Facility Information Summary	
AER Reporting Year	2015
Licence Register Number	P0395-03
Name of site	Wyeth Nutritionals Ireland Limited
Site Location	Askeaton, Co. Limerick
NACE Code	1086
Class/Classes of Activity	7.2.1 and 2.1
National Grid Reference (6E, 6 N)	-8.98170 52.6091

A description of the activities/processes at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance which was measured during the reporting year **and an overview of compliance with your licence** listing all exceedances of licence limits (where applicable) and what they relate to e.g. air, water, noise.

Wyeth Nutritionals Ireland Limited is one of Europe's leading producers of infant and child nutritional products. Established in 1974, this world-class facility is one of the largest purpose-built infant nutritional production facilities in the world. The factory produces both powdered formulas and a liquid ready-to-feed range of products with an annual production capacity of almost 50 million kilograms.

Output from the factory in 2015 was slightly less than production output for 2014. Changes were made to operation scheduling resulting in increased downtime due to process cleaning with a corresponding increase in demand for water, energy and wastewater discharged. Changes also occurred where a packaging line was demolished and replaced by a new line that involved some construction work.

In line with the site's environmental policy a number of initiatives were implemented as part of the 2015 environmental management programme in the areas of water use, waste management and energy use that helped improve the overall environmental performance of the site.

A summary of proposed amendments to the site's Decommissioning Management Plan arising from a review of the plan is attached (as per Condition 10.2.2 of the IE Licence) Agreement is sought from the Agency to proceed implementation.

Declaration:

All the data and information presented in this report has been checked and certified as being accurate. The quality of the information is assured to meet licence requirements.

Signature	Date
Group/Facility manager (or nominated, suitably qualified and experienced deputy)	30/03/2016

AIR-summary template	Lic No:	P0395-03	Year	2015

Answer all questions and complete all tables where relevant

			Additional information
1	Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current reporting year and answer further questions. If **you do not have** licenced emissions and **do not complete a solvent management plan** (table A4 and A5) you do not need to complete the tables	Yes	

Periodic/Non-Continuous Monitoring

2	Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below		No	
3	Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist?	Basic air monitoring checklist	Yes	

AGN2

Table A1: Licensed Mass Emissions/Ambient data-periodic monitoring (non-continuous)

Emission reference no:	Parameter/ Substance	Frequency of Monitoring	ELV in licence or any revision therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments -reason for change in % mass load from previous year if applicable
A1-1	Nitrogen oxides (NOx/NO2)	Biannually	300	100 % of values < ELV	Min. 172.2 Max. 189.5	mg/Nm3	yes	EN 14792:2005		
A1-1	Carbon monoxide (CO)	Biannually			26.9	mg/Nm3		EN 15058:2004		
A1-1	volumetric flow	Biannually				Nm3/hour	SELECT	SELECT		
A1-2	Nitrogen oxides (NOx/NO2)	Biannually	200	100 % of values < ELV	124.7	mg/Nm3	yes	EN 14792:2005		Only possibly to complete one round of monitoring due to limited boiler operations.
A1-2	Carbon monoxide (CO)	Biannually	100	100 % of values < ELV	1.7	mg/Nm3	yes	EN 15058:2004		Only possibly to complete one round of monitoring due to limited boiler operations.
A1-2	volumetric flow	Biannually	-		6376	Nm3/hour				Only possibly to complete one round of monitoring due to limited boiler operations.
A1-4	Nitrogen oxides (NOx/NO2)	Biannually	200							Unable to measure boiler missions due to boiler offline for a portion of the period and on hot stand-by for remainder of period
A1-4	Carbon monoxide (CO)	Biannually	100							Unable to measure boiler missions due to boiler offline for a portion of the period and on hot stand-by for remainder of period

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A1-4	volumetric flow	Biannually								Unable to measure boiler missions due to boiler offline for a portion of the period and on hot stand-by for remainder of period
A2-1	Total Particulates	Quarterly	50	100 % of values < ELV	Min. 16.02 Max. 24.19	mg/Nm3	yes	EN 13284-1:2002		Only 2 monitoring rounds completed due to plant downtime.
A2-1	volumetric flow	Quarterly			Min. 30783 Max. 34824	Nm3/hour		EN 16911:2013		Only 2 monitoring rounds completed due to plant downtime.
A2-3	Total Particulates	Quarterly	50	100 % of values < ELV	Min. 3.86 Max. 38.59	mg/Nm3	yes	EN 13284-1:2002		
A2-3	volumetric flow	Quarterly			Min. 66163 Max. 78748	Nm3/hour	yes	EN 16911:2013		
A2-4	Total Particulates	Quarterly	50	100 % of values < ELV	Min. 14.63 Max. 33.24	mg/Nm3	yes	EN 13284-1:2002		
A2-4	volumetric flow	Quarterly			Min. 88193 Max. 99609	Nm3/hour	yes	EN 16911:2013		
A2-6	Total Particulates	Quarterly	50	100 % of values < ELV	Min. 19.80 Max. 30.89	mg/Nm3	yes	EN 13284-1:2002		
A2-6	volumetric flow	Quarterly			Min. 88056 Max. 92053	Nm3/hour		EN 16911:2013		
	Total Particulates								27895	
	Nitrogen oxides (NOx/NO2)								41036	-8%. Note: data from 2013 monitoring emission A1-4 used to calculate mass emissions.

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	Carbon monoxide (CO)								6068	-68%. More accurate accounting of CO emissions completed this year. Note: data from 2013 monitoring emission A1-4 used to calculate mass emissions.

