

ANNUAL ENVIRONMENTAL REPORT 2010



**Pfizer Ireland Pharmaceuticals
t/a Wyeth Nutritionals Ireland
Askeaton
Co. Limerick**

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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 Protection Agency each year.

The following is the Annual Environmental Report (AER) for 2010 for Wyeth Nutritionals Ireland (WNI), Askeaton, Co. Limerick. and outlines the environmental performance of Wyeth Nutritionals Ireland (WNI) now known as Pfizer Ireland Pharmaceuticals t/a Wyeth Nutritionals Ireland. It also sets out a programme of work to be completed during 2011.

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 2010 are included Appendix 1.

On October 15th 2009, Pfizer Inc., completed its acquisition of Wyeth in the United States, with Wyeth becoming a subsidiary of Pfizer. Because of the merger, Pfizer owns Wyeth and became the ultimate corporate parent of the WNI Askeaton facility. Further to this acquisition and due to certain planned corporate restructurings (which are subject to change) and the long lead time needed for permit transfer, WNI subsequently submitted a Transfer of a Licence Application to the EPA to account for a technical change of ownership of the Askeaton facility. This licence transfer became effective on 26th January 2011. For the purposes of the 2010 AER, the site will be referenced as Wyeth Nutritionals Ireland (WNI).

Brian Shiel
EHS Lead

2.0 REPORT

2.1 INTRODUCTION

This is the fifth Annual Environmental Report (AER) submitted by Wyeth Nutritionals Ireland in compliance with Conditions in the Integrated Pollution and Prevention Control (IPPC) Licence Register No. P0395-02. Previous reports were submitted in compliance with conditions of the Integrated Pollution Control (IPPC) 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, 2010 to December 31, 2010.

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

Pfizer Ireland Pharmaceuticals t/a Wyeth Nutritionals Ireland

2.1.4 Address

Askeaton
Co. Limerick
Ireland

2.1.5 Activities at the Site

Production commenced 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.

A full line of nutritional products, including infant formulas, follow-on formulas, growing-up milks, and prenatal supplements are manufactured. 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 education 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. The steps in this process are shown in *Fig. 1* below.

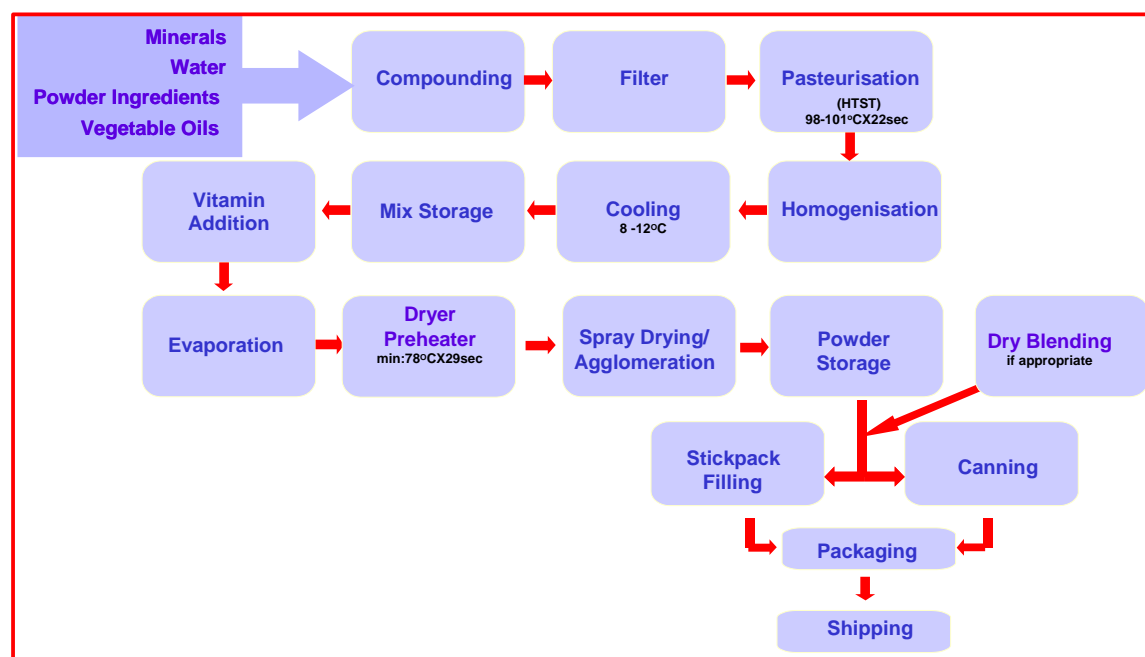


Figure 1: Powder production process

The powder is filled into easy-open cans along with a plastic scoop. Air in the can is removed and replaced with nitrogen or nitrogen/carbon dioxide mix 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 in this process are shown in *Fig. 2* below.

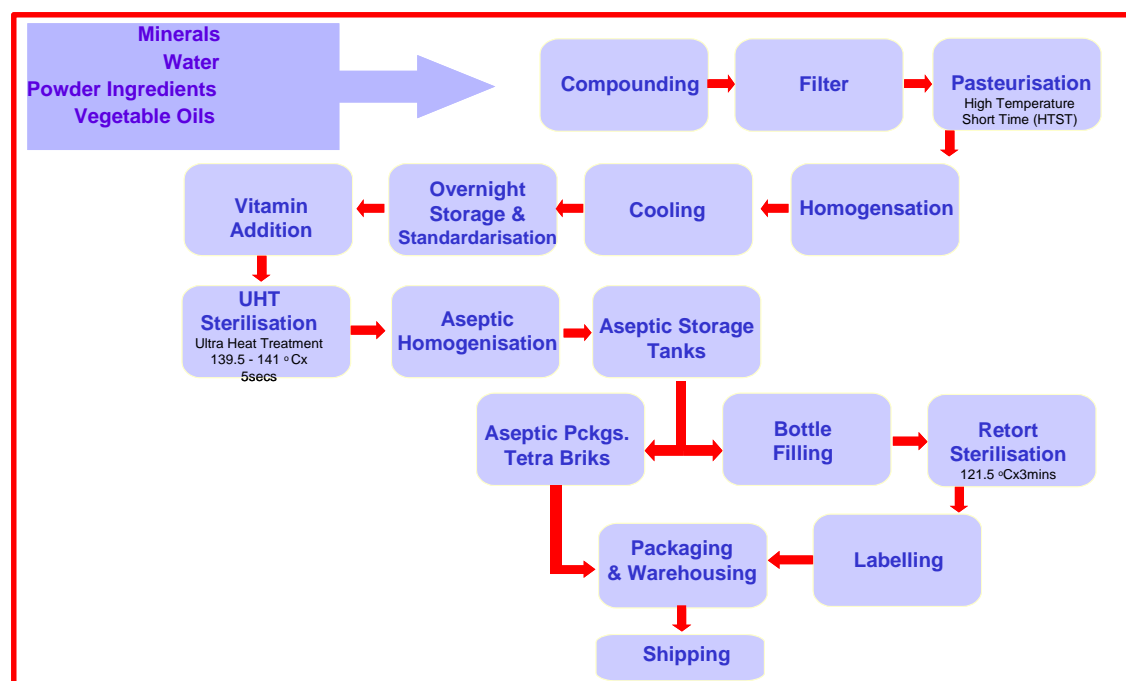


Figure 2: Liquid production process

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, Nitrogen and Carbon Dioxide 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

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

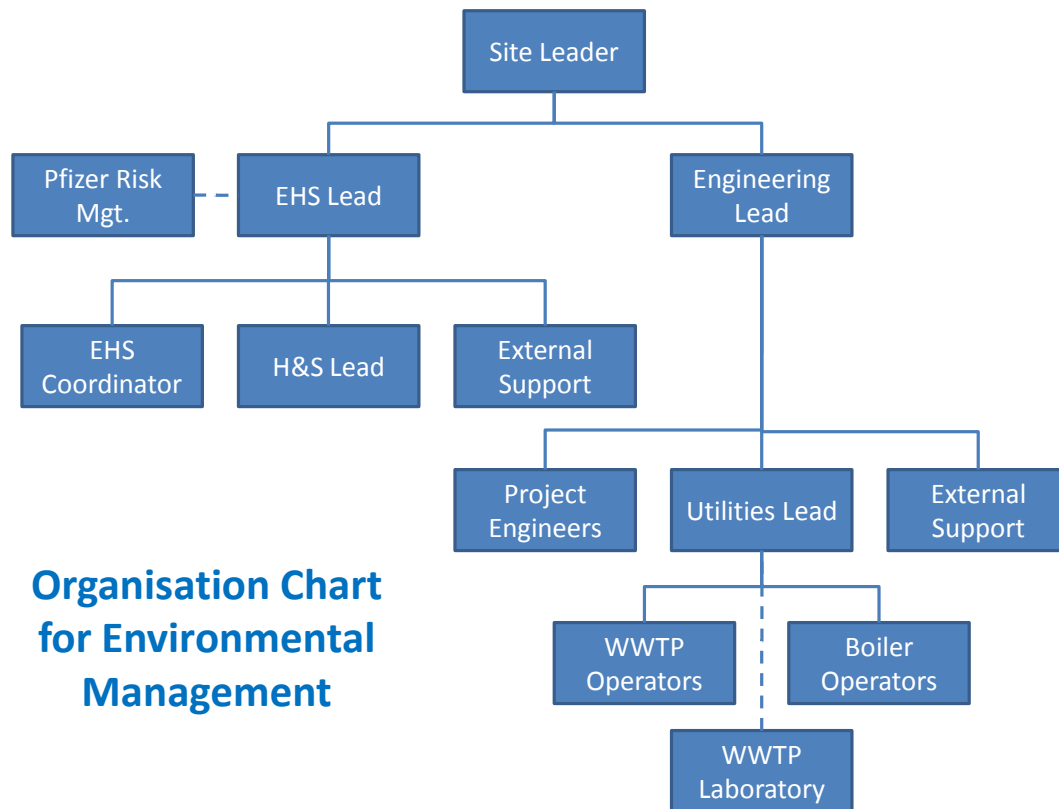


Figure 3: Organisation chart for environmental management

2.2 SUMMARY INFORMATION

2.2.1 Comparative Analyses

Data for emissions to both water (effluent) and atmosphere in 2010 are compared below with data from 2003 to 2009 (inclusive). In all other cases, year-to-year comparisons are made over as many years as possible.

