ANNUAL ENVIRONMENTAL REPORT

2014

For

Arrow Group,

The Maudlins Industrial Estate,

Naas,

Co. Kildare

IE Licence No. P0812-01

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1.0 Introduction

1.1 Company Details

Company	**Arrow Group**
Address	The Maudlins Industrial Estate
Town	Naas
County / City	Co. Kildare
IE Classification	7.8 (a) (b): Food Manufacturing
Description of Classification	*"The treatment and processing, other than exclusively packaging, of the following raw materials, whether previously processed or unprocessed, intended for the production of food or feed from: only animal raw materials (other than exclusively milk) with a finished product production capacity greater than 75 tonnes per day; For the purposes of clause (a), packaging shall not be included in the final weight of the product. Clause (a) shall not apply where the raw material is milk only".*
Employees	818
Contact Name	Ms. Eibhlis Crowley
Position	Environmental Manager
Telephone	045-894100
Fax	045-894143
Email	ecrowley@dawnfarms.ie

IE Registration Number	**P0812-01**

*Please note the Employee No. detailed in the 2013 AER did not include QK Coldstores employees

It shall be noted that all information contained herein, refers to the period from January 2014 to December 2014, unless otherwise specified. Please note that Vitner Products ceased operating on the Arrow Group site on the 5th January 2012. The information and data outlined in this report will refer to the other five companies operating on the site.

The Arrow Group now operate under an Industrial Emissions Licence since the 16th December 2013. The IPPC Licence was amended to conform with the provisions and requirements of Council Directive 2010/75/EU.

2 Environmental Policy

Section No.: 3	**The Arrow Group,**	Issued By: Env. Department
Date of Issue: 31st March 2013	**The Maudlins,**	Approved By: Eibhlís Crowley
Rev. No.: 02	**Naas,**	Page: 1 of 1
	Co. Kildare	
ENVIRONMENTAL POLICY		

The Arrow Group based at the Maudlins Industrial Estate in Naas is made up of five separate food manufacturing activities specialising in the manufacture and supply of meat products, pasta products and soup stocks etc. The companies operating under the Arrow Group include Dawn Farms, International Meat Ingredients, QK Meats, Simply Soups and Pasta Concepts.

It is the policy of the Arrow Group to ensure that our business practices protect the environment of our customers, our employees and the community in which we operate.

The Arrow Group have developed and adopted the following principles:

- Continual assessment of the aspects and impacts of our activities, functions, products and services.
- Adopting appropriate measures to manage and continuously improve environmental performance throughout all aspects of our business.
- Minimise the environmental impact of our activities and processes on all environmental media through good environmental practices and setting of objectives and targets which include targets relating to emissions to air, water and land.
- Prevent pollution by continuously monitoring and assessing our activities.
- Monitor / minimise our use of natural resources such as oil, energy and water.
- Minimise packaging and raw material usage, avoid waste and recycle / reuse where possible.
- We will adhere to all applicable Local and EU environmental legislation and will maintain close liaison with all regulatory authorities.
- Promote environmental awareness amongst employees, customers and contractors through training and involvement with our environmental programmes.
- Ensure that our Environmental policy is communicated to all employees and contractors and is made available to the public.
- The Arrow Group is committed to reducing our carbon footprint and associated greenhouse gases through reduced energy consumption and the installation of energy efficient technology.

The above principles are met through an Environmental Management System based on ISO 14001.
Signed: _____ Date:

3 Site Description

3.1 Previous site history

The site was originally a greenfield site before any development took place. The first company to be set up was QK Coldstores in 1981. In 1991 the site was further developed with Dawn Farms being established. QK Meats was founded in 1992 with the site being further developed. In 1993 International Meat Ingredients was set up, with Simply Soups following in 1994. Finally in 1996 Pasta Concepts was established with further development taking place on site. Throughout the years the site has undergone development and modification. In June 2008, the site was granted an IPPC licence under the Arrow Group name. The licence changed to an Industrial Emissions Licence in December 2013 to comply with the Industrial Emissions Directive 2010/75/EU.

3.2 Company background

Arrow Group is now comprised of five different companies operating on their site at the Maudlins Industrial Estate, Naas, Co. Kildare. These five companies are as follows:

- Dawn Farm Foods
- International Meat Ingredients
- Simply Soups
- QK Meats
- Pasta Concepts

Apart from QK Meats each company is involved in the production or preparation of processed foods, with each company operating independently of each other.

3.3 Description of equipment

The main energy consuming equipment is as follows:

- Refrigeration Plant (mainly compressors). Heaviest user of refrigeration is freezers, voltator and room coolers
- Cookers – these use gas, steam and electricity
- Chargrillers
- Production equipment – specifically blenders, decanter, grinders and Rising Film Evaporator
- Armor Inox (as a whole system)
- Boilers

- Large Motors
- Air Compressors

3.4 Manufacturing process

Due to the nature of the site, with five companies operating slightly different manufacturing processes, each company will be undertaken individually to describe the manufacturing process:

Dawn Farm Foods:

Dawn Farms specialise in the production of individually quick frozen (IQF) and chilled cooked meat ingredients for supply to ready meal manufacturers, frozen and chilled pizza manufacturers, the sandwich industry and the foodservice sector. They also supply a range of delicatessen meat and ready to eat snack products to the retail and foodservice sectors.

International Meat Ingredients:

International Meat Ingredients is involved in the preparation of cooked meat ingredients, primarily fermented meat products for use as Pizza Toppings. Pepperoni and Salami products are available in a range of diameters, presliced or in stick form.

Simply Soups:

Simply Soups produce a range of chilled and frozen natural stocks as an ingredient in the soups / sauces and ready meals industry. The stocks are simmered gently and then reduced to the required percentage of solids (Brix level) by evaporating the liquid to the required brix.
The evaporation process is a reduction method under vacuum where the evaporated water is condensed in an enclosed system.

QK Meats:

QK Meats is a raw meat processing facility which specialises in value added processing across all four species in a variety of formats.

Pasta Concepts:

Pasta Concepts is engaged in the manufacture of frozen pasta components/sauce for supply to the food service industry and ready meal manufacturers in the UK and mainland Europe. The company's products – principally filled pastas such as ravioli and cannelloni – are supplied to

manufacturers who typically place them in trays with other ingredients such as sauces for onward supply to the retail trade, restaurants and other outlets.

4 Monitoring summary

4.1 Foul Sewer Emissions

Please refer to Table 4.1.1 below for weekly monitoring results for the period 1st January 2014 to 31st December 2014. The sampling point for effluent discharge is as follows:

- WEP2- discharge to local authority sewer from waste water treatment plant

The samples were analysed by T.E. Laboratories in Carlow.

Table 4.1.1 Results of WEP2 Monitoring carried out by the Arrow Group in 2014

ELVs as per IPPC Licence mg/l (from 1st June 2009)	70	400	760	15	10	6 - 9	600	20
Max Allowable Limit	84	480	912	18	12	6 - 9	720	24
Date Sampled	Ammonia as (N) (mg/l)	BOD (mg/l)	COD (mg/l)	Orthophosphate (mg/l)	Oils, Fats & Greases (mg/l)	pH	Suspended Solids (mg/l)	Total Phosphorous (mg/l)
03/01/2014	<0.08	17	243	18	<2	7.7	37	23
09/01/2014	<0.08	32	242	18	12	8.1	53	22
16/01/2014	24	56	241	3.6	<2	7.6	126	8.3
*22/01/2014	1.0	80	197	0.46	12	7.0	135	5.0
30/01/2014	0.52	6.0	72	5.4	<2	7.4	14	7.3
06/02/2014	0.75	12	117	4.4	6	7.7	33	6.0
13/02/2014	0.29	14	97	4.2	<2	7.0	32	4.3
20/02/2014	0.81	23	105	6.2	9.0	7.2	26	8.8
27/02/2014	3.2	33	114	7.5	7.0	7.0	28	10
06/03/2014	1.1	5	77	5.7	<2	7.5	12	8.5
13/03/2014	0.4	35	158	8.1	8.0	7.0	61	15
20/03/2014	0.11	7	79	3.9	<2	7.2	22	6
27/03/2014	0.15	11	104	9	4.0	7.3	41	11
03/04/2014	0.27	17	125	11	3.0	7.1	34	16
10/04/2014	0.19	17	117	8.7	4.0	7.0	36	12
17/04/2014	0.47	4	74	8.2	<2	7.7	22	9.5
24/04/2014	0.12	10	84	7.5	9.0	7.1	35	9.3
01/05/2014	0.08	23	103	8.1	6.0	7.8	59	10
*06/05/2014	4.9	42	185	4.6	7.0	8.0	54	7.5
15/05/2014	<0.08	4	47	5.6	10	7.6	11	7
22/05/2014	<0.08	<3	28	7.7	<2	7.2	14	8.8
29/05/2014	<0.08	14	127	7.7	8.0	7.6	54	8
05/06/2014	0.11	15	85	5.9	<2	7.7	33	9.5
12/06/2014	0.11	22	76	5.8	5.0	7.8	34	7.8
19/06/2014	0.61	38	129	2.1	4.0	7.8	78	5.4
26/06/2014	0.78	56	245	3.2	10	7.8	140	6.4
03/07/2014	0.29	27	95	7.6	<2	7.9	44	9.5
10/07/2014	0.16	33	230	8	6.0	7.2	120	11
17/07/2014	<0.08	22	181	9.7	2.0	7.4	96	13
24/07/2014	36	37	206	14	<2	7.5	61	16
31/07/2014	6.2	30	214	5.4	<2	7.5	76	11
07/08/2014	0.08	13	74	6.8	6.0	7.6	20	8.5
14/08/2014	0.5	12	164	8	9.0	7.4	13	8.8
21/08/2014	0.17	26	80	5.7	10	7.6	40	8.5
28/08/2014	9.2	27	90	10	3.0	7.9	19	14
04/09/2014	0.32	9	80	12	<2	7.4	13	13
11/09/2014	50	56	200	10	6.0	7.9	34	13