Note 1: Volumetric flow shall be included as a reportable parameter

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Continuous Monitoring

4	Does your site carry out continuous air emissions monitoring?	SELECT	
	If yes please review your continuous monitoring data and report the required fields below in Table A2 and compare it to its relevant Emission Limit Value (ELV)		
5	Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below	SELECT	
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	SELECT	
7	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below	SELECT	

Table A2: Summary of average emissions -continuous monitoring

Emission reference no:	Parameter/ Substance	ELV in licence or any revision therof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission	Annual maximum	Monitoring Equipment downtime (hours)	Number of ELV exceedences in current reporting year	Comments
	SELECT			SELECT	SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					

note 1: Volumetric flow shall be included as a reportable parameter.

Table A3: Abatement system bypass reporting table Bypass protocol

Date*	Duration** (hours)	Location	Reason for bypass	Impact magnitude	Corrective action

* this should include all dates that an abatement system bypass occurred

** an accurate record of time bypass beginning and end should be logged on site and maintained for future Agency inspections please refer to bypass protocol link

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Solvent use and management on site

8 Do you have a total Emission Limit Value of direct and fugitive emissions on site? if yes please fill out tables A4 and A5 — SELECT

Table A4: Solvent Management Plan Summary
Total VOC Emission limit value

Solvent regulations — Please refer to linked solvent regulations to complete table 5 and 6

Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision therof	Compliance
					SELECT
					SELECT

Table A5: Solvent Mass Balance summary

	(I) Inputs (kg)	(O) Outputs (kg)						
Solvent	(I) Inputs (kg)	Organic solvent emission in waste	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g. by-	Solvents destroyed onsite through	Total emission of Solvent to air (kg)
							Total	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: P0395-03 Year 2015

			Additional information
1	Does your site have licensed emissions direct to surface water or direct to sewer? If yes please complete table W2 and W3 below for the current reporting year and answer further questions. If **you do not have** licenced emissions you only need to complete table W1 and or W2 for storm water analysis and visual inspections	Yes	
2	Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table W2 below summarising only any evidence of contamination noted during visual inspections	Yes	

Table W1 Storm water monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licenced Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	

*trigger values may be agreed by the Agency outside of licence conditions

Table W2 Visual inspections-Please only enter details where contamination was observed.

Location Reference	Date of inspection	Description of contamination	Source of contamination	Corrective action	Comments
			SELECT		
			SELECT		

Licensed Emissions to water and /or wastewater(sewer)-periodic monitoring (non-continuous)

				Additional information
3	Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table W3 below		No	
4	Was all monitoring carried out in accordance with EPA guidance and checklists for Quality of Aqueous Monitoring Data Reported to the EPA? If no please detail what areas require improvement in additional information box	External /Internal Lab Quality checklist / Assessment of results checklist	Yes	

Table W3: Licensed Emissions to water and /or wastewater (sewer)-periodic monitoring (non-continuous)

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision theref[Note 2]	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	Comments
SW1	Water	Toxicity	composite	Annual	24 hour	5	All results < 1.2 x ELV	<1	TU	yes	Toxicity Analysis	ISO	8692:2012 11348-3:2007		

Note 1: Volumetric flow shall be included as a reportable parameter

Note 2: Where Emission Limit Values (ELV) do not apply to your licence please compare results against EQS for Surface water or relevant receptor quality standards

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: P0395-03 Year 2015

Continuous monitoring

			Additional Information
5	Does your site carry out continuous emissions to water/sewer monitoring?	Yes	

If yes please summarise your continuous monitoring data below in Table W4 and compare it to its relevant Emission Limit Value (ELV)

6	Did continuous monitoring equipment experience downtime? **If yes please record downtime in table W4 below**	No	
7	Do you have a proactive service contract for each piece of continuous monitoring equipment on site?	No	
8	Did abatement system bypass occur during the reporting year? **If yes please complete table W5 below**	No	

Table W4: Summary of average emissions -continuous monitoring

Emission reference no:	Emission released to	Parameter/ Substance	ELV or trigger values in licence or any revision thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission for current reporting year (kg)	% change +/- from previous reporting year	Monitoring Equipment downtime (hours)	Number of ELV exceedences in reporting year	Comments
SW1	Water	volumetric flow	2800	24 hour	No flow value shall exceed the .specific limit	m3/day		-2	0	0	
SW1	Water	pH	6 - 9	24 hour	No pH value shall deviate from the .specified range	pH units			0	0	
SW1	Water	BOD	40	24 hour	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	mg/L	6521	-8	0	0	
SW1	Water	Suspended Solids	50	24 hour	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	mg/L	8279	-33	0	0	Good management of the Wastewater Treatment Plant with focused monitoring and control of sludge age.
SW1	Water	Total nitrogen	15	24 hour	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	mg/L	1836	+2	0	0	
SW1	Water	Ammonia (as N)	10	24 hour	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	mg/L	735	-7	0	0	
SW1	Water	Total phosphorus	1.5	24 hour	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	mg/L	26	-81	0	0	Good management of the Wastewater Treatment Plant with focused monitoring and control of sludge age.
SW1	Water	Ortho-phosphate (as PO4)	0.75	24 hour	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	mg/L	19	-73	0	0	Good management of the Wastewater Treatment Plant with focused monitoring and control of sludge age.
SW1	Water	Fats, Oils and Greases	15	24 hour	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	mg/L	2492	-10	0	0	
SW1	Water	COD	-	24 hour		mg/L	18598	-23	0	0	

note 1: Volumetric flow shall be included as a reportable parameter.

