NA	NA	NA	7.1	8.4	67	6460	16.3
	3	NA	NA	NA	NA	NA	6.8	7.7	0	2048	15.6
	4	NA	NA	NA	NA	NA	8.22	8.09	172	562	9.09
swtp	1	NA	NA	NA	NA	NA	10.70	8.26	202	729	6.2
	2	NA	NA	NA	NA	NA	6.0	7.7	106	22	15.0
	3	NA	NA	NA	NA	NA	8.4	7.8	-80	8111	16.2
	4	NA	NA	NA	NA	NA	6.96	7.84	170	2230	9.32
TPD	1	NA	NA	NA	NA	NA	8.46	7.94	118	18883	16.5
	2	NA	NA	NA	NA	NA	7.0	8.3	61	2601	25.9
	3	NA	NA	NA	NA	NA	7.5	7.5	-2	1384	25.5
	4	NA	NA	NA	NA	NA	8.43	8.0	145	1715	19.21

*1 meters below top of casing
*2 meters above site datum
*3 Measured at laboratory because of field instrument malfunction
NM – Not measured due to field instrument malfunction
NS = Not Sampled
NA = Not Applicable

Table 24: Results of field measurements taken at each sample location.

Parameter	Period	Sample ID							
		101	201	202	203	204	SWUS	SWTP	TPD
Nitrate as NO_3 (mg/l)	1	26.14	7.09	5.76	5.32	-	13.73	13.73	1.33
	2	33	8	4	9	8	6	-	7
	3	28	6	13	7	<0.3	14	6	10
	4	15	7	-	-	-	8	7	2
Chloride (mg/l)	1	88	79	111	29	368	31	81	402
	2	588	68	1610	28	374	1960	6300	460
	3	225	59	901	19	368	511	2400	422
	4	41	56	93	17	361	46	594	480
Sodium (mg/l)	1	58	62	175	30	403	15	44	460
	2	345	63	972	35	405	1090	3900	528
	3	123	50	510	31	403	316	1260	463
	4	38	38	149	24	461	23	445	603
Calcium (mg/l)	1	220	92	162	117	46	101	103	37
	2	277	95	196	95	38	107	180	41
	3	219	89	89	92	37	112	128	44
	4	246	76	220	157	38	89	85	37
Fluoride (mg/l)	1	-	0.10	0.20	0.10	0.20	-	-	-
	2	0.10	0.10	0.20	0.20	0.20	0.20	0.50	0.20
	3	-	-	-	-	-	-	-	-
	4	-	-	-	0.1	0.2	-	-	-
Magnesium (mg/l)	1	29.0	10.0	16.0	8.2	7.2	9.8	13.0	4.0
	2	63	10	107	7	6	132	478	6
	3	40	11	69	10	7	49	169	6
	4	29	8	15	10	6	10	48	3
Sulphate (soluble) (mg/l)	1	40	72	40	24	21	6	12	18
	2	124	30	246	38	30	286	1040	25
	3	61	22	150	17	17	84	344	26
	4	9	107	24	27	39	19	-	18
Iron (mg/l)	1	2.03	2.76	15.87	3.99	0.37	0.18	0.48	-
	2	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-
Manganese (mg/l)	1	0.30	0.08	2.78	0.78	0.39	0.05	0.07	0.02
	2	0.11	0.03	0.05	0.03	0.02	0.05	0.10	0.02
	3	0.058	0.023	0.027	0.025	0.220	0.035	0.047	0.016
	4	0.093	0.025	0.331	1.92	0.254	0.027	0.029	0.011
Nitrite as NO_2 (mg/l)	1	-	-	0.13	-	0.66	-	-	0.33
	2	-	-	0.66	-	3.95	-	-	0.66
	3	<0.1	<0.1	<0.1	<0.1	0.7	<0.1	<0.1	0.7
	4	-	-	-	-	5.92	-	-	-
Ortho-Phosphate as PO_4 (mg/l)	1	-	-	-	-	-	-	-	-
	2	-	-	9	-	-	-	-	-
	3	0.9	0.9	1.2	0.6	0.3	1.5	3.9	1.5
	4	-	-	-	-	-	-	-	-
Potassium (mg/l)	1	9.3	5.7	10.0	8.8	35.0	3.3	5.0	16.0
	2	20	6	55	10	33	65	237	15
	3	12	5	27	10	28	15	71	14
	4	4	20	12	10	5	8	9	28
Total Alkalinity ($CaCO_3$) (mg/l)	1	535	228	572	281	518	253	258	637
	2	506	477	346	191	505	204	181	699
	3	480	239	382	337	548	271	241	583
	4	607	235	511	272	562	233	230	617
COD (mg/l)	1	27	46	37	26	38	27	26	54
	2	36	23	67	20	23	91	360	39
	3	31	-	57	-	32	58	131	52
	4	23	-	22	-	28	22	56	53