18/09/2014	26	18	89	3.5	<2	7.1	18	5.8
25/09/2014	0.26	5	88	14	<2	7.4	21	16
*30/09/2014	27	26	134	13	3.0	7.0	78	21
09/10/2014	14	11	112	1.7	9.0	7.5	12	9
16/10/2014	34	9	62	12	7.0	7.6	5	14
24/10/2014	0.22	18	148	14	<2	7.5	29	16
30/10/2014	0.22	14	144	10	<2	7.4	52	11
06/11/2014	1.3	106	312	9.3	8.0	6.9	210	21
13/11/2014	43	124	435	16	6.0	7.3	220	16
20/11/2014	26	82	208	12	<2	7.4	102	16
*24/11/2014	36	118	430	7.1	<3	7.1	122	11
26/11/2014	1.6	31	184	9.8	<3	7.2	74	13
04/12/2014	6.4	84	290	9.4	<2	7.3	86	14
11/12/2014	71	110	384	14	<2	7.5	290	15
18/12/2014	67	63	340	11	<3	7.3	170	20

*The Arrow Groups results of split samples taken by Agency personnel on various dates in 2014

In addition to the above monitoring schedule, the EPA also sampled the effluent discharge from WEP2 on the 22nd January 2014, the 6th May 2014, 30th September 2014 and the 24th November 2014. Results can be seen in Table 4.1.2 below. Split samples were taken on these dates and analysed by both the EPA and T.E. Laboratories on behalf of the Arrow Group.

Table 4.1.2: Results of Foul Sewer Monitoring carried out by the EPA in 2014

ELV's as per IPPC Licence mg/l (from 1st June 2009)	**70**	**400**	**760**	**15**	**10**	**6 - 9**	**600**	**20**	
Date Sampled	**Ammonia as (N) (mg/l)**	**BOD (mg/l)**	**COD (mg/l)**	**Orthophosphate (mg/l)**	**Oils, Fats & Greases (mg/l)**	**pH**	**Suspended Solids (mg/l)**	**Total Phosphorous (mg/l)**	
22/01/14	1	80	197	0.46	12	7	135	5	Results from Tel Labs
22/01/14	2	76	150	0.56	-	6.6	41	2	Results from EPA
06/05/14	4.9	42	185	4.6	7	8	54	7.5	Results from Tel Labs
06/05/14	6.1	54	224	4.5	-	7.2	72	6.6	Results from EPA
30/09/14	27	26	134	13	3	7	78	21	Results from Tel Labs
30/09/14	3.4	27	145	14	-	7.1	71	14	Results from EPA
24/11/14	36	118	430	7.1	<3	7.1	122	11	Results from Tel Labs
24/11/14	44	200	341	8	-	7.6	206	13	Results from EPA

4.2 Storm Water Emissions

The licence requires storm water emissions to be monitored on a weekly basis for a number of parameters. Please refer to Table 4.2 below for weekly monitoring results for storm water emissions. The samples are analysed by T.E. Laboratories in Carlow.

Table 4.2.1 Results of SEP1 Monitoring carried out by the Arrow Group in 2014

	Ammonia as NH4	BOD	Conductivity	pH
ELV	< 2 mg/l	10 mg/l	1000µs/cm	6 - 9
03/01/2014	1.3	7	884	8
09/01/2014	0.98	5	662	7.7
16/01/2014	0.64	6	957	7.7
22/01/2014	0.49	8	948	8
30/01/2014	0.53	6	721	7.8
06/02/2014	0.11	3	622	7.9
13/02/2014	<0.1	9	598	8
20/02/2014	0.41	7	362	7.7
27/02/2014	0.11	4	686	7.4
06/03/2014	0.3	8	873	7.7
13/03/2014	0.43	7	718	7.6
20/03/2014	<0.1	6	153	7.4
27/03/2014	<0.1	5	544	7.4
03/04/2014	0.12	8	669	7.7
10/04/2014	<0.1	6	925	7.7
17/04/2014	<0.1	7	848	7.8
24/04/2014	0.38	7	740	7.8
01/05/2014	0.45	6	400	7.9
06/05/2014	0.43	2	758	7.6
15/05/2014	<0.1	7	951	8
22/05/2014	0.1	4	804	7.5
29/05/2014	0.28	8	859	8
05/06/2014	0.73	4	809	8.1
12/06/2014	0.61	5	605	7.5
19/06/2014	0.64	7	485	8.1
26/06/2014	1	5	650	7.6
03/07/2014	1.4	9	593	8.1
10/07/2014	0.49	5	759	7.6
17/07/2014	0.18	6	605	7.9
24/07/2014	0.79	4	663	7.6
31/07/2014	1.7	4	975	8.3
07/08/2014	<0.1	3	546	7.7
14/08/2014	<0.1	6	446	8.9

21/08/2014	1.4	4	828	8.8
28/08/2014	0.79	4	825	8.9
04/09/2014	1.6	8	764	8.3
11/09/2014	1.8	9	846	7.4
10/10/2014	< 0.10	< 2	155	7.3
16/10/2014	< 0.10	< 5	175	7.5
24/10/2014	1.4	< 2	328	7.3
20/11/2014	0.69	6	559	7.5
26/11/2014	0.73	<2	639	7.6
04/12/2014	1.2	3	337	7.8
11/12/2014	< 0.10	3	509	7.6
18/12/2014	< 0.10	< 3	252	7.4

Please note that the Arrow Group ceased discharging to Stormwater on the 16th September 2014 and recommenced discharging on the 18th November 2014

4.3 Emissions to Air

There are a number of monitoring points for emissions to air that have to be monitored as per conditions of the IED Licence. These are as follows:

- AEP1 (Boiler)
- AEP2 (Boiler)
- AEP3 (Boiler) (Not in operation)
- AEP4 (Boiler)
- AEP6 (Wastewater Treatment Plant)

Atmospheric Emissions monitoring was carried out on the 19th June 2014 and the 07th November 2014 by Air Scientific. Please refer to Table 4.3.1 below for results of the atmospheric emissions monitoring carried out in 2014. All data is normalised to 273 Kelvin, 101.3kPa, dry gas with referencing to 3% O_2.

Results for AEP2 were within the Emission Limit Values specified in the IED Licence.

Table 4.3.1: Results of Atmospheric Emissions Monitoring carried out by Air Scientific.

Parameter	Boiler	Visit 1 19/06/14	Visit 2 07/11/14
Volumetric Flow Rate ($m^3.hr^{-1}$)	AEP1	7878	6251
	AEP2	7688	8207
	AEP4	1303	1474
	AEP6	-	-
Oxides of Nitrogen ($mg.m^{-3}$)	AEP1	100.75	99.87
	AEP2	145.89	127.48
	AEP4	146.40	99.64
	AEP6	-	-
Sulphur Dioxide ($mg.m^{-3}$)	AEP1	5.42	-3.94
	AEP2	2.55	-4.02
	AEP4	6.67	-3.90
	AEP6	-	-

Note: Flow results based on average firing time of 30 minutes over a 1 hour time period

Atmospheric Emissions Monitoring was also carried out by Fitz Scientific on behalf of the Agency on the 6th of February 2014. Results of their findings are as follows:

Table 4.3.2: Results of Atmospheric Emissions Monitoring carried out by Fitz Scientific

Parameter	Results for AEP2	ELV as specified in IED Licence
Particulates	<0.4 mg/m^3	50 mg/m^3
Oxides of Nitrogen	143.9 mg/m^3	970 mg/m^3
Oxides of Sulphur as SO_2	0.9 mg/m^3	170 mg/m^3

All results were well within the Emission Limit Value specified in the IED Licence.