Table W5: Abatement system bypass reporting table

Date	Duration (hours)	Location	Resultant emissions	Reason for bypass	Corrective action*	Was a report submitted to the EPA?	When was this report submitted?
						SELECT	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)	Lic No:	P0395-03	Year	2015

*Measures taken or proposed to reduce or limit bypass frequency

Bund/Pipeline testing template	Lic No:	P0395-03	Year	2015	

Bund testing

dropdown menu click to see options

			Additional information
1	Are you required by your licence to undertake integrity testing on bunds and containment structures ? if yes please fill out table B1 below listing all **new bunds and containment structures** on site, in addition to **all bunds which failed** the integrity test-**all bunding structures which failed including mobile bunds must be listed in the table below, please include all bunds outside the licenced testing period** (mobile bunds and chemstore included)	Yes	
2	Please provide integrity testing frequency period	3 years	
3	Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), Tanks, sumps and containers? (containers refers to "Chemstore" type units and mobile bunds)	Yes	
4	How many bunds are on site?	26	
5	How many of these bunds have been tested within the required test schedule?	26	
6	How many mobile bunds are on site?	1	
7	Are the mobile bunds included in the bund test schedule?	Yes	
8	How many of these mobile bunds have been tested within the required test schedule?	1	
9	How many sumps on site are included in the integrity test schedule?	10	
10	How many of these sumps are integrity tested within the test schedule?	10	
	Please list any sump integrity failures in table B1		
11	Do all sumps and chambers have high level liquid alarms?	Yes	
12	If yes to Q11 are these failsafe systems included in a maintenance and testing programme?	Yes	
13	Is the Fire Water Retention Pond included in your integrity test programme?	N/A	

Table B1: Summary details of bund /containment structure integrity test

Bund/Containment structure ID	Type	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)
B1	reinforced concrete		Various small lot chemicals	N/A, Remote containment	N/A, Remote containment	Structural assessment		Sep-15	Yes	Fail	Cracks in perimeter wall and pipes protruding through base. Not a bund as there is remote containment	Scheduled repairs	Jly-16	
B9	reinforced concrete		Wastewater/Reject mix product tanks	N/A, Remote containment	N/A, Remote containment	Structural assessment		Sep-15	Yes	Fail	Cracks in the base. Not a bund as there is remote containment.	Scheduled repairs	Jly-16	
B19	reinforced concrete		Hydrochloric acid and sodium hydroxide	N/A, Remote containment	N/A, Remote containment	Structural assessment		Sep-15	Yes	Fail	Cracked and missing tiles.	Scheduled repairs	Jly-16	
RTF Products	reinforced concrete		Cooling water.	N/A, Remote containment	N/A, Remote containment	Structural assessment		Sep-15	Yes	Fail	Crackes in perimeter wall and base.	Scheduled repairs	Jly-16	

* Capacity required should comply with 25% or 110% containment rule as detailed in your licence

			Commentary
15	Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance? bunding and storage guidelines	No	
16	Are channels/transfer systems to remote containment systems tested?	Yes	
17	Are channels/transfer systems compliant in both integrity and available volume?	Yes	

Pipeline/underground structure testing

1	Are you required by your licence to undertake integrity testing* on underground structures e.g. pipelines or sumps etc ? if yes please fill out table 2 below listing all underground structures and pipelines on site **which failed the integrity test and all which have not been tested withing the integrity test period as specified**	Yes	
2	Please provide integrity testing frequency period	3 years	
	*please note integrity testing means water tightness testing for process and foul pipelines (as required under your licence)		

Table B2: Summary details of pipeline/underground structures integrity test

Structure ID	Type system	Material of construction:	Does this structure have Secondary containment?	Type of secondary containment	Type integrity testing	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)	Comments
F219	Process	concrete	No	SELECT	Combination	Yes	Fail	Fracture		Jul-16	SELECT	Unable to repair and retest in 2015 due to plant operations. Low risk process line.
F59 to F61	Foul	ceramic	No		Combination	Yes	Fail	Unknown		Jul-16		Unable to repair and retest in 2015 due to plant operations. Low risk foul line.
F59 to F59a	Process	ceramic	No		Combination	Yes	Fail	Unknown		Jul-16		Unable to repair and retest in 2015 due to plant operations. Low risk process line.
FG to 59a	Process	ceramic	No		Combination	Yes	Fail	Unknown		Jul-16		Unable to repair and retest in 2015 due to plant operations. Low risk process line.

Bund/Pipeline testing template					Lic No:	P0395-03		Year	2015			
F60 to F61	Foul	ceramic	No		Combination	Yes	Fail	Unknown		Jul-16		Unable to repair and retest in 2015 due to plant operations. Low risk foul line.
F220 to ML	Foul	ceramic	No		Combination	Yes	Fail	Unknown		Jul-16		Unable to repair and retest in 2015 due to plant operations. Low risk foul line.
F221 to ML	Foul	ceramic	No		Combination	Yes	Fail	Unknown		Jul-16		Unable to repair and retest in 2015 due to plant operations. Low risk foul line.
F60 to F220	Foul	ceramic	No		Combination	Yes	Fail	Unknown		Jul-16		Unable to repair and retest in 2015 due to plant operations. Low risk foul line.
F220 to F221	Foul	ceramic	No		Combination	Yes	Fail	Unknown		Jul-16		Unable to repair and retest in 2015 due to plant operations. Low risk foul line.
F221 to F61	Foul	ceramic	No		Combination	Yes	Fail	Unknown		Jul-16		Unable to repair and retest in 2015 due to plant operations. Low risk foul line.