2.2.2 Emissions to Water

Emission to surface water consists of waste from 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.

Parameter	Year								Emission Limit Value
	2003	2004	2005	2006	2007	2008	2009	2010	
Avg. Volume (daily) (m ³)	1409	1368	1730	1868	1875	2017	2072	2030	2800
Avg. pH	8.4	8.3	7.9	7.9	7.9	7.9	8.1	7.9	6-9

Table 1: Average daily value of physical parameters since 2003

Parameter	Mass Emission (kg)								Licenced Mass Emissions (kg)
	2003	2004	2005	2006	2007	2008	2009	2010	
BOD	5143	6591	8014	6771	9162	10475	9183	8140	36500
Sus. Solids	12343	12977	11713	13096	11538	12476	12214	12835	51100
Total Nitrogen	3261	3345	3833	3420	4258	5578	4702	4062	15330
Total Phosphorus (as P)	206	250	229	202	248	193	210	183	2044
Oils, Fats and Greases	2725	3645	3216	6425* ¹	6714* ¹	7039* ¹	7230* ¹	7066* ¹	15330
Ammonia (as N)	1389	1298	1077	860	1111	881	864	1203	10220

*¹ 10mg/l limit of detection was used to estimate result.

Table 2: Summary of annual mass emissions to surface water since 2003

The above information is depicted graphically in Fig. 4

Year-to-Year Mass Emissions

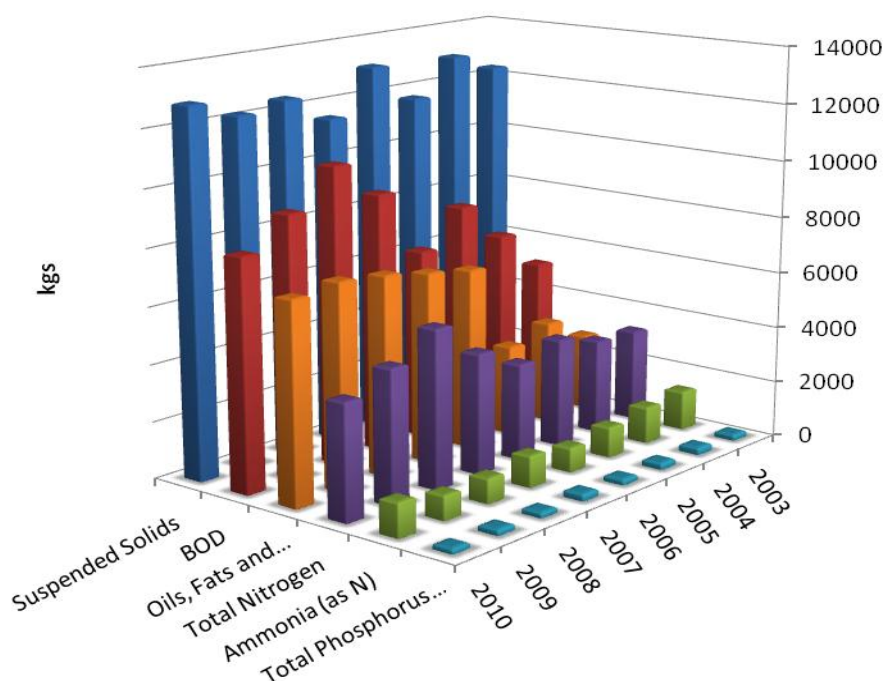


Figure 4: Effluent mass emissions to surface water since 2003 (8 years).

Comparing the results for 2010 with those of 2009 shows no significant change in the physical parameters with BOD, Total Nitrogen, Total Phosphorus and OFGs decreasing, while Suspended Solids and Ammonia increased.

All results for oils, fats and greases during 2006 to 2010 inclusive were below the level of detection of 10mg/l, which was used to estimate the emissions for those years.

There were no non-compliances for emissions to water during the reporting period.

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)							
	2003	2004	2005	2006	2007	2008	2009	2010
NOx (as NO ₂)	199.26	91.16	52.45	47.11	34.88	41.00	44.86	39.15
Total Particulates	9.20	*	17.16	33.96	54.63	50.98	39.28	30.40
CO	4.17	0.26	15.88	*	19.19 ^{*1}	18.27 ^{*1}	18.15 ^{*1}	18.26 ^{*1}

* no data available

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

Table 3: Summary of annual mass emissions to atmosphere since 2003.

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

Year-to-Year Mass Emissions

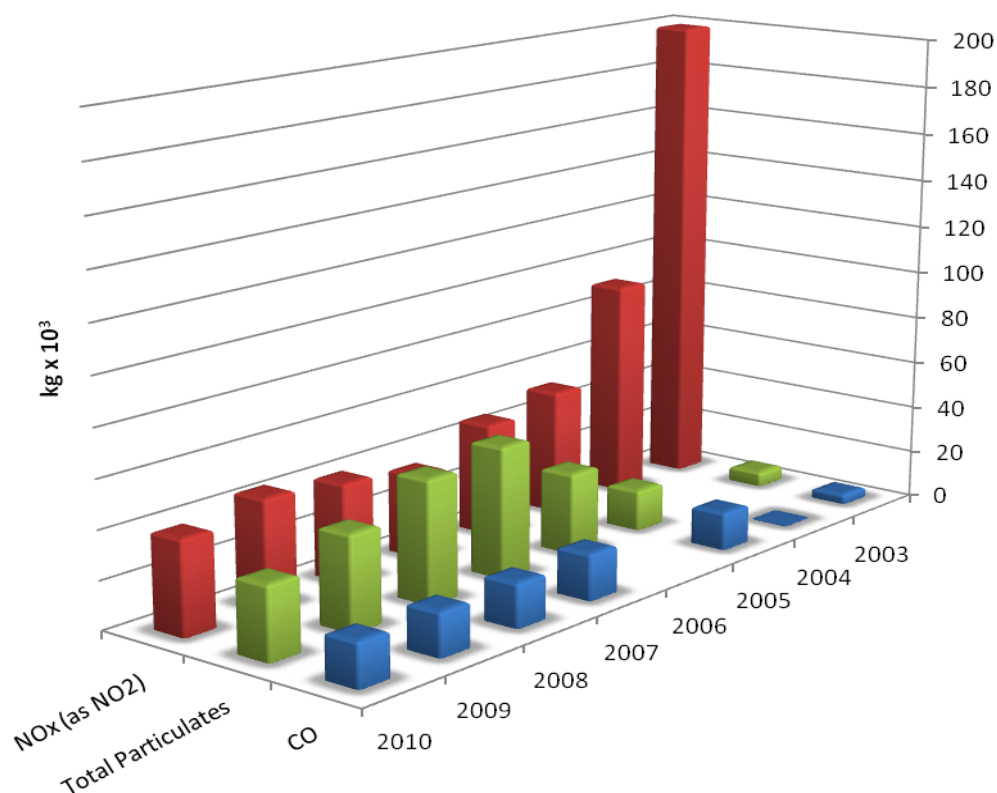


Figure 5: Mass emissions to atmosphere since 2003 (8 years).

Comparing emissions for 2010 with emissions in 2009 shows a decrease in NOx and total particulates with a slight, increase in CO emissions, however, the CO result is mostly from estimated data.

There were no non-compliances for emissions to atmosphere during the reporting period.

2.2.4 Waste Management

Non-Hazardous Waste

A total of 5906 tonnes of non-hazardous waste was generated from normal site operations during the reporting period. Approximately 80% (4725 tonnes) was sent off site for recovery and the remaining 20% (1181 tonnes) was landfilled. A record of the data relating to this type of waste from site operations (Condition 7 of the IPPC licence) and information concerning the management of this waste is presented in *Tables 4-6*.