- below the limit of detection

Table 25: Inorganic analysis results for samples

Parameter	Period	Sample ID							
		101	201	202	203	204	SWUS	SWTP	TPD
BOD (mg/l)	1	<1	<1	7	<1	<1	<1	<1	6
	2	<1	<1	<1	<1	1	<1	33	<1
	3	2	2	2	1	3	2	36	6
	4	2	2	3	1	2	5	6	5
Total Coliforms (cfu/100 ml)	1	0	0	4600	0	43	11000	15000	>240000
	2	23	0	≥24000	23	0	2400	24000	2400
	3	150	23	11000	460	2400	2400	4600	240
	4	4	43	24000	93	23	1100	11000	11000
Faecal Coliforms (cfu/100 ml) *3	1	0	0	460	0	0	11000	1500	0
	2	4	0	460	9	0	75	460	93
	3	20	0	23	43	1200	2400	1100	43
	4	0	0	93	0	0	1100	4600	750

- below the limit of detection

Table 26: BOD and bacteriological results for samples.

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.

While the overall direction of ground water flow is east toward the river Deel there is expected to be a degree of mixing along the interface between the ground water and surface water bodies.

During periods of high water level in the river the gradient in water flow is expected to be influent to ground water, thus having a likely negative impact on the ground water quality adjacent to the river.

2.4.3 Effluent Acute Toxicity Test

In November 2008 samples of the wastewater discharge was tested to determine its acute toxicity as required under Condition 6 (sub-condition 6.7) of the IPC licence. A summary of the results obtained is in *Table 27*.

Test Species	Test Parameter	Test Result	No. of Toxic Units
Pseudokirchneriella subcapitata	72 h IC_{50}	>90% vol./vol.	<1.1
Vibrio fischeri	5 min EC_{50}	>45% vol./vol.	<2.2
	15 min EC_{50}	>45% vol./vol.	<2.2

Table 27: Summary of acute toxicity of effluent sample.

2.4.4 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 28* below along with dates of previous testing and due dates for future testing.

No.	Description	Last Recorded Test	Result	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	August, 2007	Pass	August, 2010	New bund constructed

Table 28: Retention facilities on site for the storage of potentially polluting substances.

2.4.5 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 2008.

A summary of the review is as follows:

There were no structural changes or process changes on the site during 2008.

No new equipment was installed and No existing equipment was decommissioned during 2008.

The following cost updates were included in the RMP for the calendar year 2008:

- Production related hazardous waste and non-hazardous waste disposal costs were revised to reflect realistic current rates;
- The cost for contract cleaning of tanks was changed to reflect realistic current rates resulting in a 68% decrease since the last review; and
- The cost for contract cleaning of sumps and bunds was added to the total CRAMP costs.

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 approximately €1.5 million would be required to confirm the site to an environmentally safe (inert) condition.

The RMP is reviewed annually.

2.4.6 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 2008.

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.

No new risks were identified.

The existing risks were assessed and changes were made as follows:

1. The risk rating and associated most likely cost for the operation of the wastewater treatment plant was increased due to an incident involving this process that occurred in January of the reporting period (see section 2.2.8 of this report).
2. The risk rating and associated most likely cost for the wastewater drainage network was increased due to an incident involving this process that occurred in May of the reporting period (see section 2.2.8 of this report).
3. The risk rating for the bulk storage of liquid raw materials was increased due to an incident involving this process that occurred in January of the reporting period (the same incident referred to in point 1 above).