Groundwater/Soil monitoring template	Lic No:	P0395-03	Year	2015

			Comments	
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes		Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER
2	Are you required to carry out soil monitoring as part of your licence requirements?	no		
3	Do you extract groundwater for use on site? If yes please specify use in comment section	no		
4	Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below. Groundwater monitoring template	yes		
5	Is the contamination related to operations at the facility (either current and/or historic)	no		Analytical results from the 2015 monitoring rounds were in line with those of previous monitoring. The monitoring was completed in accordance with the site's Industrial Emissions Licence requirements and is reported in accordance with Stage 1 - Step 2 of the Environmental Protection Agency's Guidance on the Management of Contaminated Land and Groundwater at EPA Licenced Sites, issued in 2013.
6	Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	N/A		
7	Please specify the proposed time frame for the remediation strategy	N/A		
8	Is there a licence condition to carry out/update ELRA for the site?	yes		
9	Has any type of risk assesment been carried out for the site?	yes		
10	Has a Conceptual Site Model been developed for the site?	yes		The site is underlain by Waulsortian limestone bedrock, with the overlaying subsoils ranging from 1.5 m to 4 m in thickness across the site. The inferred groundwater flow direction in the limestone bedrock aquifer, as measured on 07 September 2015, is to the east towards the River Deel. This is consistent with previous monitoring at the site.
11	Have potential receptors been identified on and off site?	yes		
12	Is there evidence that contamination is migrating offsite?	no		Field measurements of water quality parameters and redox indicators were also generally consistent with previous rounds and indicate that dissolved oxygen concentrations in groundwater are low to moderate and groundwater is moderately to strongly reducing. Monitoring results for Round 2 2015 can be summarised as follows: - The majority of major ion concentrations reported in September 2015 are comparable to the previous monitoring round in March 2015 for all wells excluding BH101. At well BH101, the majority pf major ion concentrations increased between March 2015 and September 2015. - Several major ions exceeded assessment criteria. Elevated concentrations of sodium, chloride and potassium in groundwater at several wells are likely to reflect the site's costal setting. Based on the current site status and monitoring data (particularly the major ion data) it is considered there is a limited degree of mixing between groundwater and surface water bodies close to the River Deel estuary. During high tide in the river, the gradient of water flow is expected to be from the river outwards to the surrounding limestone aquifer, reversing under low tide conditions.

Table 1: Upgradient Groundwater monitoring results

Groundwater/Soil monitoring template Lic No: P0395-03 Year 2015

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	IGV	Upward trend in pollutant concentration over last 5 years of monitoring data
07/09/2015	BH201	pH	pH probe	Biannual	6.07	6.82	pH units	N/A	N/A	no
04/03/2015	BH201	COD	Colourimetric	Biannual	14	11.5	mg/l	N/A	N/A	no
04/03/2015	BH201	Calcium	ICP-OES	Biannual	72	67	mg/l	N/A	200	no
04/03/2015	BH201	Iron (dissolved)	ICP-OES	Biannual	<0.02	<0.02	mg/l	N/A	0.2	no
04/03/2015	BH201	Magnesium	ICP-OES	Biannual	16	11	mg/l	N/A	50	no
04/03/2015	BH201	Manganese (dissolved)	ICP-OES	Biannual	<0.002	<0.002	mg/l	N/A	0.05	no
04/03/2015	BH201	Potassium	ICP-OES	Biannual	6	5	mg/l	N/A	5	no
04/03/2015	BH201	Sodium	ICP-OES	Biannual	104	84	mg/l	150	150	no
04/03/2015	BH201	Total Alkalinity (CaCO3)	Metrohm	Biannual	224	214	mg/l	N/A	N/A	no
04/03/2015	BH201	Chloride	Aquakem	Biannual	111	93.5	mg/l	187.5	30	no
04/03/2015	BH201	Nitrate (as NO3)	Aquakem	Biannual	6	6	mg/l	37.5	25	no
04/03/2015	BH201	Nitrite (as NO2)	Aquakem	Biannual	<0.02	<0.02	mg/l	0.375	0.1	no
07/09/2015	BH201	Orthophosphate	Aquakem	Biannual	0.08	0.08	mg/l	N/A	0.03	no
07/09/2015	BH201	Sulphate as SO4	Aquakem	Biannual	16	15.5	mg/l	187.5	200	no
04/03/2015	BH201	Fluoride	Dionex	Biannual	<0.3	<0.3	mg/l	N/A	1	no

.+ where average indicates arithmetic mean

.++ maximum concentration indicates the maximum measured concentration from all monitoring results produced during the reporting year

Table 2: Downgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*	IGV	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
04/03/2015	BH203	pH	pH probe	Biannual	8	7.5	pH units	N/A	N/A	no
04/03/2015	BH203	COD	Colourimetric	Biannual	<7	<7	mg/l	N/A	N/A	no
07/09/2015	BH203	Calcium	ICP-OES	Biannual	71	69.5	mg/l	N/A	200	no
04/03/2015	BH203	Iron (dissolved)	ICP-OES	Biannual	0.04	0.04	mg/l	N/A	0.2	no
07/09/2015	BH203	Magnesium	ICP-OES	Biannual	6	6.5	mg/l	N/A	50	no
07/09/2015	BH203	Manganese (dissolved)	ICP-OES	Biannual	0.07	0.04	mg/l	N/A	0.05	no
04/03/2015	BH203	Potassium	ICP-OES	Biannual	13	11.5	mg/l	N/A	5	no
07/09/2015	BH203	Sodium	ICP-OES	Biannual	72	64	mg/l	150	150	no