EWG 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	21.80	R3	(b) Dublin	DMG Services
2 0 0 1 0 1	N	Cardboard and plastic packaging	457.15	R3	(b) Limerick	Greenstar Environmental Services Ltd.
2 0 0 1 0 1	N	Plastic packaging	55.80	R3	(b) Limerick	Greenstar Environmental Services Ltd.
2 0 0 1 0 1	N	Cardboard	21.20	R3	(b) Limerick	Greenstar Environmental Services Ltd.
2 0 0 1 4 0	N	Metal	601.96	R4	(b) Limerick	Greenstar Environmental Services Ltd.
1 5 0 1 0 7	N	Glass Packaging	16.01	R5	(b) Limerick	Greenstar Environmental Services Ltd.
0 2 0 5 0 2	N	Sludge	2973.34	R3	(b) Waterford	Molaisin Compost Ltd.
2 0 0 1 4 0	N	Metal	24.80	R4	(b) Limerick	Hegarty Metal Recycling
0 2 0 5 9 9	N	Waste liquid product incl. packaging	63.14	R3	(b) Carlow	Mr. Joeseeph Waddock
2 0 0 3 0 1	N	General food and office waste	705.91	D1	(b) Limerick	Greenstar Environmental Services Ltd.
2 0 0 3 0 1	N	Waste product and raw materials	489.77	D1	(b) Limerick	Greenstar Environmental Services Ltd.
2 0 0 1 2 5	N	Used cooking oil	1.58	R1	(b) Galway	Frylite (Ireland) Ltd.
0 2 0 3 0 4	N	Waste veg. oil	81.32	R3	(b) Cork	McGill Env. Systems (Irl.) Ltd.
2 0 0 1 3 8	N	Timber	3.4	R3	(b) Limerick	Greenstar Environmental Services Ltd.

Table 4: AER Summary of non-hazardous waste generated on site during 2010

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
Greenstar Environmental Services Ltd.	WCP-DC-08-1120-01	Dublin City Council	01/05/09
One51 ES Metals (Ireland) Ltd.	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
Greenstar Environmental Services Ltd.	W0082-02	EPA	06/11/03
One51 ES Metals (Ireland) Ltd.	WP 05-04	Limerick City Council	01/01/07
Frylite (Ireland) Ltd.	WR/77	Galway Co. Council	10/01/05
Molasin Compost Ltd.	W0245-01	EPA	19/01/10
Mr. Joeseeph 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 25.0 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 IPPC licence and information concerning the management of this waste is presented in *Tables 7-9*.

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	1.255	R4	(b) Kildare	Irish Lamp Recycling
2 0 0 1 2 1	Y	Fluorescent lamps	0.356	R5	(b) Kildare	Irish Lamp Recycling
2 0 0 1 3 3	Y	Batteries	0.215	R11	(b) Kildare	Irish Lamp Recycling
0 7 0 1 0 4	Y	Mixed solvents	3.418	R1, R2	(c) Germany (c) Belgium	Enva
0 6 0 2 0 4	Y	Hydroxides	0.446	D9	(b) Shannon	Enva
0 8 0 1 1 1	Y	Glue	0.005	R1	(c) Germany	Enva
1 3 0 2 0 8	Y	Oil and Grease	0.438	R1	(c) Germany	Enva
1 5 0 1 1 0	Y	Used drums	0.755	D9, R1	(b) Shannon (c) Germany	Enva
1 5 0 2 0 2	Y	Used filters and wipes	0.699	R1	(c) Germany	Enva
1 6 0 5 0 6	Y	Waste laboratory chemicals	0.156	R1, D9,	(b) Shannon (c) Germany	Enva
1 6 0 5 0 8	Y	Waste vitamins and minerals	0.070	R1	(c) Germany	Enva
2 0 0 1 2 6	Y	Waste Fish Oil	0.095	R1	(c) Germany	Enva
2 0 0 1 2 7	Y	Ion Exchange Resin	1.000	R1	(c) Germany	Enva
1 6 0 5 0 9	Y	Vitamins and Minerals	8.619	R1, D9	(c) Germany (b) Shannon	Enva
0 8 0 3 1 2	Y	Waste ink	0.077	R1	(c) Germany	Enva
1 3 0 2 0 8	Y	Waste oil	6.000	R9	(b) Portlaoise	Enva

Table 7: Summary of hazardous waste generated on site during 2010

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

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
Tradaree Transport	WCP-LK-10-0649-01	Limerick Co. Council	10/09/10

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 IPPC 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 is in *Tables 10*, below.

	pH		BOD (mg/l)		Total NH ₃ (mg/l)		Total N (mg/l)		
	High	Low	Avg.	High	Avg.	High	Avg.	High	Avg.
	8.7	7.4	8.1	24.0	8.9	1.3	0.3	4.2	2.1

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

There were three exceedences of the internal action limit for BOD (15 mg/l) during the reporting period. These were at the beginning of the year and were as a result of incorrect sampling method. An action to correct this was implemented and BOD remained below the limit for the remainder of the year.

2.2.6 Summary of Agency Monitoring and Enforcement

EPA representatives paid a number of visits to the site during 2010. The purpose of each visit is given in *Table 11* below.

Visit Date	Purpose
March 3 rd	To sample emissions to water
March 4 th	To perform a site audit
May 11 th	To sample emissions to water
July 14 th	To sample emissions to water
August 9 th	To sample emissions to atmosphere
November 8 th	To sample emissions to water

Table 11: Summary of visits to WNI by the Agency (EPA) during 2010.

There were no significant differences noted between any analysis carried out by the site and analysis carried out by the Agency.

2.2.7 Energy and Water Use

Electricity and natural gas were primarily used 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	215,891 MWh
Electricity	32,729 MWh

Table 12: Energy consumption summary for 2010.

Electricity

The site's annual electricity consumption since 2003 is shown in *Fig. 6*. Over 90% of electricity used during the reporting period was generated in the CHP Plant on site.

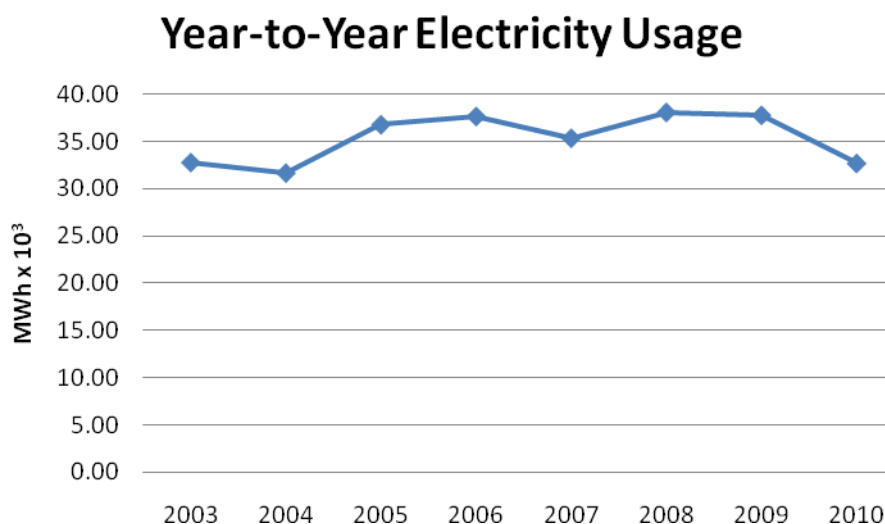


Figure 6: Annual electricity consumption since 2003 (8 years)

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*.

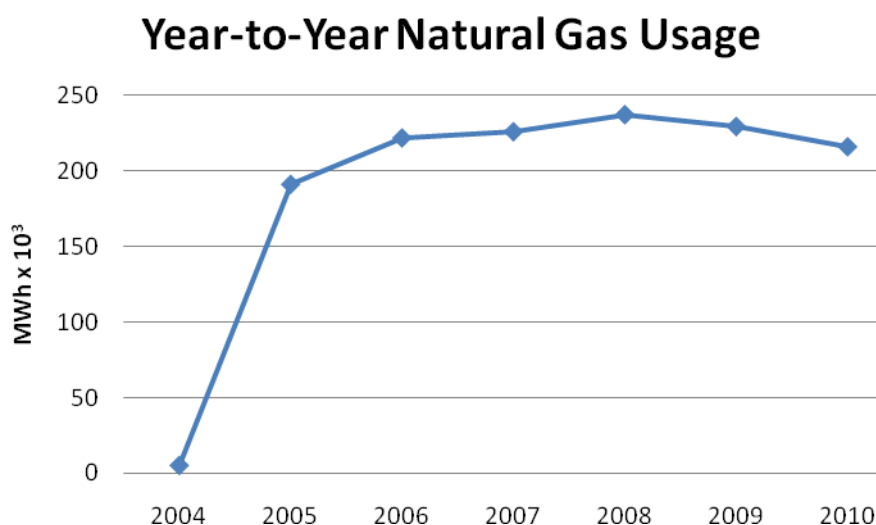


Figure 7: Annual natural gas consumption since 2004 (7 years)

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 buildup of lime scale on heated surfaces of the manufacturing process equipment.

A total of 930,239 m³ of water was used on site during the reporting period. Annual water usage since 2003 is shown in *Fig. 8*.

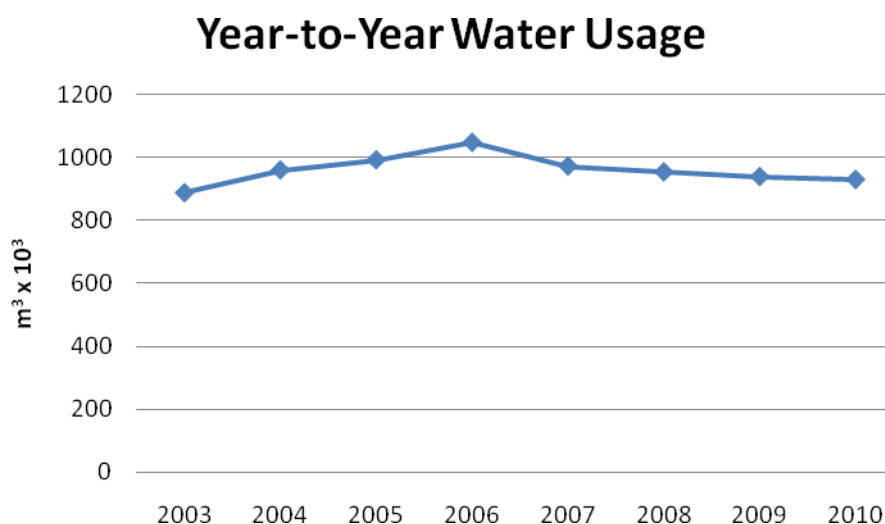


Figure 8: Annual water usage since 2003 (8-years)

2.2.8 Environmental Incidents and Complaints

Incidents

No incidents were recorded during the reporting period.