4.4 Noise Emissions

The annual day-time noise survey was carried out at four noise sensitive locations (NSL's) off-site between 10.57hrs to 18.03hrs on the 8th of December 2014 and also between 11.03hrs and 13.03hrs on the 12th December 2014. The night-time survey was carried out between 23.10hrs to 04.06hrs on the 10th and 11th of February 2015.

Schedule B4 of the IED Licence stipulates the following noise limits for emissions associated with the Arrow Group facility (at the nearest noise sensitive receptors):

Daytime: (08:00hrs to 22:00hrs)	55dB(A) L_{Aeq} (30 minutes)
Night-time: (22:00hrs to 08:00hrs)	45dB(A) L_{Aeq} (30 minutes)

The locations of the noise sensitive locations are as follows:

NSL1:

This monitoring location is located within the Aylmer Park residential estate opposite house No.148.

NSL2:

This monitoring location is located to the western boundary of the site at a position within the Gleann na Ríogh residential estate, in close proximity to house No. 47.

NSL3:

This monitoring location is located close to the southern boundary of the site in the vicinity of a number of residential dwellings located at Bru na Ríogh.

NSL4:

This monitoring location is located beyond the eastern boundary of the site at a position close to an existing hotel development. Note the measurement position is some 40m closer to the Arrow Group facility than the NSL due to access restrictions.

The annual noise survey was conducted in accordance with the EPA NG4 Guidance document where the **specific** noise levels were monitored. The results of the survey demonstrated that specific noise emissions from the Arrow Group facility were in compliance with the emission limit values set in the IED Licence.

The following methodology was adopted in order to complete this aspect of the assessment:

Table 4.4.1 Methodology for Determination of Site Specific Noise

Description of Site Noise		Noise Parameter that Best Represents Specific Noise from the Site
Category	**Subjective Impression**	
A	Site noise dominant, no other significant noise sources noted	$L_{Aeq,T}$
B	Intermittent noise from other sources (e.g. traffic, birds, wind), with underlying site noise audible	$L_{A90,T}$ if frequent interfering noise and site noise is audible in lulls or $L_{A50,T}$ if site noise is clearly audible (steady or variable), with occasional interference from other sources.
C	Plant barely audible (i.e. not immediately noticeable, unless actively listening)	$<L_{A90,T}$ (i.e. specific plant noise is up to 5dB lower than measured $L_{A90,T}$)
D	Plant not audible	Not Detected, ND $<<L_{A90,T}$ (more than 5dB lower than $L_{A90,T}$)

The estimated specific noise level at each monitoring location is presented in Table 4.4.2 below:

Table 4.4.2 Specific Noise Levels

Location	Period	Site Noise Category	Noise Parameter That Best Represents Specific Noise from Site	Estimated Specific Plant Noise	Within Criteria
NSL 1	Day-time	B	L_{AF90}	48 – 51	Yes
	Night-time	B	L_{AF90}	38	Yes
NSL 2	Day-time	A	L_{Aeq}	50 - 54	Yes
	Night-time	B	L_{AF90}	44 - 45	Yes
NSL 3	Day-time	B	L_{AF90}	47 – 50	Yes
	Night-time	B	L_{AF90}	38	Yes
NSL 4	Day-time	B	L_{AF90}	50 – 52	Yes[Note A]
	Night-time	B	L_{AF90}	40 - 41	Yes[Note A]

Note A: The specific noise level presented here is the noise level corrected for distance to account for the fact that the monitoring location is closer to the Arrow Group activity than the NSL.

The results of the assessment has demonstrated that specific noise levels associated with noise emissions from the Arrow Group facility are in compliance with the emission limit values set out in the IE Licence.

In conclusion, noise emissions from a combination of sources including road traffic noise on local roads, the M7 and activity within the Maudlins Industrial Estate including sources associated with the Arrow Group facility, produce a relatively high ambient noise level throughout the area. The principal noise sources on the Arrow group site that contributed to the noise levels measured at nearby sensitive locations are plant, equipment and vehicles.

At no location was there any audible tonal component to the noise emissions from the Arrow Group site which was confirmed by analysis of the 1/3rd octave band spectra.

During the daytime period the measured noise levels at all locations were in compliance with the 55dB $_{LAeq, 30minutes}$ noise criterion specified in the IE Licence.

During the night time period the measured noise levels were in compliance with the 45dB $_{LAeq, 30minutes}$ noise criterion specified in the IE Licence.

Corrective Action carried out to date by the Arrow Group to minimise noise onsite:
The Arrow Group commissioned AWN Consulting to further investigate noise emissions from their facility in May 2012. The aim of the survey was to assess the environmental noise levels in Gleann na Ríogh Drive and Aylmer Park during the night-time period with the Arrow Group site in normal operation, the background noise levels without the Arrow Group in operation and also to determine the individual contribution of each main plant area within the Arrow Group site to the overall noise levels.

The Arrow Group were found to be in compliance at both locations and no tones were present. The investigation of the relative contribution to the overall noise level from the major noise sources within the Arrow Group site found that the QK Coldstores plant area was the main contributor to the noise environment at Gleann na Ríogh Drive. This survey also showed that the background noise levels in the area are high even without the Arrow Group facility operating. An investigation into the noise levels resulting from the QK Coldstores plantroom was carried out in April 2013.

As a result of this investigation, the Arrow Group installed discharge attenuators on two condensors associated with the QK Coldstores plantroom. A water pump was also replaced with a quieter model and the entry door to the Compressor room was upgraded.

Other Noise Control Measures implemented onsite to date:

A number of noise control measures were implemented onsite to reduce noise emissions. These measures are as follows:

- External Trucks were restricted from accessing the site after 8pm at night Saturday to Thursday. Trucks that require access to the site on a Friday night do so by entering from the Dublin Road side of the site after 10pm.
- A new roadway was also built on the Dublin Road side of the site to allow trucks to assess a building (after 8pm each night) that is not associated with the Arrow Group Licence. This roadway meant that trucks no longer had to pass residents houses at night.
- Barriers were erected onsite to prevent forklifts and internal trucks passing the residents houses adjacent to QK Coldstores. Forklifts now access the waste area and other buildings by using the route along the Dublin Road side of the site
- The QK Coldstores plant room was fully enclosed in order to reduce the noise emissions coming from the compressors (main source of noise complaints)
- A noise management team was set up to address the noise issues onsite. This team was involved in educating all companies/clients and hauliers onsite of the measures put in place to reduce noise emissions which are impacting on nearby residents
- A noise control plan was also implemented onsite. This consists of a traffic management system which controls the number of trucks entering the yard. A traffic management liason officer ensured that:

  - No trucks are left idling

  - No trucks park up against the dividing wall

  - No refrigeration units are running near the dividing wall

  - There is no excess revving or engines left running

  - Trucks comply with the 15km speed limit

- Additional signage was also erected at various locations around the site to inform hauliers that it is a noise sensitive location and that noise is to be kept to a minimum.

- The noise sensitive location adjacent to the wall for residents living in the Gleann na Ríogh estate was yellow hatched to prevent trucks parking in this area
- Flyers are handed out to all hauliers entering the site informing them of the rules to be adhered to when onsite and the locations of the various different loading bays.
- The Truck park at the front of the site is closed every evening at 8pm until 8am. No refrigeration units are allowed on in this area after 8pm. Security have been authorised to relocate trucks that have refrigeration units on after this time to an alternative location where they will be clamped and incur a €250 clamp removal fee.
- AWN Consulting were also commissioned to examine the potential noise attenuation that may be provided by the installation of acoustic barriers/screens as a means of noise control onsite. This was done by means of a computer based noise model.
- The existing noise barrier at the Dawn Domestic loading bay was also extended out to further protect the residents from noise emissions coming from this loading bay.

5 Waste Management

Please refer to Table 5-1 for waste streams removed off the site in 2014.