Groundwater/Soil monitoring template					Lic No:	P0395-03		Year	2015	
04/03/2015	BH203	Total Alkalinity (CaCO3)	Metrohm	Biannual	286	280	mg/l	N/A	N/A	no
07/09/2015	BH203	Chloride	Aquakem	Biannual	45	44.5	mg/l	187.5	30	no
04/03/2015	BH203	Nitrate (as NO3)	Aquakem	Biannual	9	6.5	mg/l	37.5	25	no
07/09/2015	BH203	Nitrite (as NO2)	Aquakem	Biannual	0.2	0.13	mg/l	0.375	0.1	yes
04/03/2015	BH203	Orthophosphate	Aquakem	Biannual	<0.06	<0.06	mg/l	N/A	0.03	no
07/09/2015	BH203	Sulphate as SO4	Aquakem	Biannual	38	35	mg/l	187.5	200	no
04/03/2015	BH203	Fluoride	Dionex	Biannual	<0.3	<0.3	mg/l	N/A	1	no

*please note exceedance of generic assessment criteria (GAC) such as a Groundwater Threshold Value (GTV) or an Interim Guideline Value (IGV) or an upward trend in results for a substance indicates that further interpretation of monitoring results is required. In addition to completing the above table, please complete the Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA.

Groundwater monitoring template

More information on the use of soil and groundwater standards/ generic assessment criteria (GAC) and risk assessment tools is available in the EPA published guidance (see the link in G31)

Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013).

**Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is close to surface water compare to Surface Water Environmental Quality Standards (SWEQS), If the site is close to a drinking water supply compare results to the Drinking Water Standards (DWS)

Surface water EQS

Groundwater regulations GTV's

Drinking water (private supply) standards

Drinking water (public supply) standards

Interim Guideline Values (IGV)

Groundwater/Soil monitoring template Lic No: P0395-03 Year 2015

Table 3: Soil results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit
							SELECT
							SELECT

Where additional detail is required please enter it here in 200 words or less

Environmental Liabilities template	Lic No:	P0395-03	Year	2015

Click here to access EPA guidance on Environmental Liabilities and Financial provision

			Commentary
1	ELRA initial agreement status	Submitted and not agreed by EPA;	
2	ELRA review status	Review required and completed	
3	Amount of Financial Provision cover required as determined by the latest ELRA	€ 1,778,733.00	
4	Financial Provision for ELRA status	Submitted and not agreed by EPA;	
5	Financial Provision for ELRA - amount of cover	All liabilities (known and unknown)	
6	Financial Provision for ELRA - type	Other please specify	Corp. Insurance Policy & Nestle S.A. Central Funds
7	Financial provision for ELRA expiry date	No date specified.	
8	Closure plan initial agreement status	sure plan submitted and not agreed by EPA	
9	Closure plan review status	Review required and completed	
10	Financial Provision for Closure status	Submitted and not agreed by EPA;	
11	Financial Provision for Closure - amount of cover	All liabilities (known and unknown)	
12	Financial Provision for Closure - type	SELECT	Financial Security
13	Financial provision for Closure expiry date	No date specified.	

Environmental Management Programme/Continuous Improvement Programme template		Lic No:	P0395-03	Year	2015

Highlighted cells contain dropdown menu click to view

			Additional Information
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes	
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes	
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes	
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes	

Environmental Management Programme (EMP) report

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Waste reduction/Raw material usage efficiency	Reduction of 35% of water use per unit of production between 2010 and 2017.	70	Almost 29% reduction achieved by the end of 2015	Section Head	Installation of infrastructure
Waste reduction/Raw material usage efficiency	Elimination of the landfilling of waste by 2015 and ensure that this elimination is maintained.	100	Targets achieved and audit completed to confirm.	Section Head	Improved Environmental Management Practices
Additional improvements	Incorporate sustainability into the procurement process for Irish suppliers of dairy ingredients.	80	On target	Section Head	Improved Environmental Management Practices
Additional improvements	Develop and manage areas for the promotion of biodiversity	80	On target	Section Head	Improved Environmental Management Practices
Energy Efficiency/Utility conservation	Reduction of 3.5% in energy use per unit of production each year in 2015, 2016 and 2017.	50	Not on target	Section Head	Installation of infrastructure

Noise monitoring summary report	Lic No:	P0395-03	Year	2015

1	Was noise monitoring a licence requirement for the AER period? If yes please fill in table N1 noise summary below	Yes
2	Was noise monitoring carried out using the EPA Guidance note, including completion of the "Checklist for noise measurement report" included in the guidance note as table 6? (Noise Guidance note NG4)	Yes
3	Does your site have a noise reduction plan	Yes
4	When was the noise reduction plan last updated?	16/11/2015
5	Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?	No

Table N1: Noise monitoring summary

Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA_{eq}	LA_{90}	LA_{10}	LA_{max}	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is site compliant with noise limits (day/evening/night)?
25/26 May 2015	Day		NSL 1	58	44	59	80	No	SELECT	Local traffic, birds, planes, silage cutting, plant not audible	Yes
25/26 May 2015	Day		NSL 2	62	47	63	81	No		Traffic noise from N69, local traffic. Plant barely audible	Yes
25/26 May 2015	Day		NSL 3	58	49	62	76	No		Traffic noise from N69 and local traffic. Plant not audible	Yes
25/26 May 2015	Day		NSL 4	57	49	59	75	No		Traffic noise from N69 and local traffic. Birds. Low level steady plant noise barely audible in traffic lulls.	Yes
25/26 May 2015	Day		NSL 5	53	38	55	74	No		Distant traffic N69. Local traffic. Plant barely audible in traffic lulls.	Yes
25/26 May 2015	Day		NSL 6	45	36	47	64	No		Steady plant noise, distant & local traffic.	Yes
25/26 May 2015	Evening		NSL 1	54	36	51	80	No		Local & distant traffic, birds, planes, silage making, plant barely audible.	Yes
25/26 May 2015	Evening		NSL 2	61	43	57	83	No		Traffic N69, local traffic, dog barking. Low level plant noise barely audible here.	Yes