Complaints

Complaints received during the reporting period are summarized in *Table 13 below*.

Complaint Class	Noise	Odour	Water	Dust	Procedural	Miscellaneous
Total	16	None	None	None	None	None

Table 13: Summary of complaints.

2.3 MANAGEMENT OF THE ACTIVITY

2.3.1 Schedule of Environmental Objectives and Targets for 2010

The schedule of objectives and targets for 2010 is in *Table 14* 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 14: Schedule of objectives and targets for 2010.

2.3.2 Environmental Management Programme (EMP) Report

Objective No. 1 Improve control of emissions to water.

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

Programme:

1. Review available technology for use in monitoring the quality of the influent to the wastewater treatment plant with the capability 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.

Programme Report:

1. Available technology from a number of vendors was reviewed and assessed to match the application. The correct combination of

instrumentation has not been decided and there are new technologies which have yet to be reviewed.

2. Technology to measure activated sludge bacterial performance was evaluated and purchased towards the end of the reporting period. The technology will be used during 2011 as a tool to assist in improving the performance of the wastewater treatment plant.
3. A composite sampler suitable for the application was sourced and has been ordered for delivery in 2011.
4. Almost 50% of the recommendations from the report on the assessment of all the self-monitoring compliance data, on-site procedures and quality checks in the wastewater laboratory have been implemented to date. The remainder of the recommendations are scheduled for implementation in 2011.

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.

Programme Report:

1. The sections of the underground drainage network that were highlighted as having deficiencies during the phase 2 of the inspection and testing have been remediated. All work carried out has been recorded and filed.
2. The next phase of testing and inspection of the underground drainage network is continuing with any remaining sections of the network scheduled for completion during 2011.

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 to improve the plants coefficient of performance.

Programme Report:

1. Boiler operations were changed to allow one boiler to be taken off-line for a period, however, this boiler had later to be returned to service to meet operational demand.
2. Boiler operation settings were reviewed and adjusted in an attempt to reduce the number of 24-hour cycles when the boiler(s) are in hot stand-by. This trial was not successful.
3. A full review of refrigeration controls was carried out to identify where changes could be made to enable a greater match between compressor operation and refrigeration demand. Recommendations from the report are planned for implementation during 2011.
4. The operation of the refrigeration plant was reviewed to identify areas where improvements could be made to improve the plant's coefficient of performance. A number of areas were identified in the report and the recommendations are planned to be implemented during 2011.

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:

1. Where possible, identify recycle outlets for waste currently landfilled. Assess the capability of these outlets to comply with the legal and in-house 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.

Programme Report:

1. During 2010 a number of waste reduction initiatives were implemented by individuals and groups across the site to reduce waste generated and to divert waste from landfill. These initiatives resulted in the elimination of 169.68 tonnes of waste generated and diverted 1205 tonnes of waste from landfill to recycling and composting.
2. An improved recycle outlet for waste vegetable oil was identified and approved for use by the EPA. WNI also worked with Corporate procurement and EHS in developing a scope of work for a new waste management contract that has been put out for tender. The new contract is expected to be in place by mid 2011 and will include a requirement to drive waste management improvements on the site.

- 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.
- Programme Report:**
1. An analysis of noise from equipment indicated potential noise sources and action was taken to examine ways of reducing the level of noise at source. Exhaust fans were identified as a potential contributor and a research to source noise abatement technology that could be fitted without a major disruption to site operations was undertaken.
- An acoustic specialist company was found that had succeeded in reducing noise from exhaust fans in similar applications was contacted. They designed and fitted their abatement technology to one exhaust fan in 2011. Surveys have yet to be undertaken to measure the effectiveness of these measures.

2.3.3 Environmental Management Programme Proposal

The proposed schedule of objectives and targets for 2011 is in *Table 15* below:

No.	Objective	Target
1	Improve control of emissions to water.	Improve wastewater treatment plant performance and confirm the quality standard of monitoring data.
2	Reduce water use.	Reduce water use by 2% compared with water used during 2010.
3	Increase energy efficiency and reduce carbon dioxide emissions.	Reduce CO ₂ emissions by 5% compared with 2010 CO ₂ emissions.
4	Reduce waste generation and divert waste from landfill.	Reduce net waste generated by 2% compared to net waste generated during 2010.
5	Reduce site noise.	Identify and implement measures necessary to minimise a noise from site operations.

Table 15: Proposed schedule of objectives and targets for 2010.

- Objective No. 1** Improve control of emissions to water
- Target:** Improve wastewater treatment plant performance and confirm the quality standard of monitoring data.
- Programme:**
1. Source instrumentation to monitor the influent to the wastewater treatment plant that will detect abrupt changes in the influent characteristics.

2. Complete the implementation of the outstanding recommendations from the report on the assessment of all the self-monitoring compliance data, on-site procedures and quality checks in the wastewater treatment plant laboratory. Compare laboratory procedures with best practices.
3. Examine the issue of low temperature ambient condition effects on the wastewater treatment plant operation and determine if a cold operation strategy for the plant could be developed to counter such effects.

Objective No. 2 Reduce water use.

Target: Reduce water volume use by 2% compared with water volume used during 2010.

Programme:

1. Reduce the quantity of water used for clean-in-place (CIP) through a review of CIP methods used to identify opportunities for water and chemical use reduction.
2. Install controls and telemetry to match raw water pump duties to raw water demand.

Objective No. 3 Increase energy efficiency and reduce carbon dioxide emissions.

Target: Reduce CO₂ emissions by 5% compared with 2010 CO₂ emissions.

Programme:

1. Implement the identified energy reduction projects for the refrigeration plant.
2. Evaluate the potential energy reduction projects already identified and select the projects for implementation that will contribute in meeting the target.

Objective No. 4 Reduce waste generation and divert waste from landfill.

Target: Reduce net waste generated by 2% compared to net waste generated during 2010.

Programme:

1. Review all waste generated on site to identify opportunities for reduction.
2. Review waste disposal and recycle routes to identify opportunities to divert waste from disposal to recycle and improved recycle methods.

- Objective No. 5** Reduce site noise.
- Target:** Identify and implement measures necessary to minimise a noise from site operations.
- Programme:**
1. Confirm the effectiveness of recently installed noise abatement equipment on the exhaust fan.

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

Pollutants/Substances	Identification	Emissions from WNI in 2010		EPER Thresholds	
		Atmos. kg/year	Water kg/year	Atmos. kg/year	Water kg/year
CO ₂		40,067,997	-	100,000,000	-
NOx	as NO ₂	39,150	-	100,000	-
Total – Nitrogen	as N	-	4062	-	50,000
Total – Phosphorus	as P	-	183	-	5,000

Table 16: PERL of substances emitted during 2010 compared with EPER thresholds.

A comparison of emissions since 2002 for each of the substances listed above with the exception of CO₂ is made in *Table 2* and *Table 4* for emissions to water and emissions to atmosphere respectively.

Annual CO₂ emissions since 2002 are shown in *Fig. 9* below. The negative emissions shown for 2007 - 2010 represent CO₂ from exported electricity.

No emissions from 2010 exceeded the EPER thresholds.

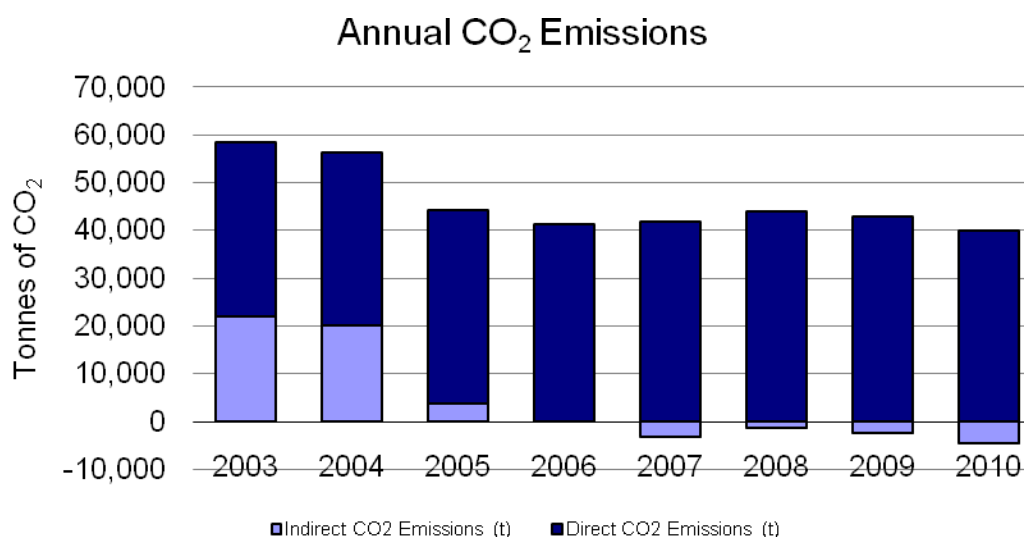


Figure 9: Annual CO₂ direct and indirect emissions since 2003 (8 years).