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

2.4.7 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 1 of the network.

Work has started on testing and inspection of section 2 of the network and this will be completed along with any remediation work identified during 2009.

Appendix 1

| PRTR# : P0395 | Facility Name : AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland | Filename : P0395_2008 App.xls | Return Year : 2008 | 30/03/2009 13:04

Environmental Protection Agency

AER Returns Worksheet

Version 1.1.03

REFERENCE YEAR	2008

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

No.	class_name
2.1.0	The production of energy in combustion plant the rated thermal input of which is equal to or greater than 50MW other than any such plant which makes direct use of the products of combustion in a manufacturing process.

Address 1	Askeaton
Address 2	County Limerick
Address 3	
Address 4	
Country	Ireland
Coordinates of Location	13351512
River Basin District	
NACE Code	105
Main Economic Activity	Manufacture of dairy products
AER Returns Contact Name	Brian Shiel
AER Returns Contact Email Address	ShielB@wyeth.com
AER Returns Contact Position	Engineering Services Manager
AER Returns Contact Telephone Number	061-392168
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	061-392440
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
1c	Thermal power stations and other combustion installations

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

Is it applicable?	No
Have you been granted an exemption ?	No
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4.1 RELEASES TO AIR

| PRTR# : P0395 | Facility Name : AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland | Filename : P0395_2008 App.xls | Return Year : 2008 | 30/03/2009 13:04

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR												
POLLUTANT		METHOD			ADD EMISSION POINT				QUANTITY			
			Method Used		A1-1	A1.2	A1.4	Site				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
02	**Carbon monoxide (CO)**	C	OTH	Use some data from 2006	17864.0	275.45	136.0	0.0	18275.45	0.0	0.0	
03	Carbon dioxide (CO2)	C	ETS		0.0	0.0	0.0	44124.0	44124.0	0.0	0.0	
08	Nitrogen oxides (NOx/NO2)	M	PER	ISO10849	35500.0	2410.0	3094.0	0.0	41004.0	0.0	0.0	

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								
POLLUTANT		METHOD			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

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														
POLLUTANT		METHOD			ADD EMISSION POINT						QUANTITY			
			Method Used		A2-1	A2-2	A2-3	A2-4	A2-5	A2-6				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4	Emission Point 5	Emission Point 6	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
210	Dust	M	PER	ISO9096	2263.0	352.0	9265.0	18313.0	821.0	19966.0	50980.0	0.0	0.0	

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 Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

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

Please enter summary data on the quantities of methane flared and / or utilised

	T (Total) kg/Year	M/C/E	Method Used: Method Code	Method Used: Designation or Description	Facility Total Capacity m3 per hour	
Total estimated methane generation (as per site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	

4.2 RELEASES TO WATERS

| PRTR# : P0395 | Facility Name : AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland | Filename : P0395_2008 App.xls | Return Year : 2008 | 30/03/2009 13:04

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

RELEASES TO WATERS								
POLLUTANT					ADD EMISSION POINT	QUANTITY		
			Method Used		SW1			
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
12	Total nitrogen	M	PER	Colorimetric-Hach Method 10071	5578.0	5578.0	0.0	0.0
13	Total phosphorus	M	PER	Colorimetric - Hach Method 8190	193.187	193.187	0.0	0.0

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 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

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 WATERS								
POLLUTANT					ADD EMISSION POINT	QUANTITY		
			Method Used		SW1			
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
238	Ammonia (as N)	M	PER	Colorimetric - Hach Method 10031	881.648	881.648	0.0	0.0
303	BOD	M	PER	5-Day BOD test	10475.6	10475.6	0.0	0.0
314	Fats, Oils and Greases	E	Estimate	APHA 1098:5529:D	7035.0	7035.0	0.0	0.0

Wyeth

4.3 RELEASES TO WASTEWATER OR SEWER

| PRTR# : P0395 | Facility Name : AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland | Filenan 30/03/2009 13:04