25/26 May 2015	Evening		NSL 3	56	44	58	81	No		N69 Traffic noise, local traffic. Dog barking. Plant not audible here.	Yes
25/26 May 2015	Evening		NSL 4	58	<50	57	74	No		Local and N69 traffic noise. Low level plant noise barely audible in traffic lulls.	Yes
25/26 May 2015	Evening		NSL 5	52	43	52	71	No		Distant & local traffic noise. Plant not audible.	Yes
25/26 May 2015	Evening		NSL 6	43	40	45	58	No		Distant traffic noise. Low level steady plant noise.	Yes
25/26 May 2015	Night		NSL 1	33	29	36	53	No		Distant traffic, trees rustling, plant barely audible.	Yes
25/26 May 2015	Night		NSL 2	60	43	59	81	No		Local and N69 traffic, trees rustling, plant barely audible.	Yes
25/26 May 2015	Night		NSL 3	50	41	46	74	No		Local & distant traffic noise. Plant barely audible.	Yes
25/26 May 2015	Night		NSL 4	55	44	53	83	No		N69 and local traffic. Steady low level plant noise audible in traffic lulls.	Yes
25/26 May 2015	Night		NSL 5	40	37	42	65	No		Distant traffic (N69), low level steady plant noise.	Yes
25/26 May 2015	Night		NSL 6	41	38	43	64	No		Distant traffic (N69), low level steady plant noise.	Yes

*Please ensure that a tonal analysis has been carried out as per guidance note NG4. These records must be maintained onsite for future inspection

If noise limits exceeded as a result of noise attributed to site activities, please choose the corrective action from the following options?

SELECT

** please explain the reason for not taking action/resolution of noise issues?
As per Condition 6.14.2 of our IE Licence, please find our Noise Mitigation and Control Programme and Implementation Report attached.

Resource Usage/Energy efficiency summary

Lic No: P0395-03 Year 2015

		Additional information
1 When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below	Enter date of audit	Nov-14
2 Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? If yes please list them in additional information	Yes	LIEN
3 Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information	Yes	<1

SEAI - Large Industry Energy Network (LIEN)

Table R1 Energy usage on site

Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)	205051	204228	-1.20%	0.70%
Total Energy Generated (MWHrs)	41312	40312		
Total Renewable Energy Generated (M	0	0		
Electricity Consumption (MWHrs)	31940491	32602991		
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	0	0		
Light Fuel Oil (m3)	95	25		
Natural gas (m3)	18625601	18361840		
Coal/Solid fuel (metric tonnes)	0	0		
Peat (metric tonnes)	0	0		
Renewable Biomass	0	0		
Renewable energy generated on site	0	0		

* where consumption of energy can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.

** where site production information is available please enter percentage increase or decrease compared to previous year

Table R2 Water usage on site

					Water Emissions	Water Consumption	
Water use	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	Volume Discharged back to environment(m^3yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater							
Surface water	720697	720061	-1.20%	0.70%	538007	Not available	182054
Public supply							
Recycled water							
Total	720697	720061	-1.20%	0.70%	538007	Not available	182054

* where consumption of water can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.

** where site production information is available please enter percentage increase or decrease compared to previous year

Table R3 Waste Stream Summary

	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)	27.353	0	12.394	13.374	1.585
Non-Hazardous (Tonnes)	7381.95	12.64	600.169	6769.141	0

Resource Usage/Energy efficiency summary Lic No: P0395-03 Year 2015

Table R4: Energy Audit finding recommendations

Date of audit	Recommendations	Description of Measures proposed	Origin of measures	Predicted energy savings %	Implementation date	Responsibility	Completion date	Status and comments
Energy Target Setting	33 idividual projects identified	Various	other initiative (please specify)	22%	01/01/2015	Energy Engineer	31/12/2019	Energy Target Setting is a Nestle corporate initiative used to plan energy and water reduction measures.
			SELECT					
			SELECT					

Table R5: Power Generation: Where power is generated onsite (e.g. power generation facilities/food and drink industry)please complete the following information

	Unit ID	Unit ID	Unit ID	Unit ID	Station Total
Technology	CHP				
Primary Fuel	Natural Gas				
Thermal Efficiency	80-85%				
Unit Date of Commission	01/01/2005				
Total Starts for year	24/7 operation				
Total Running Time	8,000+ hours				
Total Electricity Generated (GWH)	41				
House Load (GWH)	32				
KWH per Litre of Process Water	0.0017				
KWH per Litre of Total Water used on	0.001				

Complaints and Incidents summary template Lic No: P0395-03 Year 2015

Complaints

		Additional information
Have you received any environmental complaints in the current reporting year? If yes please complete summary details of complaints received on site in table 1 below	Yes	