2.3.5 Other Significant Environmental Aspects and Audits

Wyeth Nutritionals continued to operate its Environmental Management System (EMS) to the ISO 14001 Standard. A surveillance audit conducted by SGS Ireland Ltd. took place in during September of the reporting period and the audit findings confirmed the site could continue to be registered.

Wyeth Nutritionals Ireland remained as a participant in the Eco-management and Audit Scheme. An audit of its environmental statement took place on June 28th and 29th 2010.

One waste management site was visited to observe their operation and check documentation to confirm its suitability for use by Wyeth Nutritionals Ireland.

2.4 LICENCE SPECIFIC REPORTS (Summaries)

2.4.1 Noise Monitoring

In accordance with the requirements of its IPPC 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 11th/12th May 2010. A second nighttime survey to examine tonal noise aspects was carried out on 1st July 2010. The site was operating normally on both occasions.

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 17* 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 by examining the profile of logged noise levels.	

Table 17: 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.

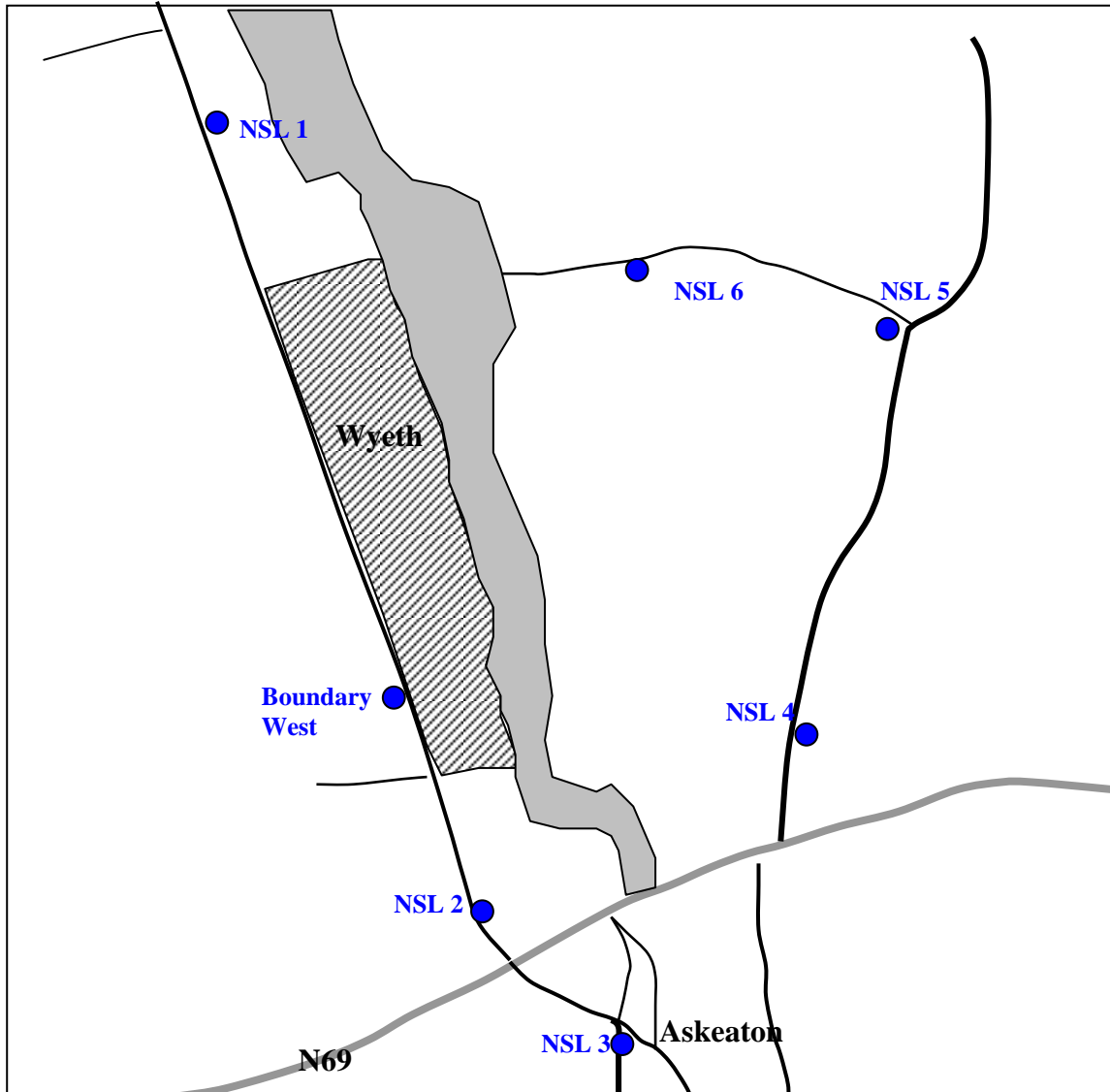


Figure 10: Noise measurement locations

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 18* below.

Location	Time	Measured Noise Level dB(A)				Specific Noise* ¹	Comments, Audible Sounds
		L _{Aeq}	L _{A90}	L _{A50}	L _{A10}		
Daytime							
NSL 1	12.30	53	29	36	50	<29	Occasional cars, Wyeth barely audible
	12.45	48	29	35	47		
NSL 2	12.15	49	40	44	51	41	Traffic on N69, and occasional local traffic, low level plant noise.
	12.30	50	41	44	51		
NSL 3	13.30	69	44	50	61	<46	Local and distant traffic, Wyeth barely audible
	13.45	64	46	54	66		
NSL 4	15.35	59	49	55	61	<52	Birds (frequent), traffic on N69, occasional local cars, lower level plant noise.
	15.50	60	52	57	63		
NSL 5	15.00	56	34	39	55	34	Birds (frequent), occasional local cars, low level plant noise.
	15.15	57	34	40	56		
NSL 6	14.15	37	31	33	37	33	Birds, low level variable plant noise.
	14.40	41	30	33	44		
Boundary West	12.20	50	44	46	48	46	Occasional traffic, plant noise.
	12.45	54	44	46	49		
Nighttime							
NSL 1	22.30	44	29	33	43	33	Two to three cars, light rain-drops, very low level variable plant noise.
	22.45	46	29	33	38		
NSL 2	22.15	48	42	44	50	44	Traffic on N69 and occasional local traffic, light rain drops, steady plant noise.
	23.35	52	44	46	53		
NSL 3	00.20	51	43	45	52	45	Occasional local traffic, distant traffic, variable plant noise, occasional tone at 250Hz.
	00.35	49	42	44	51		
NSL 4	23.10	52	43	47	56	43	Traffic on N69, occasional local traffic, dogs, steady plant noise.
	23.25	52	42	45	55		
NSL 5	23.15	46	37	39	45	39	Occasional cars, distant traffic, low level variable plant noise.
	23.30	47	34	36	42		
NSL 6	23.25	46	34	37	40	37	Low level variable plant noise, two car movements in lane.
	23.55	45	32	35	40		
Boundary West	22.25	47	47	47	48	47	Plant noise, occasional plant traffic and local road traffic.
	22.40	48	46	47	50		

*¹ Specific noise level attributable to site operations (higher noise level of two readings)

Table 18: Measured noise levels on 10th/11th May 2010.

During the nighttime survey of the 11th/12th May, a tonal feature was detected at NSL 3 (Askeaton). The tone was at a frequency of 250 Hz (third-octave). There was a northerly breeze on the night of the survey, which resulted in enhanced noise propagation towards Askeaton to the south. This tone was not clearly audible at the other measurement locations.

A second nighttime noise survey was carried out on 1st July 2010 to examine the tonal aspects in more detail. Third-octave spectra were first measured at each location, and in cases where a 250 Hz tonal feature was visible, a more detailed narrow-band analysis was carried out.

The results of the survey are presented in *Table 19*. During this second survey, there was a southerly breeze, which greatly reduced noise propagation towards NSL 3 (Askeaton), and enhanced noise propagation towards the north. The weather during this survey was dry, light southwest breeze (Beaufort 2) and short duration measurements of five minutes were performed for tonal purposes only.

The steady plant noise level at NSL 3 (Askeaton) was just 33 dB(A) and was barely audible. There was no tone detected.

At locations to the north (NSL 1 and NSL 6), the third octave spectra showed evidence of a tonal feature in the 250 Hz third-octave band. The detailed tonal analysis determined that these tones were “audible” but not “prominent”.

The IPPC licence prohibits “clearly audible” tones at nighttime, which are interpreted to mean “prominent” tones.

Label	Time	Measured Noise Level dB(A)					Specific Noise ¹	General Comments, Audible Sounds	Objective Tonal Analysis ²
		L _{Aeq}	L _{A90}	L _{A50}	L _{A10}				
NSL 1	22.40	44	42	44	46	44	Slowly varying plant noise. No clear tones.	1/3 rd octave feature at 250 Hz FFT: 240 Hz tone Joint Nordic: "audible"	
NSL 2	22.30	55	39	42	52	39	Traffic noise, rustling leaves, very low plant noise. Non-tonal	1/3 rd octave: no significant tonal features.	
NSL 3	23.05	54	33	37	51	<33	Occasional local car, digs, distant traffic, plant barely audible. Non-tonal.	1/3 rd octave: no significant tonal features.	
NSL 4	23.45	45	38	40	49	38	Traffic, rustling leaves, low level plant noise. Non-tonal.	1/3 rd octave: no significant tonal features.	
NSL 5	23.30	52	40	43	56	40	Distant traffic (quite noticeable) Aircraft, low level plant noise. Non-tonal.	1/3 rd octave: no significant tonal features.	
NSL 6	23.20	44	40	42	47	42	Plant noise, distant traffic. Possible tone	1.3 rd octave feature at 250 Hz FFT: 240 Hz tone Joint Nordic: "audible"	
Boundary West	22.30	50	49	50	51	50	Steady plant noise. Non-tonal	1/rd octave: no significant tonal feature.	