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER								
POLLUTANT		METHOD			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

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 POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER								
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	F (Fugitive) KG/Year
					0.0	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_2008 App.xls | Return Year : 2008 30/03/2009 13:04

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND							
POLLUTANT		METHOD			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	0.0

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 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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE | PRTRef : P0395 | Facility Name : AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland | Filename : P0395_2008 App.xls | Return Year : 2008 | 30/03/2009 13:04

35

Transfer Destination	European Waste Code	Hazardous	Quantity T/Year	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker	Name and Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)	Licence / Permit No. of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	20 01 01	No	16.432	Paper	R3	M	Weighed	Offsite in Ireland	DMG Services/WP98102	Unit 53, Park West Ind Park, Dublin 12		
Within the Country	20 01 01	No	453.99	Cardboard and plastic packaging	R3	M	Weighed	Offsite in Ireland	Veolia Environmental Services, 82-2	Dock Road, Limerick		
Within the Country	20 01 01	No	63.5	Plastic packaging	R3	M	Weighed	Offsite in Ireland	Veolia Environmental Services, 82-2	Dock Road, Limerick		
Within the Country	20 01 01	No	49.06	Cardboard	R3	M	Weighed	Offsite in Ireland	Veolia Environmental Services, 82-2	Dock Road, Limerick		
Within the Country	20 01 40	No	450.25	Metal	R4	M	Weighed	Onsite in Ireland	Veolia Environmental Services, 82-2	Dock Road, Limerick		
Within the Country	20 01 40	No	298.08	Metal	R4	M	Weighed	Offsite in Ireland	Hegarty Metal Recycling, WP 05-04	Ballysimon Road, Limerick		
Within the Country	15 01 07	No	7.0	Glass	R5	M	Weighed	Offsite in Ireland	Veolia Environmental Services, 82-2	Dock Road, Limerick		
Within the Country	02 05 02	No	3347.9	Sludge	R3	M	Weighed	Offsite in Ireland	Molaisin Compost Ltd. WP 66/08	Cappoquin, Co. Waterford		
Within the Country	02 05 99	No	247.04	Waste liquid product including packaging	R3	M	Weighed	Offsite in Ireland	Mr. Joeseph Waddock, WP 02/08	Killamaster, Co. Carlow		
Within the Country	20 03 01	No	506.14	General municipal waste	D1	M	Weighed	Offsite in Ireland	Veolia Environmental Services, 82-2	Dock Road, Limerick		
Within the Country	20 03 01	No	506.92	Waste product and raw materials	D1	M	Weighed	Offsite in Ireland	Veolia Environmental Services, 82-2	Dock Road, Limerick		
Within the Country	20 01 25	No	2.08	Used cooking oil	R1	E	Volume Calculation	Offsite in Ireland	Frylite Ltd. WR/77	Kilcolgan Village, Co. Galway		
Within the Country	20 01 35	Yes	2.638	WEEE	R4	M	Weighed	Offsite in Ireland	Irish Lamp Recycling Ltd. WFP-IrE-08-0348-01	WoodstockInd. Est., Kilkenny Road, Athy, Co. Kildare	Irish Lamp Recycling Ltd Woodstock Ind. Est. Kilkenny Road, Athy, Co. Kildare	WFP-IrE-08-0348-01
Within the Country	20 01 21	Yes	0.376	Lamps	R5	M	Weighed	Offsite in Ireland	Irish Lamp Recycling Ltd. WFP-IrE-08-0348-01	WoodstockInd. Est., Kilkenny Road, Athy, Co. Kildare	Irish Lamp Recycling Ltd Woodstock Ind. Est. Kilkenny Road, Athy, Co. Kildare	WFP-IrE-08-0348-01
Within the Country	20 01 33	Yes	0.193	Batteries	R4	M	Weighed	Offsite in Ireland	Irish Lamp Recycling Ltd. WFP-IrE-08-0348-01	WoodstockInd. Est., Kilkenny Road, Athy, Co. Kildare	Irish Lamp Recycling Ltd Woodstock Ind. Est. Kilkenny Road, Athy, Co. Kildare	WFP-IrE-08-0348-01