Table 5-1 Details of Waste Disposal for 2014

Waste Type	EWC	Hazardous	Weight	Method of Disposal/Recovery	Destination of Waste	Permit/Licence No. of Waste Contractor
Municipal Waste	20 03 01	No	1,197 Tonnes	Recovery	Oxigen Environmental Limited, Robinhood Industrial Estate, Robinhood Road, Ballymount, Dublin 22	Waste Licence No.: 152-3
General Waste	20 03 01	No	23.66 Tonnes	Recovery	Oxigen Environmental Limited, Merrywell Industrial Estate, Ballymount Road Lower, Clondalkin, Dublin 22, Dublin.	Waste Licence No.: 208-01
Category 3 Waste (Animal By-Products)	02 02 03	No	8,334 Tonnes	Rendering	Western Proteins, Hazel Hill, Ballyhaunis, Co. Mayo	IPPC Licence: P0048-03 Department of Agriculture Approval No.: R918
Cardboard	15 01 01	No	377 Tonnes	Recycling	Greyhound Recycling, Crag Avenue, Clondalkin Industrial Estate, Clondalkin, Dublin 22	Waste Licence No.: W0205-01

Waste Type	EWC	Hazardous	Weight	Method of Disposal/Recovery	Destination of Waste	Permit/Licence No. of Waste Contractor
Cardboard	15 01 01	No	614 Tonnes	Recycling	ROC Recycling Solutions Ltd., Ballymacken Ind. Estate, Ballymacken, Portlaoise, Co. Laois	WFP-LS-11-0001-01
Soft Plastic	15 01 02	No	25 Tonnes	Recycling	ROC Recycling Solutions Ltd., Ballymacken Ind. Estate, Ballymacken, Portlaoise, Co. Laois	WFP-LS-11-0001-01
Hard Plastic	20 01 39	No	10.19 Tonnes	Recycling	ROC Recycling Solutions Ltd., Ballymacken Ind. Estate, Ballymacken, Portlaoise, Co. Laois	WFP-LS-11-0001-01
Metal	20 01 40	No	31.6 Tonnes	Recycling	United Metals, Eastway Business Park, Ballysimon, Co. Limerick	WFP LK 2011 147-R1
Mixed Recyclables	15 01 06	No	1 Tonne	Recycling	Oxigen Environmental	Waste Licence No.: 208-01

Waste Type	EWC	Hazardous	Weight	Method of Disposal/Recovery	Destination of Waste	Permit/Licence No. of Waste Contractor
					Limited, Merrywell Industrial Estate, Ballymount Road Lower, Clondalkin, Dublin 22, Dublin	
Timber	15 01 03	No	1.90 Tonnes	Recycling	ROC Recycling Solutions Ltd., Ballymacken Ind. Estate, Ballymacken, Portlaoise, Co. Laois	WFP-LS-11-0001-01
Timber	15 01 03	No	21.72 Tonnes	Recycling	Oxigen Environmental Limited, Merrywell Industrial Estate, Ballymount Road Lower, Clondalkin, Dublin 22, Dublin	Waste Licence No.: 208-01
Electronic Waste	16 02 14	Yes	1.58 Tonnes	Recovered	Thorntons Recycling, Kileen Road, Ballyfermot, Dublin 10	44-2
Sludge from Waste Water	02 02 04	No	3,560 Tonnes	Landspreading	Kieran Kelly, Beechwood House,	N/A

Waste Type	EWC	Hazardous	Weight	Method of Disposal/Recovery	Destination of Waste	Permit/Licence No. of Waste Contractor
Treatment Facility					Booleigh, Athy, Co. Kildare	

5-2 Details of Hazardous Waste removed off-site in 2014

Waste Type	EWC	Hazardous	Quantity	Destination of Waste	Permit/Licence No. of Waste Contractor
Waste Oil	13 02 08*	Yes	2,500 Kgs	Hi-Volt Recycling, Ballyduff, Thurles, Co. Tipperary	Waste Licence W0267-01
Fluorescent Tubes	20 01 21*	Yes	126 Kgs	Irish Lamp Recycling Co. Ltd., Woodstock Industrial Estate, Kilkenny Road, Athy, Co. Kildare	WFP-KE-14-0072-01
Solid Oily Waste	15 02 02*	Yes	377 Kgs	Enva Ireland Limited, Clonminam Ind. Estate, Portlaoise, Co. Laois	Waste Licence 184-1
Filters	16 01 07*	Yes	295 Kgs	Enva Ireland Limited, Clonminam Ind. Estate, Portlaoise, Co. Laois	Waste Licence 184-1

6 Resource Consumption

6.1 Energy

Details of energy consumption are given in Table 6-1-1 below:

Table 6-1-1 Details of energy consumption (2009-2014)

kWh Consumption						
	2009	**2010**	**2011**	**2012**	**2013**	**2014**
Electricity (kWh)	29,890,114	28,358,924	29,134,371	29,662,735	28,795,729	31,282,657
Oil (kWh)	40,159,879	12,598,741	4,408,500	6,570,782	0	0
Gas (kWh)	8,013,093	29,800,847	40,860,329	39,941,994	45,635,931	49,935,278
Oil & Gas (kWh)	48,172,972	42,399,588	45,268,829	46,512,776	45,635,931	49,935,278
Total kWh	**78,063,087**	**70,758,511**	**74,403,200**	**76,175,511**	**74,431,660**	**81,217,935**

Table 6-1-2 Details of water consumption (2009-2014)

	Water Consumption 2009-2014					
Source	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Water (m^3)	290,432	273,179	257,921	294,241	370,015	381,908

6.2 Energy Efficiency

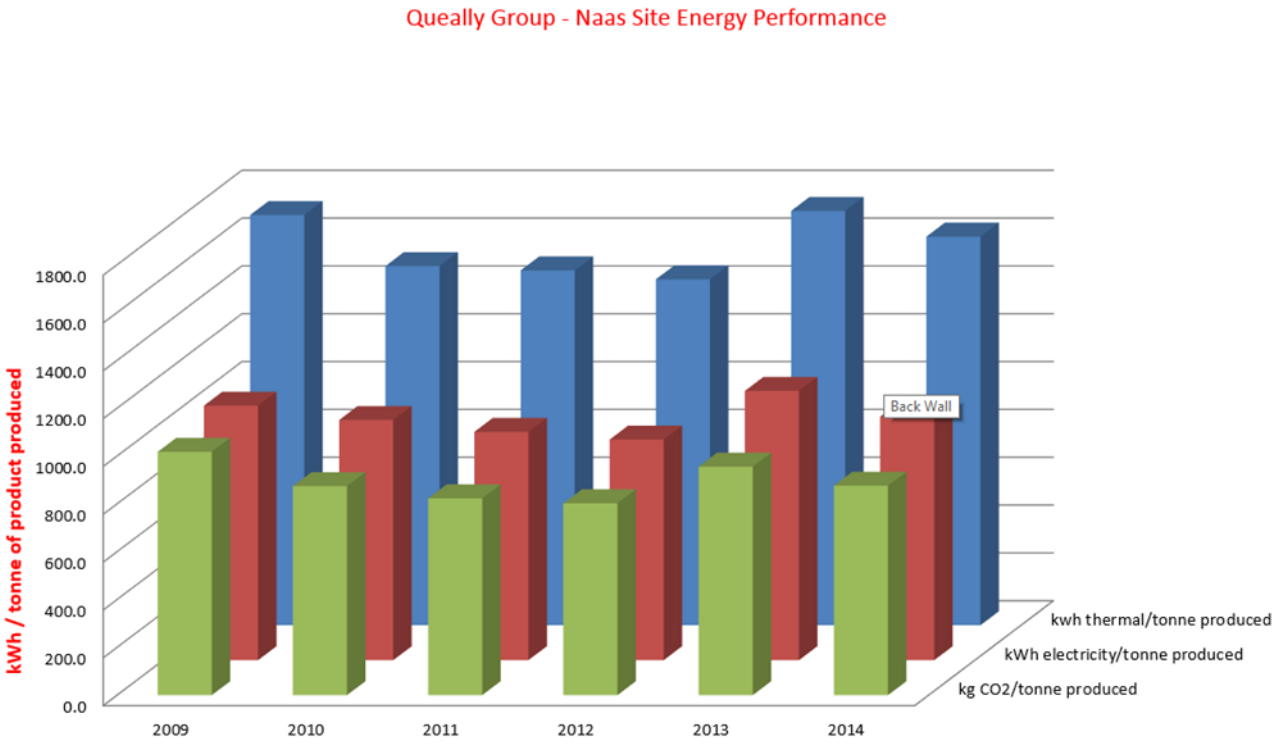
The efficiency of energy usage can be measured by calculating a value for energy consumed (kWh) per unit of production (tonnes). Details of the calculation for 2009-2014 are given in Table 6-2-1 below. Please note that QK Meats are a low energy user as they do not cook product so their production figures will not be included when calculating the energy efficiency per tonne of finished product:

Table 6-2-1 Details of Energy Efficiency per unit of production

		kWh/product produced					
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**%***
Electricity/tonne	1,064	1,004	955	922	1,093	1,017.95	▼4%
Oil	1,430	446	144	204	0		
Gas	285	1,055	1,339	1,242	1,732	1,624.92	
Oil & Gas/Tonne	1,715	1,502	1,483	1,446	1,732	1,624.92	▼5%
Total	**2,779**	**2,506**	**2,438**	**2,369**	**2,826**	**2,642**	**▼ 5%**

kWh/Tonne							
Production (Tonnes)	28,086	28,237	30,515	32,158	26,342	30,731	▲ **9%**

* = % reduction over 2009 Figures



The Arrow Group were winners of the prestigious Industry Award in the 2014 Sustainable Energy Awards.