¹ Specific noise level attributable to site operations.

² In interpreting the third-octave spectra, a clear tonal feature is a frequency band that stands at least 5 dB above the neighbouring bands. Where tonal features were detected in the third-octave spectra, a narrow-band FFT analysis was carried out. The tones in the FFT spectra were then assessed in accordance with the Joint Nordic Method. This is done by comparing the level of the tonal component with the level of the tonal broadband noise in the critical bandwidth surrounding the tone. If the tone exceeds the broadband noise by specified amounts, it may be classed as "audible", or "prominent". A "prominent" tone would be considered "clearly audible". Where the tone is less than the broadband noise, the tone is said to be "masked", and is likely to be inaudible.

Table 19: Investigation of tonality July 1st 2010.

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.

Location		Nighttime Specific Noise Levels						
Type	Label	2004	2005	2006	2007	2008	2009	2010
Noise Sensitive Location	NSL 1	<31	42	33	40	39	<30	33
	NSL 2	43	<40	45	43	45	43	44
	NSL 3	45	40	45	42	38	43	45
	NSL 4	36	40	30	41	30	45	43
	NSL 5	-	-	43	<34	41	41	39
	NSL 6	-	-	-	-	-	44	37
Boundary	Boundary West	52	52	50	49	52	51	47

Table 20: Comparison of nighttime specific noise levels since 2004.

The results of the noise surveys from 2004 to 2010 are represented in Table 20. 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. The noise level at the western boundary decreased by 4 dB relative to 2009. This is most likely due to Dryer 2 taken out of service prior to the 2010 survey.

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 <29 dB(A) to <52 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 33 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 detectable impulsive component in the noise at the noise sensitive locations. While tonal features in the 250 Hz third-octave band were detected, a narrow-band analysis determined that these were not clearly audible tones.

2.4.2 Groundwater Monitoring

In accordance with its IPPC 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	1 st March
2	25 th August

Table 21: Dates for groundwater sampling in 2010.

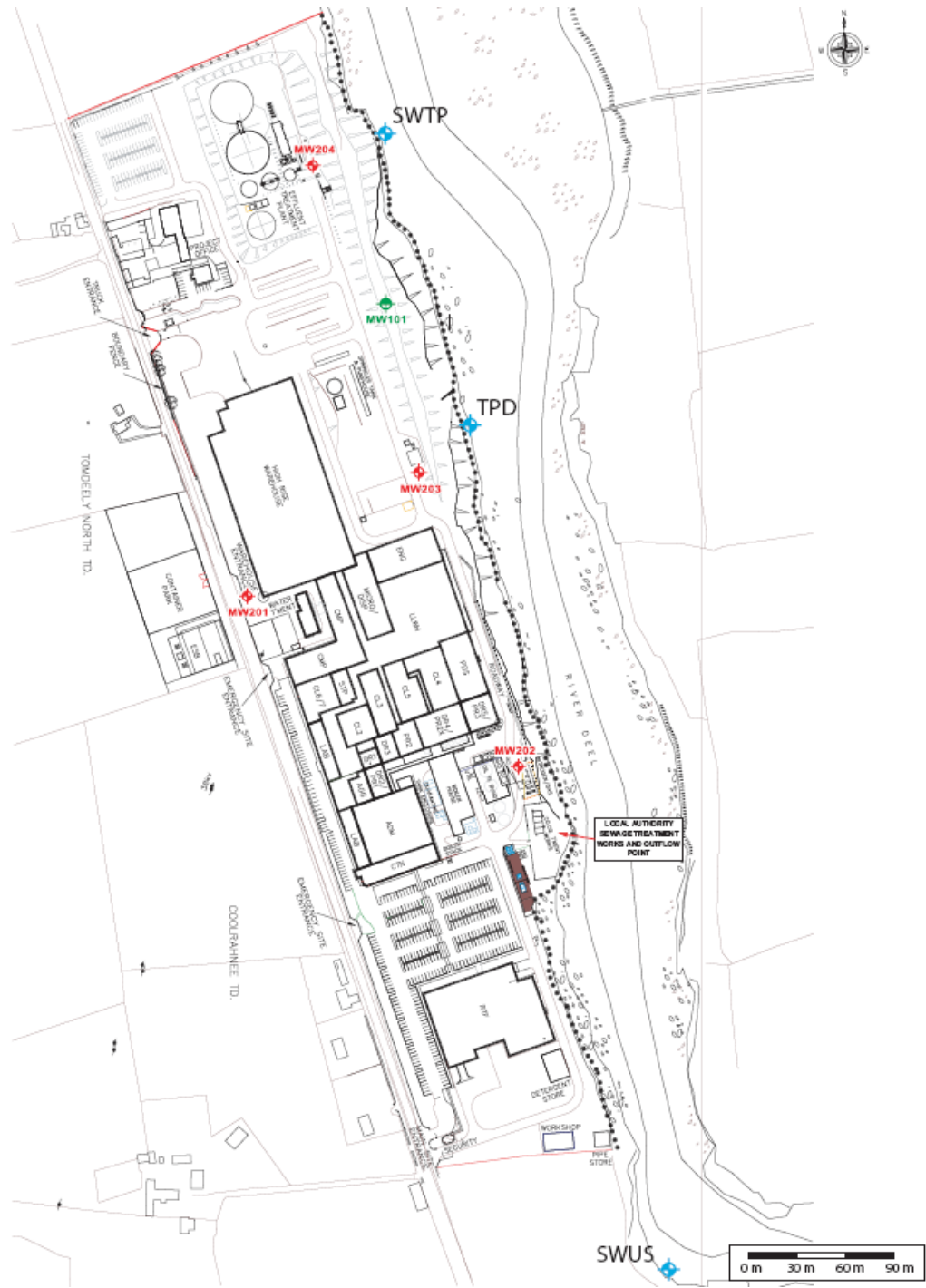


Figure 11: Locations of the monitoring wells and other sample points around the site.
SWUS – Surface water up stream
SWTP – Surface water treatment plant (down stream)
TPD – Treatment plant discharge

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	Period	Sample ID				
		101	201	202	203	204
Nitrate as NO ₃ (mg/l)	1	14	8	<1.33	<1.33	<1.33
	2	19.94	7.531	<1.29	<1.29	11.52
Chloride (mg/l)	1	478	40	285	146	376
	2	1280	62	71	202	398
Sodium (mg/l)	1	229	28	246	62	341
	2	758	26	110	97	444
Calcium (mg/l)	1	244	77	100	241	61
	2	325	70	76	267	47
Fluoride (mg/l)	1	0.2	0.2	0.2	0.2	0.1
	2	<0.1	0.1	0.1	<0.1	0.2
Magnesium (mg/l)	1	44	8	10	11	6
	2	98	8	8	17	6
Sulphate (soluble) (mg/l)	1	92	17	7	9	16
	2	196	30	37	29	16
Iron (mg/l)	1	<0.03	0.03	0.19	0.15	0.04
	2	<0.19	<0.19	<0.19	0.29	<0.19
Manganese (mg/l)	1	0.073	0.020	1.110	2.020	0.311
	2	0.08	0.02	0.90	2.22	0.32
Nitrite as NO ₂ (mg/l)	1	<0.33	<0.33	<0.33	<0.33	<0.33
	2	<0.02	<0.02	<0.02	0.030	<0.02
Total Phosphates as P (mg/l)	1	0.064	0.168	1.98	5.49	0.143
	2	<0.08	<0.08	<0.08	<0.08	<0.08
Phosphate Ortho as P	1	13	4	11	13	20
	2	31	5	5	15	24
Total Alkalinity (CaCO ₃) (mg/l)	1	497	2150	551	678	633
	2	813	175	189	666	118
COD (mg/l)	1	23	<20	29	<20	23
	2	56	<11	<11	23	21

- below the limit of detection

Table 22: Inorganic analysis and COD results for samples

Parameter	Period	Sample ID						SWUS	SWTP	TPD
		101	201	202	203	204				
BOD (mg/l)	1	-	-	-*	-*	6	-	-	27	
	2	-	-	10	-	-	3	-*	-*	
Total Coliforms (mpn/100 ml)	1	91	-	23	-	770	3990	3500	228200	
	2	27	-	7280	687	133	8130	23590	92080	
E. Coliforms (mpn/100 ml)	1	18	-	-	-	-	921	980	1	
	2	-	-	93	-	-	1733	1733	6	

- Not detected above the indicated method detection limit (MDL)
 -*indicates BOD not detected above lower detection limit of 2 mg/l
Table 23: BOD and bacteriological results for samples.