Table 1 Complaints summary

Date	Category	Other type (please specify)	Brief description of complaint (Free txt <20 words)	Corrective action< 20 words	Resolution status	Resolution date	Further information
30/01/2015	Noise		Site noisy throughout the night.	Issue with PRV found to be the cause. Replaced PRV.	Complete	30/01/2015	
10/02/2015	Noise		Low level hummming noise throughout the night.	Site checked for source. Nothing found. Wind was from north.	Complete	12/02/2015	
13/02/2015	Noise		Noise coming from site.	Site checked. Very little process equipment operating. No source found.	Complete	16/02/2015	
25/02/2015	Noise		Low frequency hum from the site.	Checked site and equipment that was operating. Suspected vibration from drier 3 fan. Fan was cleaned.	Complete	25/02/2015	
09/04/2015	Noise		Hummig sound and beeping sounds at night.	No issues found with plant. Truck shunting operations at night susppended at the south end of the site.	Complete	13/04/2015	
06/06/2015	Noise		Noise from the site.	Site checked and no issues found. Complainant advised that the noise had stopped.	Complete	06/06/2015	
15/06/2015	Noise		Noise (alarm) at pump house on the south side of town.	Burglar alarm issue corrected.	Complete	15/06/2015	
04/09/2015	Noise		Humming sound from the site.	Suspected cause: vibration from fan on drier 3. Fan balanced.	Complete	25/09/2015	

Total complaints open at start of reporting year	0
Total new complaints received during reporting year	8
Total complaints closed during reporting year	8
Balance of complaints end of reporting year	0

Incidents

		Additional information
Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below	Yes	

Complaints and Incidents summary template Lic No: P0395-03 Year 2015

*For information on how to report and what constitutes an incident	What is an incident

Table 2 Incidents summary

Date of occurrence	Incident nature	Location of occurrence	Incident category*please refer to guidance	Receptor	Cause of incident	Other cause(please specify)	Activity in progress at time of incident	Communication	Occurrence	Corrective action<20 words	Preventative action <20 words	Resolution status	Resolution date	Likelihood of reoccurence
15/10/2015	Spillage	Water treatment chemical storage.	1. Minor	Ground	Plant or equipment issues		Normal activities	EPA	New	Repaired leek and monitored nearby storm water drain.	Pressure test line, review engineering design and material suitability.	Complete	21/10/2015	Low
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT

Total number of incidents current year	1
Total number of incidents previous year	3
% reduction/ increase	-66%

WASTE SUMMARY	Lic No:	P0395-03	Year	2015
SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES		PRTR facility logon	dropdown list click to see options	

SECTION B- WASTE ACCEPTED ONTO SITE-TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES

			Additional Information
1	Were any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility ?; (waste generated within your boundaries is to be captured through PRTR reporting) If yes please enter details in table 1 below	No	
2	Did your site have any rejected consignments of waste in the current reporting year? If yes please give a brief explanation in the additional information	No	
3	Was waste accepted onto your site that was generated outside the Republic of Ireland? If yes please state the quantity in tonnes in additional information	No	

Table 1 Details of waste accepted onto your site for recovery, disposal or treatment (do not include wastes generated at your site, as these will have been reported in your PRTR workbook)

Licenced annual tonnage limit for your site (total tonnes/annum)	EWC code European Waste Catalogue EWC codes	Source of waste accepted	Description of waste accepted **Please enter an accurate and detailed description - which applies to relevant EWC code** European Waste Catalogue EWC codes	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/ Increase over previous year +/ - %	Reason for reduction/ increase from previous reporting year	Packaging Content (%)- only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -

SECTION C-TO BE COMPLETED BY ALL WASTE FACILITIES (waste transfer stations, Composters, Material recovery facilities etc) EXCEPT LANDFILL SITES

4	Is all waste processing infrastructure as required by your licence and approved by the Agency in place? If no please list waste processing infrastructure required onsite	SELECT	
5	Is all waste storage infrastructure as required by your licence and approved by the Agency in place? If no please list waste storage infrastructure required on site	SELECT	
6	Does your facility have relevant nuisance controls in place?	SELECT	
7	Do you have an odour management system in place for your facility? If no why?	SELECT	
8	Do you maintain a sludge register on site?	SELECT	

SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-landfill only

Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	Comments

Table 3 General information-Landfill only

Area ID	Date landfilling commenced	Date landfilling ceased	Currently landfilling	Private or Public Operated	Inert or non-hazardous	Predicted date to cease landfilling	Licence permits asbestos	Is there a separate cell for asbestos?	Accepted asbestos in reporting year	Total disposal area occupied by waste	Lined disposal area occupied by waste	Unlined area
										SELECT UNIT	SELECT UNIT	SELECT UNIT
Cell 8												

WASTE SUMMARY Lic No: P0395-03 Year 2015

Table 4 Environmental monitoring-landfill only

Landfill Manual-Monitoring Standards

Was meterological monitoring in compliance with Landfill Directive (LD) standard in reporting year +	Was leachate monitored in compliance with LD standard in reporting year	Was Landfill Gas monitored in compliance with LD standard in reporting year	Was SW monitored in compliance with LD standard in reporting year	Have GW trigger levels been established	Were emission limit values agreed with the Agency (ELVs)	Was topography of the site surveyed in reporting year	Has the statement under S53(A)(5) of WMA been submitted in reporting year	Comments

.+ please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards

Table 5 Capping-Landfill only

Area uncapped*	Area with temporary cap	Area with final cap to LD Standard m2 ha, a	Area capped other	Area with waste that should be permanently capped to date under licence	What materials are used in the cap	Comments
SELECT UNIT	SELECT UNIT					

*please note this includes daily cover area

Table 6 Leachate-Landfill only

9	Is leachate from your site treated in a Waste Water Treatment Plant?	SELECT
10	Is leachate released to surface water? If yes please complete leachate mass load information below	SELECT