7.0 Environmental Incidents & Complaints

7.1 Environmental Incidents

During 2014, two environmental incidents took place. These were recorded by the Arrow Group and dealt with accordingly. The Arrow Group have a system in place to record any environmental incidents that take place on site, and then to notify the relevant authorities and also undertake remediation if necessary. Table 7-1 summarises the environmental incidents that took place on-site during 2014.

7.2 Environmental Complaints

The Arrow Group received 94 complaints during 2014. The Group have a system in place to deal with complaints, recording each one and addressing the issue that led to a complaint being lodged in the first place. Table 7-2 summarises the environmental complaints arising during 2014.

Table 7-1 Summary of Incidents

Summary of Environmental Incidents 2014

No.	Date	Type of Incident	Nature of Incident	Corrective Action
1.	25/03/14	Odours detected that gave rise to significant impairment of, or significant interference with amenities or the environment beyond the facility boundary	A spicy cooking type odour was detected which was classified as intermittent and of moderate intensity.	A number of Odour Reduction Actions were implemented and completed by the Arrow Group in 2013 and 2014. 164 Odour Impact Assessments were carried out in 2014 on behalf of the EPA. Odours were detected during 48 of these Assessments. One of which was deemed non-compliant.
2.	16/09/2014	Exceedance of Emission Limit Values for Stormwater.	BOD & Conductivity exceeded the ELV specified in the Licence	Please refer to Correspondence to the Agency dated the 27th November 2014 (Ref. No. (P0812-01_(09-14)

Table 7-2 Summary of Complaints

The Arrow Group received 94 complaints in 2014.

Complaint Type	Number of Complaints
Noise	20
Odour	68
Noise & Odour	6
Total	**94**

Noise:

The noise complaints are classified as follows:

Description of Noise	Number of Complaints
Trucks / Engines / Loading / Fridge	9
Hum / Vibrations / Compressor	5
Multiple Noise Sources	2
Other / Not Specified	4
Total No. of Complaints	**20**

Odour:

The odour complaints are classified as follows:

Description of Odour	Number of Complaints
Soup	1
Meaty	3
Spicy	7
Smokey	1
Cooking	3
Unpleasant/bad cooking	2
Burning/burnt food	1
WWTP/Effluent	12
Disgusting/Bad/Sickening/Vile	18
Multiple	19
Other/Not Specified	1
Total No. of Complaints	**68**

In addition to the above, there were 6 complaints that related to both noise and odour. These complaints related to meaty, cooking, disgusting/bad/sickening/vile, spicy, soup and multiple odours. With regards noise, 3 of the complaints related to hum/vibrations/ compressor noise, 2 related to other/not specified and one was in relation to multiple noise sources.

8.0 EPA Inspections and Non-Compliances

8.1 EPA Site Inspections/Audits

During 2014 the Agency carried out an inspection on the 25th of June 2014. No Non-Compliances were issued as a result of this inspection.

8.2 Non-Compliances

The EPA issued two non-compliances outside of the inspection schedule. Refer to Table 8-2-1 for the non-compliances issued outside of the inspection schedule.

Table 8-2-1 Non-Compliances issued by the Agency outside of the inspection/audit schedule

No.	Date	Non-Compliance	Nature of Incident	Corrective Action
1.	25/03/14	Odours detected that gave rise to significant impairment of, or significant interference with amenities or the environment beyond the facility boundary	A spicy cooking type odour was detected which was classified as intermittent and of moderate intensity.	A number of Odour Reduction Actions were implemented and completed by the Arrow Group in 2013 and 2014. 164 Odour Impact Assessments were carried out in 2014 on behalf of the EPA. Odours were detected during 48 of these Assessments. One of which was deemed non-compliant.
2.	16/09/2014	Exceedance of Emission Limit Values for Stormwater.	BOD & Conductivity exceeded the ELV specified in the Licence	Please refer to Correspondence to the Agency dated the 27th November 2014 (Ref. No. (P0812-01_(09-14)

9.0 Management of the Activity

9.1 Environmental Management Programme (EMP) Report

The Environmental Management Programme will be submitted as a separate document.

10 Tank and Pipeline Testing and Inspection Report

Integrity testing of the drainage systems was carried out in May 2012. Integrity Testing of the Stormwater line was carried out in December 2014.

11 Report on the Assessment of the Efficiency of use of Raw Materials in Processes and the Reduction in Waste generated

The Arrow Group are actively involved in reducing waste produced onsite and recycle as much as possible. Two of the companies onsite introduced the lean way of working in to their business and are now verified members of the Origin Green initiative since 2012. The remaining companies onsite are now verified members of Origin Green since 2014.

Origin Green is a unique sustainability development programme developed by Bord Bia (The Irish Food Board) to internationally demonstrate the commitment of irish food and drink producers to operating sustainably - in terms of greenhouse gas emission, energy conservation, waste reduction, water management, biodiversity, community initiatives and health and nutrition.

12 Progress made and Proposals being developed to minimise Water Demand and the Volume of Trade Effluent Discharge

The Arrow Group are constantly reviewing ways of minimising water around the site and have implemented the following measures in the past:

- Installed nozzles on hoses
- Installed air coolers on hydraulic power packs that previously used water
- Installed solenoid valves on equipment that use water as a coolant
- Installed water meters throughout the site to identify and monitor large users
- Revised showering procedures on products
- Revised belt wash water usage
- Revised cooler defrost cycles
- Installed neezle valves on supplies to control water usage better

13 Review of Residuals Management Plan

This report (Closure, Restoration and Aftercare Management Plan) was submitted to the Agency on the 1st February 2010 (Ref. No. P0812-01_(10-10). A revised Cramp Report was submitted to the Agency on the 16th August 2011 (Ref. No. P0812-01_(21-11) and was approved by the Agency in correspondence dated the 31st August 2011 (Ref. No. P0812-01/gc35djm.docx). The CRAMP was revised again in May 2015.

14 Environmental Liabilities Risk Assessment

This report was submitted to the Agency on the 18th February 2010 (Ref. No. P0812-01_(16-10)). This report was approved by the Agency in correspondence dated the 12th July 2011 (Ref. No. P0812-01/ap08eok.doc). It was revised again in May 2015. This report is to be reviewed as necessary to reflect any significant change on site and in any case every three years following initial agreement.

15 Sludge Register

Sludge from the on-site wastewater treatment plant is sent for landspreading on the lands of Kieran Kelly, Booleigh, Athy, Co. Kildare. Details of the volumes of sludge sent for landspreading in 2014 are as follows:

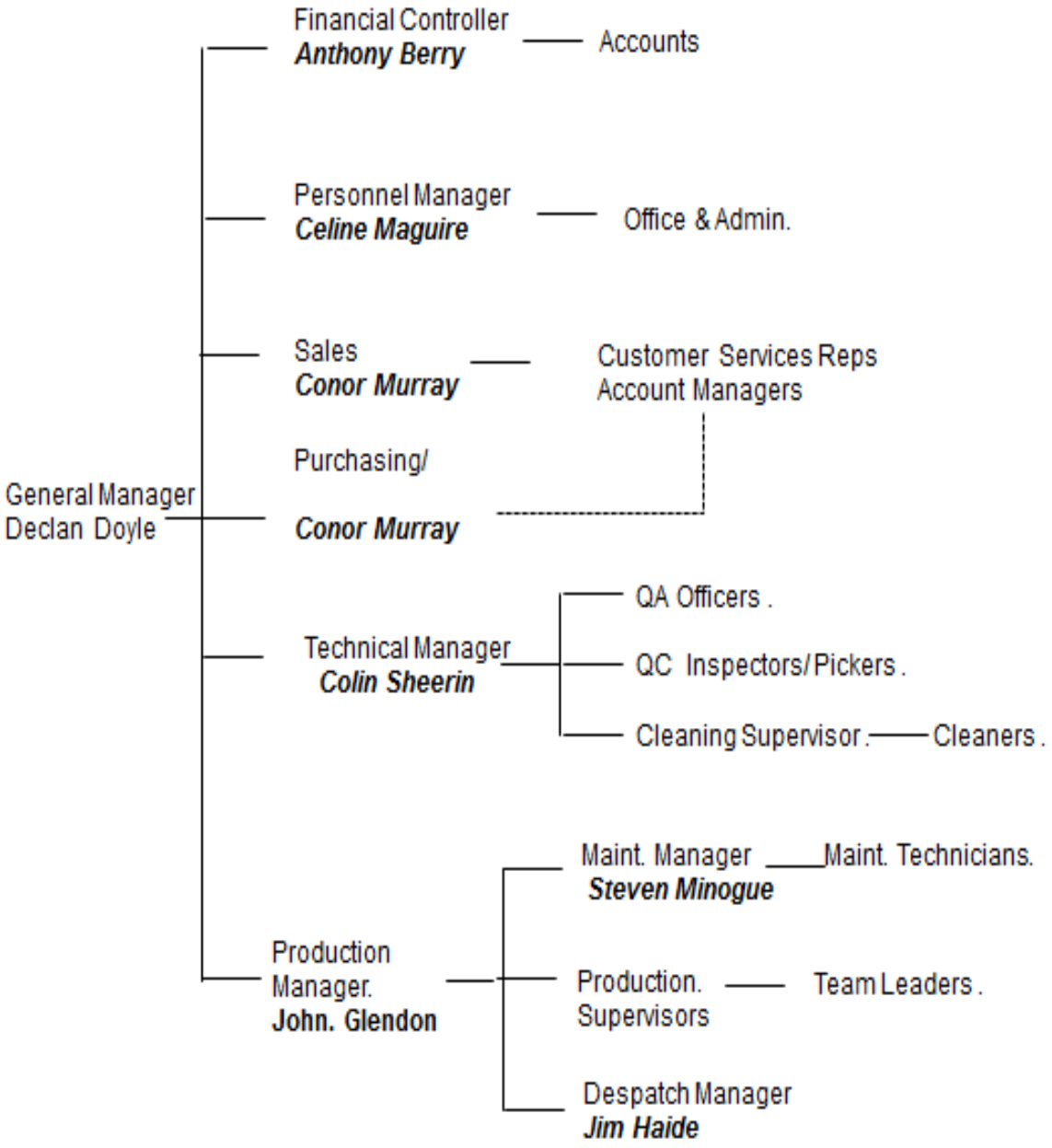
Month	Tonnes Wet Sludge	Tonnes Dry Sludge
January 2014	252.80	--
February 2014	258.32	53.46
March 2014	235.70	29.58
April 2014	196.36	58.18
May 2014	270.38	15.50
June 2014	228.98	11.72
July 2014	260.70	29.56
August 2014	235.12	47.46
September 2014	303.24	46
October 2014	336.88	68
November 2014	307.10	41.06
December 2014	262.24	12
Total:	**3,147.82**	**412.52**

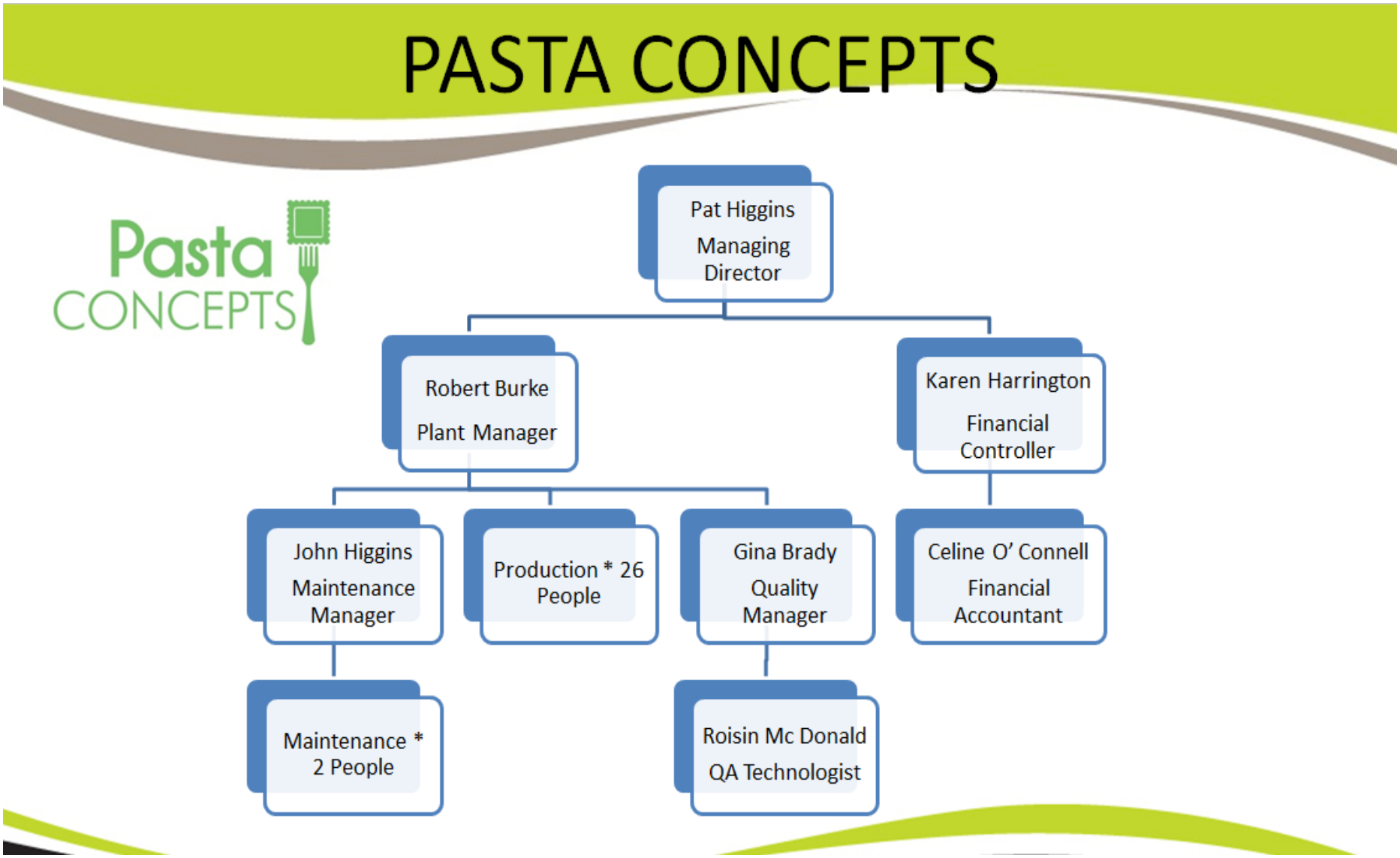
Appendix 1: Organisational Structures across the Arrow Group

Q.K. MEATS LIMITED

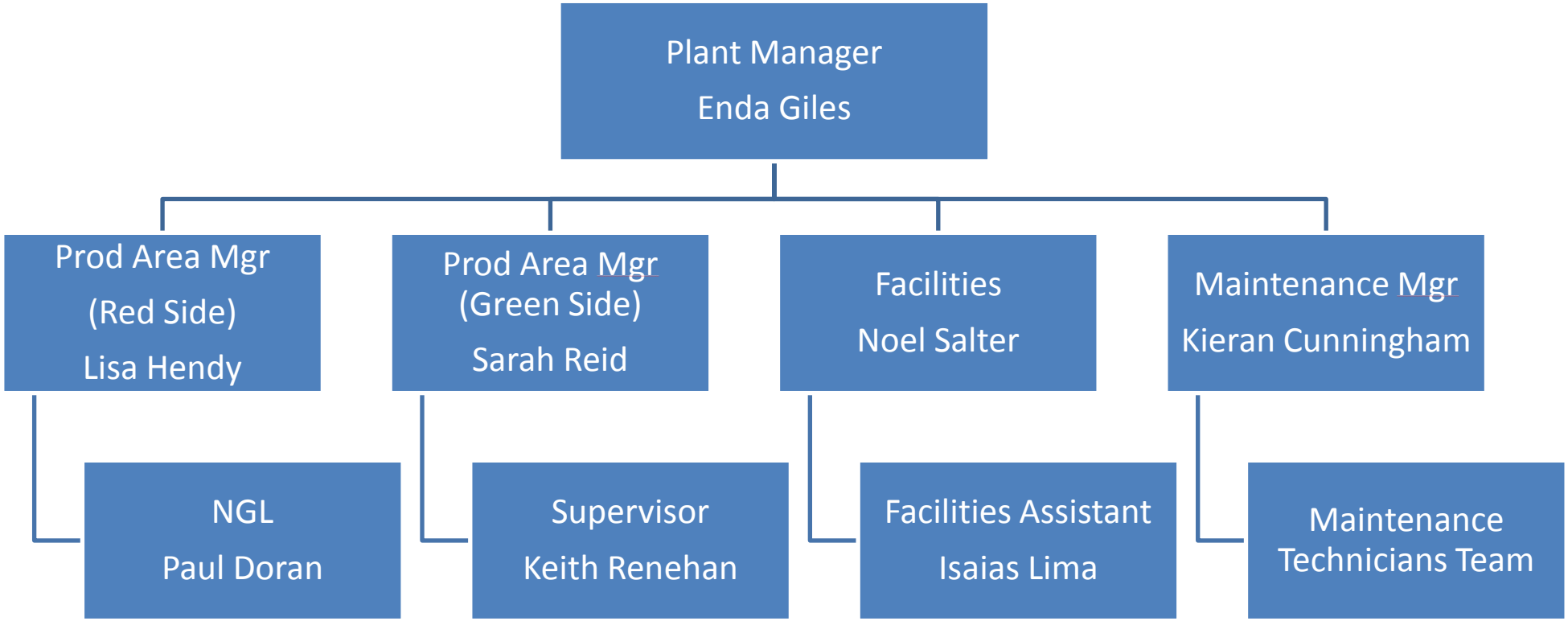
Quality Control Manual	Ref: QM 1
Approved By: Q.A. Manager	Rev : 03/01/14
Section: Org. Chart	Page 2 of 11
Signed	Revision No. 05