Sample ID	Period	Depth to Water (mbtoc)* ¹	Well Casing Elevation (mASD)* ²	Total Depth (mbtoc)* ¹	Groundwater Elevation (mASD)* ²	Purged Volume (Litre)	Dissolved Oxygen (mg/l)	pH	Redox Potential (mV)	Electrical Conductivity (µS/cm)	Temp. (°C)
101	1	10.78	15.92	14.5	5.14	25	1.78	7.05	270	1629	10.9
	2	11.60	15.92	15.67	4.32	26	5.90	6.87	219	2881	11.5
201	1	4.61	18.00	19.9	13.39	65*	0.49	7.82	142	321	11.7
	2	4.96	18.00	19.81	13.04	55*	3.29	7.97	215	418	13.0
202	1	11.155	15.00	14.72	3.85	25	0.00	8.54	-72	1124	14.7
	2	11.33	15.00	14.72	3.67	20	0.07	7.46	-200	646	15.2
203	1	7.72	14.80	19.08	7.08	65*	0.26	8.25	99	646	11.9
	2	7.64	14.80	19.97	7.16	60*	2.93	7.57	123	957	12.6
204	1	3.13	8.44	7.18	5.31	30	0.10	8.76	95	1380	11.8
	2	3.50	8.44	11.88	4.94	50	0.19	7.63	154	1727	13.3
SWUS	1	NA	NA	NA	NA	NA	6.17	8.89	258	3907	4.0
	2	NA	NA	NA	NA	NA	5.42	6.94	91	25470	16.5
SWTP	1	NA	NA	NA	NA	NA	7.12	8.78	274	10700	4.6
	2	NA	NA	NA	NA	NA	6.07	8.00	97	27750	16.2
TPD	1	NA	NA	NA	NA	NA	7.34	7.73	286	1540	15.5
	2	NA	NA	NA	NA	NA	8.00	7.98	165	1333	24.7

*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 (River Deel) 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. Historical data indicated a negative impact on the groundwater quality at well BH202 adjacent to the River Deel in terms of bacteriological quality (elevated total and faecal coliform results).

2.4.3 Bund Test Inventory

Bunds on the site are regularly tested in accordance with Condition 9 of the IPPC 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.

18 bunds were tested during 2010 and five had minor faults causing them to fail. Repairs on these bunds will be completed during 2011.

No.	Description	Last Recorded Test	Result	Test Due	Comment
1	Chemical Store	N/A	N/A	N/A	Remote containment
2A	RTF Acid Bund	July 2010	Pass	July 2013	-
2B	RTF P3 Horlith	July 2010	Fail	Post repair	Weld failure.
3A	Lube oil WWTP	July 2010	Pass	July 2013	-
3B	Lube oil Boiler Hse.	July 2010	Pass	July 2013	-
3C	Lube oil Eng. Stores	July 2010	Pass	July 2013	-
4	Sodium Hypo. Tank	July 2010	Pass	July 2013	-
6	Oil storage.	July 2010	Pass	July 2013	-
7	Main Caustic Storage Tank	October 2008	Pass	October 2011	-
8	Nitric Acid/HCL Acid Storage Tanks	February 2009	Pass	February 2012	-
9	WW Waste Products Tanks	N/A	N/A	N/A	Remote containment
10	Mix Process Tanks – Process 2	December 2008	Pass	December 2011	-
11	Mix Process Tanks – Process 2X	December, 2008	Pass	December, 2011	-
12	Mix Process Tanks – Process 3	July 2011	Fail	Post repair	Crack at wall joint.
13A	Lacquer Store	July 2010	Pass	July 2013	-
13B	Lab. Chemical Store	July 2010	Pass	July 2013	-
14A	Haz. Waste Solvent Store	July 2010	Pass	July 2013	-
14B	Haz. Waste Chemical Store	July 2010	Pass	July 2013	-
15A	Ferric Sulphate Bund (WWTP)	July 2010	Pass	July 2013	-
15B	Urea Storage Bund (WWTP)	July 2010	Fail	Post repair	Leak through pipe outlet.
16	WTP Alum Storage Enclosed Sump	July 2010	Pass	July 2013	-
17	WTP Poly Enclosed Sump	July 2010	Fail	Post repair	Panel perforated in one section
18	Mix Process Tanks – Process 1	July 2010	Fail	Post repair	Seepage through one wall
19	De-Min Plant at Boiler Hse.	N/A	N/A	N/A	Remote containment
20	WTP Alum Tank and Salt Sat. Bund	Jan 2010	Pass	Jan 2013	-
	RTF Products Bund	N/A	N/A	N/A	Remote containment

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 2010.

A summary of the review is as follows:

During 2010 a new chemical storage area adjoining the existing water treatment plant was constructed. The new storage area includes a salt saturator and an alum tank, both of which are located within a newly constructed external bund. Further structural changes include the addition of a new carbon dioxide storage tank as part of a new packaging project.

No equipment was decommissioned.

The following cost updates were included in the CRAMP for the calendar year 2010:

- Quantities and costs for the removal of hazardous and non-hazardous waste were reviewed and revised to reflect realistic current rates;
- The cost allocated for cleaning of bunds was adjusted to include the cleaning of the added bund at the water treatment plant.
- The cost allocated for decommissioning of all tanks was adjusted to include the decommissioning of the two new tanks at the water treatment plant.
- Cost for the removal and disposal of fluorescent tubes was revised to reflect current pricing.

Other minor changes were made to the document to reflect the site's change of ownership and groundwater monitoring results for 2010.

From the revised plan it was estimated that, in the very unlikely event of site closure involving complete cessation of all production activities by Pfizer Ireland Pharmaceuticals t/a Wyeth Nutritionals Ireland, an allowance of €2,099,738 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 2010

During 2010 a new chemical storage area adjoining the existing water treatment plant was constructed. The new storage area includes a salt saturator and an alum tank, both of which are located within a newly constructed external bund. Further structural changes during 2010 include the addition of a new carbon dioxide storage tank as part of a new packaging project. As it is felt that any risks associated with these additional structures are already identified within existing risks, no new risks were identified.

The existing risks were re-assessed and changes were made to one risk due to improvements made during 2010. The risk associated with site closure was removed as it is dealt with in detail via the CRAMP, however, the cost for the site closure was included in the worst case financial scenario model. This change also changed two other identified risks and in order to allow for a more realistic worst case financial model, the cost of remediation for each severity score was increased.

Due to the change of ownership of the site changes were made to the financial provisions to include cover from Pfizer as outlined in the new parent guarantee letter dated 26th January 2011.

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 and December-January 2011 plant shutdowns of the reporting period, additional outstanding remediation work was completed on section 2 of the network. Re-testing was also carried out on part of the network

Additional remediation work remains to be completed on a small area of the network in section 2 and inspection and testing will be completed on section 3 during 2011.

Appendix 1



Environmental Protection Agency

| PRTR# : P0395 | Facility Name : Pfizer Ireland Pharmaceuticals | Filename : P0395_2010.xls | Return Year : 2010 |

[Guidance to completing the PRTR workbook](#)

AER Returns Workbook

Version 1.1.11

REFERENCE YEAR	2010
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1. FACILITY IDENTIFICATION

Parent Company Name	Pfizer Ireland Pharmaceuticals
Facility Name	Pfizer Ireland Pharmaceuticals
PRTR Identification Number	P0395
Licence Number	P0395-02

Waste or IPPC Classes of Activity

	class_name
7.2.1	The treatment and processing of milk, the quantity of milk received being greater than 200 tonnes per day (average value on a yearly basis).
2.1	The operation of combustion installations with a rated thermal input equal to or greater than 50MW

Address 1	Askeaton
Address 2	County Limerick
Address 3	
Address 4	
Country	Ireland
Coordinates of Location	-8.98170 52.6091
River Basin District	IEGBNISH
NACE Code	1051
Main Economic Activity	Operation of dairies and cheese making
AER Returns Contact Name	Brian Shiel
AER Returns Contact Email Address	brian.shiel@pfizer.com
AER Returns Contact Position	EHS Lead
AER Returns Contact Telephone Number	061 601 307
AER Returns Contact Mobile Phone Number	087 130 4522
AER Returns Contact Fax Number	061 392 440
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
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)

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

[Link to previous years emissions data](#)

| PRTR# : P0305 | Facility Name : Pfizer Ireland Pharmaceuticals | Filename : P0305_2010.xls | Return Year : 2010 |

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SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR		METHOD			Please enter all quantities in this section in KGs				QUANTITY		
POLLUTANT		Method Used			ADD EMISSION POINT						
No. Annex II	Name	M/C/E	Method Code	Designation or Description	A1-1	A1-2	A1-4	Site	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4			
02	Carbon monoxide (CO)	C	OTH	Calculated from biannual measurements on boilers (ISO 12039) and estimated from expected emission on CHP Plant	17554.0	706.8	4.27	0.0	18265.07	0.0	0.0
03	Carbon dioxide (CO2)	C	ETS		0.0	0.0	0.0	40068000.0	40068000.0	0.0	0.0
08	Nitrogen oxides (NOx/NO2)	M	ISO 10849:1996		37960.0	1017.9	179.3	0.0	39157.2	0.0	0.0

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

ADD NEW ROW DELETED ROW *

RELEASES TO AIR		METHOD			Please enter all quantities in this section in KGs				QUANTITY		
POLLUTANT		Method Used			ADD EMISSION POINT						
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year			
					0.0	0.0	0.0	0.0			

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

ADD NEW ROW DELETED ROW *

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

RELEASES TO AIR		METHOD			Please enter all quantities in this section in KGs						QUANTITY		
POLLUTANT		Method Used			ADD EMISSION POINT								
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	A2-1	A2-2	A2-3	A2-4	A2-5	A2-6	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4	Emission Point 5	Emission Point 6			
210	Dust	M	ALT	EN 13284-1	2199.0	33.0	6681.0	9957.0	46.0	11492.0	30408.0	0.0	0.0