Within the Country	18 01 01	No	0.014	Sharps	D9	C	Volume Calculation	Offsite in Ireland	Stenla technologies Ire. Ltd., 55-2	Western Ind. Est., Naas Road, Dublin 12	Sterile Technologies Ireland Ltd., Units 420-430 Beech Road, Western Ind. Est., Naas Road, Dublin 12.	55-2
To Other Countries	07 01 04	Yes	1.628	Mixed solvents	R1	M	Weighed	Abroad	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est., Shannon, Co. Clare	Lindenschmidt KG, Umweltservice, Krombacher Strabe 42-46, 57223, Krutzel-Krombach, Germany	E97098037
To Other Countries	08 01 11	Yes	0.48	Waste lacquer	R1	M	Weighed	Abroad	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	Lindenschmidt KG, Umweltservice, Krombacher Strabe 42-46, 57223, Krutzel-Krombach, Germany	E97098037
To Other Countries	13 08 99	Yes	0.952	Waste oil and wipes	R1	M	Weighed	Abroad	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	Lindenschmidt KG, Umweltservice, Krombacher Strabe 42-46, 57223, Krutzel-Krombach, Germany	E97098037
Within the Country	13 08 99	Yes	1.2	Waste oil and wipes	R1	M	Weighed	Offsite in Ireland	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	ENVA Ireland Ltd., Clonminam Ind. Est., Portlaoise, Co. Laoise.	184-1
Within the Country	20 01 25	No	11.82	Waste	R1	M	Weighed	Offsite in Ireland	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare		
To Other Countries	15 01 10	Yes	0.607	Used drums	R1	M	Weighed	Abroad	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	Lindenschmidt KG, Umweltservice, Krombacher Strabe 42-46, 57223, Krutzel-Krombach, Germany	E97098037
Within the Country	15 01 10	Yes	0.112	Used drums	R4	M	Weighed	Offsite in Ireland	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	ENVA Ireland Ltd., Clonminam Ind. Est., Portlaoise, Co. Laoise.	41-4
Within the Country	15 01 10	Yes	0.082	Used drums	R3	M	Weighed	Onsite in Ireland	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	ENVA Ireland Ltd., Clonminam Ind. Est., Portlaoise, Co. Laoise.	41-4
To Other Countries	15 02 02	Yes	0.359	Used filters and wipes	R1	M	Weighed	Abroad	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	Lindenschmidt KG, Umweltservice, Krombacher Strabe 42-46, 57223, Krutzel-Krombach, Germany	E97098037
Within the Country	16 05 04	Yes	0.04	Aerosol cans	D10	M	Weighed	Offsite in Ireland	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	ENVA Ireland Ltd., Clonminam Ind. Est., Portlaoise, Co. Laoise.	184-1
To Other Countries	16 05 06	Yes	0.661	Laboratory chemicals	R1	M	Weighed	Abroad	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	Lindenschmidt KG, Umweltservice, Krombacher Strabe 42-46, 57223, Krutzel-Krombach, Germany	E97098037
Within the Country	16 05 06	Yes	0.208	Laboratory chemicals	D9	M	Weighed	Offsite in Ireland	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	ENVA Ireland Ltd., Smithstown Ind. Est., Shannon, Co. Clare.	41-1
To Other Countries	16 05 06	Yes	0.015	Laboratory chemicals	D10	M	Weighed	Abroad	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	AGR mbH - RZR Herten, 1m Emscherbruch 11, 45699 Herten, Germany	642/050506
To Other Countries	16 05 07	Yes	2.0	Water treatment chemicals	R1	M	Weighed	Abroad	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	Lindenschmidt KG, Umweltservice, Krombacher Strabe 42-46, 57223, Krutzel-Krombach, Germany	E97098037
Within the Country	**20 01 26**	**Yes**	5.603	Vegetable fat	R1	M	Weighed	Offsite in Ireland	ENVA Ireland Ltd. 41-4	Smithstown Ind. Est, Shannon, Co. Clare	Bolton RVO Ltd., Belview, Castledermot, Co. Kildare	125/2003

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