Management Organisation Chart

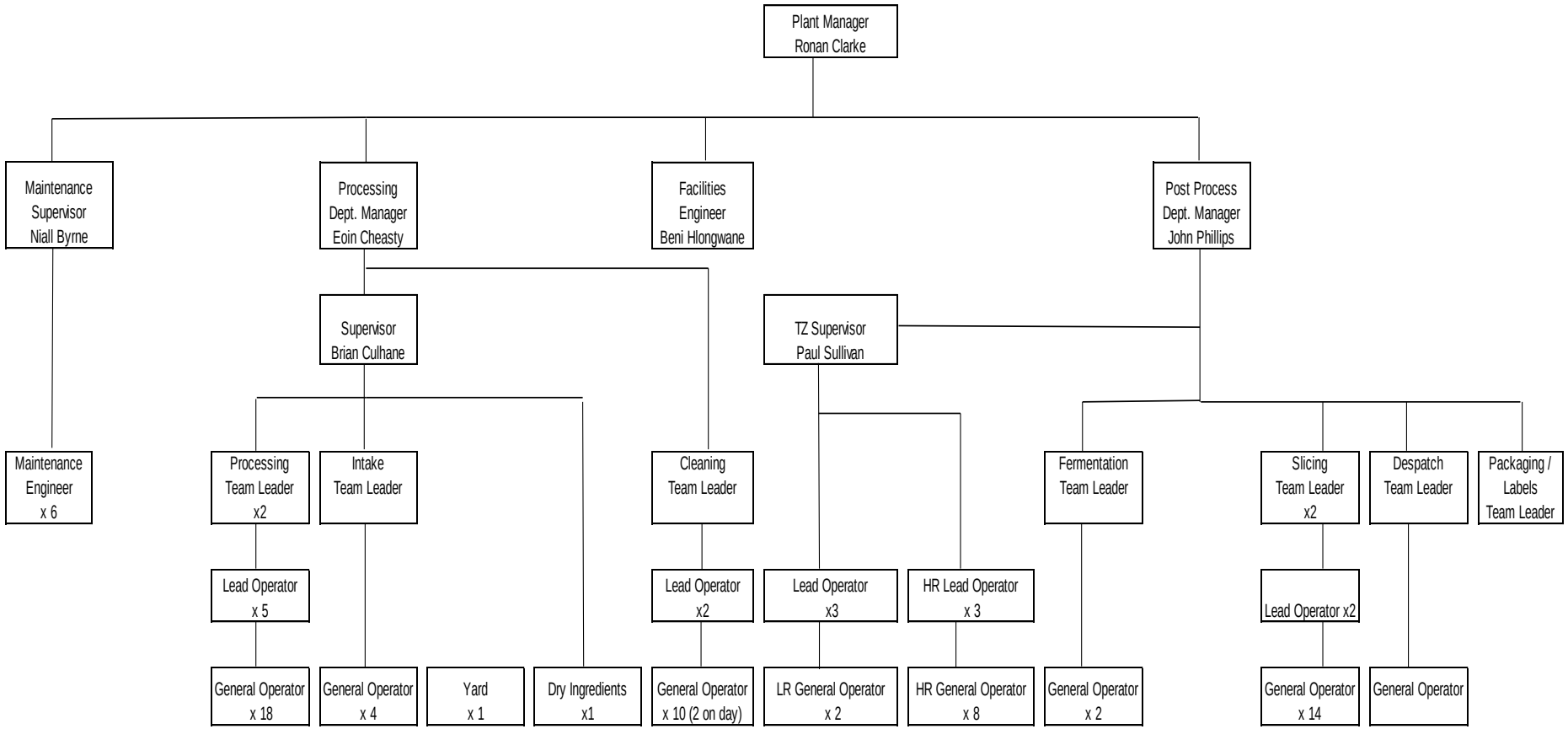



PASTA CONCEPTS
Pasta CONCEPTS
Pat Higgins
Managing Director
Robert Burke
Plant Manager
Karen Harrington
Financial Controller
John Higgins
Maintenance Manager
Production * 26 People
Gina Brady
Quality Manager
Celine O' Connell
Financial Accountant
Maintenance * 2 People
Roisin Mc Donald
QA Technologist

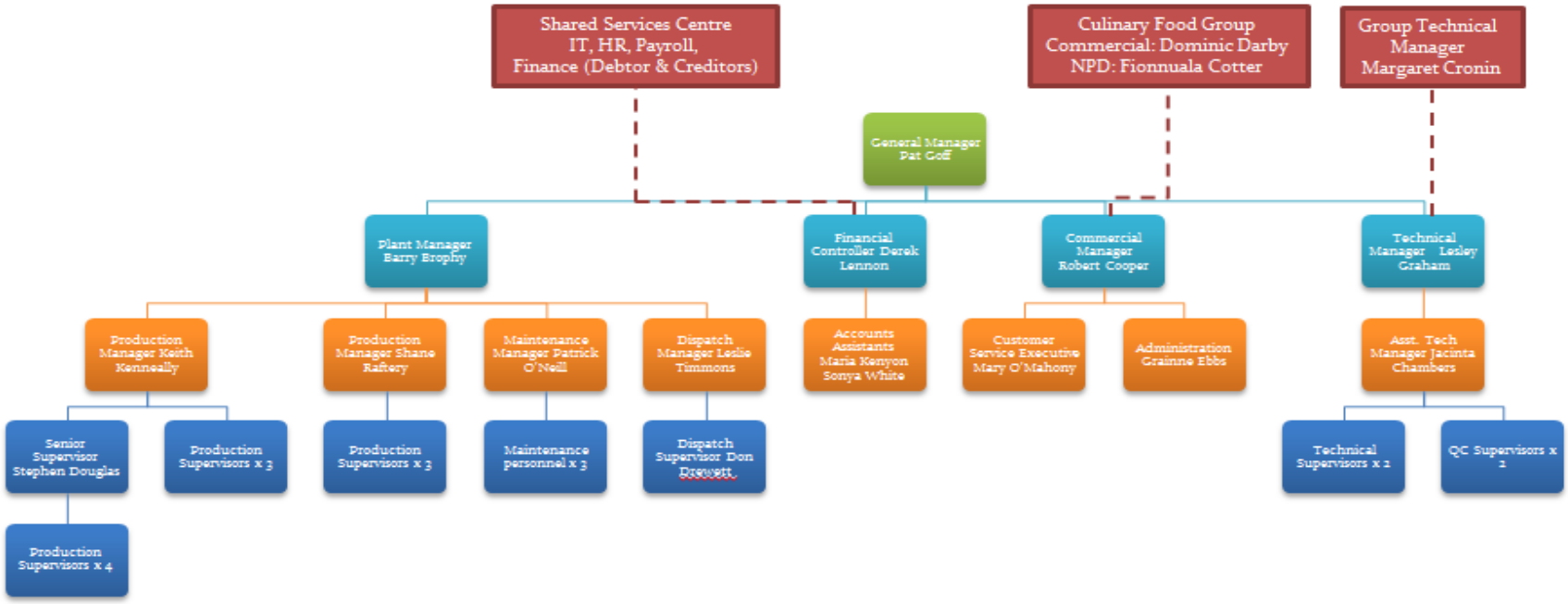
Dawn Farms Operations Structure



IMI Production Organisational Structure



Simply Soups Fine Food Ingredients	**SECTION:** QMORMA2.4
	ISSUE DATE: 07.10.13
	REVISION NO: 15
	PAGE NO: 1 of 1
QUALITY MANUAL	**ISSUED BY:** Jacinta Chambers
COMPANY ORGANISATIONAL CHART	**APPROVED BY:** Lesley Graham