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

ADD NEW ROW DELETED ROW *

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



4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

| PRTR# : P0395 | Facility Name : Pfizer Ireland Pharmaceuticals | Filename : P0395_2010.xls | Return Year : 2010 |

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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				Please enter all quantities in this section in KGs			
POLLUTANT		Method Used		ADD EMISSION POINT	QUANTITY		
No. Annex II	Name	M/C/E	Designation or Description	SW1 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
12	Total nitrogen	M	OTH Colorimetric Hach Method 1007		4062.0	4062.0	0.0
13	Total phosphorus	M	OTH Colorimetric Hach Method 8190		183.0	183.0	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				Please enter all quantities in this section in KGs			
POLLUTANT		Method Used		ADD EMISSION POINT	QUANTITY		
No. Annex II	Name	M/C/E	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) 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 C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO WATERS				Please enter all quantities in this section in KGs			
POLLUTANT		Method Used		ADD EMISSION POINT	QUANTITY		
Pollutant No.	Name	M/C/E	Designation or Description	SW1 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
238	Ammonia (as N)	M	OTH 10031 Colorimetric Hach Method		1203.0	1203.0	0.0
303	BOD	M	OTH 5-Day BOD Test		8140.0	8140.0	0.0
314	Fats, Oils and Greases	E	ESTIMATE		7066.0	7066.0	0.0
240	Suspended Solids	M	OTH Standard Method		12835.0	12835.0	0.0



4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

| PRTR#: P0395 | Facility Name : Pfizer Ireland Pharmaceuticals | Filename : P0395_2010.xls | R: 29/03/2011 12:07

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			ADD EMISSION POINT	QUANTITY		
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

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					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			ADD EMISSION POINT	QUANTITY		
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



4.4 RELEASES TO LAND

[Link to previous years emissions data](#)

| PRTR# : P0395 | Facility Name : Pfizer Ireland Pharmaceuticals | Filename : P0395_2010.xls | Return Year : 2010 |

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SECTION A : PRTR POLLUTANTS

POLLUTANT		RELEASES TO LAND			Please enter all quantities in this section in KGs		
No. Annex II	Name	M/C/E	Method Used	ADD EMISSION POINT	QUANTITY		
			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)

POLLUTANT		RELEASES TO LAND			Please enter all quantities in this section in KGs		
Pollutant No.	Name	M/C/E	Method Used	ADD EMISSION POINT	QUANTITY		
			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 [PRTR# : P0395 | Facility Name : Pfizer Ireland Pharmaceuticals | Filename : P0395_2010.xls | Return Year : 2010]

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Please enter all quantities on this sheet in Tonnes

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Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Licence/Permit No of Next Destination Facility Non-Haz Waste: Name and Licence/Permit No of Receiver/Disposer	Haz Waste: Name and Licence/Permit No of Next Destination Facility Non-Haz Waste: Name and Licence/Permit No of Receiver/Disposer	Address of Next Destination Facility Non-Haz Waste: Address of Receiver/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used						
Within the Country	20 01 01	No	21.8	paper	R3	M	Weighed	Offsite in Ireland	DMG Services t/a Shred-it, WFP-DC-09-0011-01	Parkwest Ind. Est., Dublin, 12, Ireland			
Within the Country	20 01 01	No	457.15	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd., W0082-02	Ballykeeffe Towland, Dock Road, Limerick, Ireland			
Within the Country	20 01 39	No	55.8	plastics	R3	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd., W0082-02	Ballykeeffe Towland, Dock Road, Limerick, Ireland			
Within the Country	20 01 01	No	21.2	cardboard	R3	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd., W0082-02	Ballykeeffe Towland, Dock Road, Limerick, Ireland			
Within the Country	20 01 40	No	601.96	metals	R4	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd., W0082-02	Ballykeeffe Towland, Dock Road, Limerick, Ireland			
Within the Country	15 01 07	No	16.01	glass packaging	R5	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd., W0082-02	Ballykeeffe Towland, Dock Road, Limerick, Ireland			
Within the Country	02 05 02	No	2973.34	sludges from on-site effluent treatment	R3	M	Weighed	Offsite in Ireland	Molaisin Compost Ltd., W0245-01	Kilmolash, Cappoquin, Co. Waterford, Ireland			
Within the Country	20 01 40	No	24.8	metals	R4	M	Weighed	Offsite in Ireland	One51 ES Metals (Ireland) Ltd. Via Hegarty Metals Processors (Intl) Ltd., WP 05-04	Ballysimon Road, Limerick, Ireland			
Within the Country	02 05 99	No	63.14	waste liquid product	R3	M	Weighed	Offsite in Ireland	Mr. Joseph Waddock, WP 02/08	Killamaster, Co. Carlow, Ireland			
Within the Country	20 03 01	No	705.91	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd., W0082-02	Ballykeeffe Towland, Dock Road, Limerick, Ireland			
Within the Country	20 03 01	No	489.77	waste product and raw materials	D1	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd., W0082-02	Ballykeeffe Towland, Dock Road, Limerick, Ireland			
Within the Country	20 01 25	No	1.58	used cooking oil	R1	M	Weighed	Offsite in Ireland	Frylite Ltd., WR/77	Kilcolgan, Co. Galway, Ireland			
Within the Country	02 03 04	No	81.32	waste vegetable oil	R3	M	Weighed	Offsite in Ireland	McGill Environmental Systems (Int.) Ltd., W0180-01	Croom, Carnignavar/Glenville, Co. Cork, Ireland			
Within the Country	20 01 38	No	3.4	wood other than that mentioned in 20 01 37	R3	M	Weighed	Onsite in Ireland	Greenstar Env. Services Ltd., W0082-02	Ballykeeffe Towland, Dock Road, Limerick, Ireland			
Within the Country	20 01 35	Yes	1.255	WEEE	R4	M	Weighed	Offsite in Ireland	Irish Lamp Recycling Ltd., WFP-KE-08-0348-01	Woodstock Ind. Est., Athy, Co. Kildare, Ireland	Irish Lamp Recycling (Int.) Ltd., WFP-KE-08-0348-01, Woodstock Ind. Est., Athy, Co. Kildare, Ireland	Woodstock Ind. Est., Athy, Co. Kildare, Ireland	
Within the Country	20 01 21	Yes	0.356	fluorescent tubes and other mercury-containing waste	R5	M	Weighed	Offsite in Ireland	Irish Lamp Recycling Ltd., WFP-KE-08-0348-01	Woodstock Ind. Est., Athy, Co. Kildare, Ireland	Irish Lamp Recycling (Int.) Ltd., WFP-KE-08-0348-01, Woodstock Ind. Est., Athy, Co. Kildare, Ireland	Woodstock Ind. Est., Athy, Co. Kildare, Ireland	
Within the Country	20 01 36	Yes	0.215	batteries	R11	M	Weighed	Offsite in Ireland	Irish Lamp Recycling Ltd., WFP-KE-08-0348-01	Woodstock Ind. Est., Athy, Co. Kildare, Ireland	Irish Lamp Recycling (Int.) Ltd., WFP-KE-08-0348-01, Woodstock Ind. Est., Athy, Co. Kildare, Ireland	Woodstock Ind. Est., Athy, Co. Kildare, Ireland	
Within the Country	07 01 04	Yes	0.261	mixed solvents	R1	M	Weighed	Abroad	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	07 01 04	Yes	3.157	mixed solvents	R2	M	Weighed	Abroad	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	06 02 04	Yes	0.446	hydroxides	D9	M	Weighed	Offsite in Ireland	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	08 01 11	Yes	0.005	waste glue	R1	M	Weighed	Abroad	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	13 02 08	Yes	0.438	lubricating oil and grease	R1	M	Weighed	Abroad	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	15 01 10	Yes	0.363	packaging containing residues of or contaminated by dangerous substances	D9	M	Weighed	Offsite in Ireland	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	15 01 10	Yes	0.392	packaging containing residues of or contaminated by dangerous substances	R1	M	Weighed	Abroad	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	15 02 02	Yes	0.699	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	R1	M	Weighed	Abroad	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	16 05 06	Yes	1.444	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	R1	M	Weighed	Abroad	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	16 05 06	Yes	0.12	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	D9	M	Weighed	Offsite in Ireland	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	20 01 26	Yes	0.095	oil and fat other than those mentioned in 20 01 25	R1	M	Weighed	Abroad	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	20 01 27	Yes	1.0	paint, inks, adhesives and resins containing dangerous substances	R1	M	Weighed	Abroad	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	16 05 09	No	8.613	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08	R1	M	Weighed	Abroad	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	16 05 09	No	0.006	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08	D9	M	Weighed	Offsite in Ireland	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	08 03 12	Yes	0.077	waste ink containing dangerous substances	R1	M	Weighed	Abroad	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	
Within the Country	13 02 08	Yes	6.0	other engine, gear and lubricating oils	R9	M	Weighed	Offsite in Ireland	ENVA Ireland Ltd., W0184-1	Cionnamain Ind. Est., Portlaoise, Co. Laoise, Ireland	Cionnamain Ind. Est., Portlaoise, Co. Laoise, Ireland	Cionnamain Ind. Est., Portlaoise, Co. Laoise, Ireland	
Within the Country	16 05 08	Yes	0.07	discarded organic chemicals consisting of or containing dangerous substances	R1	M	Weighed	Abroad	ENVA Ireland Ltd., W0041-1	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	Smithstown Ind. Est., Shannon, Co. Clare, Ireland	