Environmental Protection Agency

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.18

REFERENCE YEAR	2014

1. FACILITY IDENTIFICATION

Parent Company Name	Arrow Group Limited
Facility Name	Arrow Group
PRTR Identification Number	P0812
Licence Number	P0812-01

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	The Maudlins Industrial Estate
Address 2	Naas
Address 3	
Address 4	
	Kildare
Country	Ireland
Coordinates of Location	-6.64306 53.2315
River Basin District	IEEA
NACE Code	1089
Main Economic Activity	Manufacture of other food products n.e.c.
AER Returns Contact Name	Ms Eibhlis Crowley
AER Returns Contact Email Address	ecrowley@dawnfarms.ie
AER Returns Contact Position	Environmental Manager
AER Returns Contact Telephone Number	045-894100
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	045-876744
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	818
User Feedback/Comments	Releases to sewer were higher than 2013, due to the installation of diffuser heads in the aeration tanks at the latter end of 2014. All sewer discharge parameters were within compliance in 2014.
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
8(b)(i)	Animal raw materials (other than milk)

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) ?	Not Applicable
Is the reduction scheme compliance route being used ?	Not Applicable

4. WASTE IMPORTED/ACCEPTED ONTO SITE Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	No

This question is only applicable if you are an IPPC or Quarry site

4.1 RELEASES TO AIR

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs					
POLLUTANT		METHOD						QUANTITY		
			Method Used		AEP1	AEP2	AEP4			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
08	Nitrogen oxides (NOx/NO2)	E	OTH	Flu Gas Monitoring	2375.0	6541.0	6007.0	14923.0	0.0	0.0
11	Sulphur oxides (SOx/SO2)	E	OTH	Flu Gas Monitoring	4.58	6.77	2.93	14.28	0.0	0.0
86	**Particulate matter (PM10)**	E	OTH	Flu Gas Monitoring	0.0	353.0	0.0	353.0	0.0	0.0

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

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

Additional Data Requested from Landfill operators

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

Landfill: Arrow Group

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

4.2 RELEASES TO WATERS

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this only concerns Releases from your facility

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
238	Ammonia (as N)	M	OTH	Hach	25.57	25.57	0.0	0.0
303	**BOD**	M	OTH	Hach	246.74	246.74	0.0	0.0

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

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

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			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
13	Total phosphorus	M	OTH	Hach	2619.0	2619.0	0.0	0.0

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

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

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
238	Ammonia (as N)	M	OTH	Hach	2179.0	2179.0	0.0	0.0
240	Suspended Solids	M	OTH	Hach	14245.0	14245.0	0.0	0.0
303	BOD	M	OTH	5 Day BOD Test	7482.0	7482.0	0.0	0.0
306	COD	M	OTH	Hach	36025.0	36025.0	0.0	0.0
314	Fats, Oils and Greases	M	OTH	GC-MS	1085.0	1085.0	0.0	0.0
332	**Ortho-phosphate (as PO4)**	M	OTH	Hach	1903.0	1903.0	0.0	0.0

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

4.4 RELEASES TO LAND

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

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

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

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

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

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Please enter all quantities on this sheet in Tonnes

0

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/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	02 02 03	No	8334.0	materials unsuitable for consumption or processing	R3	M	Weighed	Offsite in Ireland	Western Proteins,P0048-03	Hazel Hill,Ballyhaunis,Co Mayo,.,Ireland		
Within the Country	02 02 04	No	3560.0	sludges from on-site effluent treatment	R10	M	Weighed	Offsite in Ireland	Kieran Kelly,NA	Booleigh,Booleigh,Athy,No/,Ireland		
Within the Country	13 02 08	Yes	2.5	other engine, gear and lubricating oils	R9	M	Weighed	Offsite in Ireland	Hi-Volt Recycling,Waste Licence W0267-01	Ballyduff,Thurles,..,Co. Tipperary,Ireland	Hi-Volt Recycling,Waste Licence W0267-01,Ballyduff,Thurles,..,Co. Tipperary,Ireland	Ballyduff,Thurles,..,Co. Tipperary,Ireland
Within the Country	15 01 01	No	377.0	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Greyhound Recycling,W0205-01	Crag Avenue,Clondalkin Ind Estate,Clondalkin Ind Estate,Dublin 22,Ireland		
Within the Country	15 01 01	No	614.0	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	ROC Recycling Solutions Ltd,WFP-LS-11-0001-01	Ballymacken Ind Estate,Ballymacken Ind Estate,Portlaoise,Co. Laois,Ireland		
Within the Country	15 01 02	No	25.0	plastic packaging	R3	M	Weighed	Offsite in Ireland	ROC Recycling Solutions Ltd,WFP-LS-11-0001-01	Ballymacken Ind Estate,Ballymacken Ind Estate,Portlaoise,Co. Laois,Ireland		
Within the Country	15 01 03	No	1.9	wooden packaging	R5	M	Weighed	Offsite in Ireland	ROC Recycling Solutions Ltd,WFP-LS-11-0001-01	Ballymacken Ind Estate,Ballymacken Ind Estate,Portlaoise,Co. Laois,Ireland		
Within the Country	15 01 03	No	21.72	wooden packaging	R5	M	Weighed	Offsite in Ireland	Oxigen Environmental Ltd,208-01	Merrywell Industrial Estate,Ballymount Road Lower Clondalkin,Dublin 22,Dublin,Ireland		
Within the Country	15 01 06	No	1.0	mixed packaging	R3	M	Weighed	Offsite in Ireland	Oxigen Environmental Ltd,208-01	Merrywell Industrial Estate,Ballymount Road Lower Clondalkin,Dublin 22,Dublin,Ireland		
Within the Country	15 02 02	Yes	0.377	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	R4	M	Weighed	Offsite in Ireland	Enva,184-1	Clonminam Ind Est,Clonminam Ind Est,Portlaoise,Co Laois,Ireland	Enva,184-1,Clonminam Ind Est,Clonminam Ind Est,Portlaoise,Co Laois,Ireland	Clonminam Ind Est,Clonminam Ind Est,Portlaoise,Co Laois,Ireland
Within the Country	16 02 14	No	1.58	discarded equipment other than those mentioned in 16 02 09 to 16 02 13	R4	M	Weighed	Offsite in Ireland	Thorntons Recycling,44-2	Kileen Road,Kileen Road,Ballyfermot,Dublin 10,Ireland		
Within the Country	20 01 21	Yes	0.126	fluorescent tubes and other mercury-containing waste	R4	M	Weighed	Offsite in Ireland	Irish Lamp Recycling,WFP-KE-08-0384-01	Woodstock Ind Est,Kilkenny Road,Athy,Co Kildare,Ireland	Irish Lamp Recycling,WFP-KE-08-0384-01,Woodstock Ind Est,Kilkenny Road,Athy,Co Kildare,Ireland	Woodstock Ind Est,Kilkenny Road,Athy,Co Kildare,Ireland
Within the Country	20 01 39	No	10.19	plastics	R3	M	Weighed	Offsite in Ireland	ROC Recycling Solutions Ltd,WFP-LS-11-0001-01	Ballymacken Ind Estate,Ballymacken Ind Estate,Portlaoise,Co. Laois,Ireland		
Within the Country	20 01 40	No	31.6	metals	R4	M	Weighed	Offsite in Ireland	United Metals,WFP LK 2011 147-R1	Eastway Business Park,Ballysimon,..,Co. Limerick,Ireland		
Within the Country	20 03 01	No	1220.66	mixed municipal waste	R1	M	Weighed	Offsite in Ireland	Oxigen,152-3 and 208-1	Ballymount Ind Est,Ballymount lower road,Clondalkin,Dublin 22,Ireland		
Within the Country	16 01 07	Yes	0.295	oil filters	R4	M	Weighed	Offsite in Ireland	Enva,184-1	Clonminam Ind Est,Clonminam Ind Est,Portlaoise,Co Laois,Ireland	Enva,184-1,Clonminam Ind Est,Clonminam Ind Est,Portlaoise,Co Laois,Ireland	Clonminam Ind Est,Clonminam Ind Est,Portlaoise,Co Laois,Ireland

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

Link to previous years waste data
Link to previous years waste summary data & percentage change
Link to Waste Guidance