Volume of leachate in reporting year(m3)	Leachate (BOD) mass load (kg/annum)	Leachate (COD) mass load (kg/annum)	Leachate (NH4) mass load (kg/annum)	Leachate (Chloride) mass load kg/annum	Leachate treatment on-site	Specify type of leachate treatment	Comments

Please ensure that all information reported in the landfill gas section is consistent with the Landfill Gas Survey submitted in conjunction with PRTR returns

Table 7 Landfill Gas-Landfill only

Gas Captured&Treated by LFG System m3	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitoring performed during the reporting year?	Comments
			SELECT	

Comments on liner type

Environmental Protection Agency

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2015

1. FACILITY IDENTIFICATION

Parent Company Name	Wyeth Nutritionals Ireland Ltd
Facility Name	Wyeth Nutritionals Ireland Limited
PRTR Identification Number	P0395
Licence Number	P0395-03

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Coolrahnee
Address 2	Askeaton
Address 3	
Address 4	
	Limerick
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@wyethnutrition.com
AER Returns Contact Position	Safety, Health & Environment 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	630
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 ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

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

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs						
POLLUTANT		METHOD							QUANTITY		
			Method Used		A1-1	A1-2	A1-4	Total Site			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
02	Carbon monoxide (CO)	C	OTH		5966.0	12.0	91.0	0.0	6069.0	0.0	0.0
03	Carbon dioxide (CO2)	C	ETS		0.0	0.0	0.0	37167523.0	37167523.0	0.0	0.0
08	Nitrogen oxides (NOx/NO2)	M	ISO 10849:1996		40122.0	847.0	77.0	0.0	41046.0	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		A2-1	A2-3	A2-4	A2-6			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
210	**Dust**	M	CRM	EN 13284-1:2002	594.0	6052.0	12160.0	4043.0	22849.0	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: Wyeth Nutritionals Ireland Limited

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

4.2 RELEASES TO WATERS

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		SW1			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
12	Total nitrogen	M	OTH	Colorimetric Hach Method 1007	1836.11	1836.11	0.0	0.0
13	Total phosphorus	M	OTH	Colorimetric Hach Method 8190	25.98	25.98	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		SW1			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
238	Ammonia (as N)	M	OTH	Colorimetric Hach Method 10031	734.92	734.92	0.0	0.0
303	BOD	M	OTH	5-day BOD Test	6521.64	6521.64	0.0	0.0
314	Fats, Oils and Greases	E	ESTIMATE		2492.0	2492.0	0.0	0.0
306	COD	M	OTH	Hach Reactor digestion	18598.36	18598.36	0.0	0.0
240	Suspended Solids	M	OTH	Standard method	8279.87	8279.87	0.0	0.0
387	**Ortho-phosphate (as P)**	M	EN ISO 6878:2004		18.56	18.56	0.0	0.0

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

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
					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 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
					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

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

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 03 04	No	592.68	materials unsuitable for consumption or processing	R3	M	Weighed	Offsite in Ireland	Clean (Irl) Refuse & Recycling Company Limited,W0253-01	Ballinagun West,Cree,Co. Clare,.,Ireland		
Within the Country	02 05 01	No	166.12	materials unsuitable for consumption or processing	R3	M	Weighed	Offsite in Ireland	Waddock Composting,WFP-CW-11-05-01	Killamaster,Tullow,Co. Carlow,.,Ireland		
Within the Country	02 05 02	No	2933.77	sludges from on-site effluent treatment	R3	M	Weighed	Offsite in Ireland	McDonnell Farms Biogas Ltd.,WFP/LK/2011/50/R2/T1	Dunmoylan,Shanagolden,Co. Limerick,.,Ireland		
To Other Countries	06 01 02	Yes	1.433	hydrochloric acid	R1	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Lindenschmidt KG Umweltservice,04 714 98089,Krombacher Strabe 42-46,57223,Kreutzal,.,Germany	Krombacher Strabe 42-46,57223,Kreutzal,.,Germany
To Other Countries	06 01 05	Yes	0.036	nitric acid and nitrous acid	R1	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Lindenschmidt KG Umweltservice,04 714 98089,Krombacher Strabe 42-46,57223,Kreutzal,.,Germany	Krombacher Strabe 42-46,57223,Kreutzal,.,Germany
To Other Countries	07 01 04	Yes	0.862	other organic solvents, washing liquids and mother liquors	R1	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Geocycle,38/152/BP,S.A. Scoribel,rue de Courriere 42,7181 Seneffe,.,Belgium	S.A. Scoribel,rue de Courriere 42,7181 Seneffe,.,Belgium
To Other Countries	08 01 11	Yes	0.86	waste paint and varnish containing organic solvents or other dangerous substances	R1	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Lindenschmidt KG Umweltservice,04 714 98089,Krombacher Strabe 42-46,57223,Kreutzal,.,Germany	Krombacher Strabe 42-46,57223,Kreutzal,.,Germany
Within the Country	13 02 08	Yes	6.33	other engine, gear and lubricating oils	R9	M	Volume Calculation	Offsite in Ireland	Enva Ireland Ltd.,184-1	Clonminam Ind. Est.,Portlaoise,Co. Laoise,-,Ireland	Enva Ireland Ltd.,184-1,Clonminam Ind. Est.,Portlaoise,Co. Loaise,-,Ireland	Clonminam Ind. Est.,Portlaoise,Co. Loaise,-,Ireland
Within the Country	15 01 01	No	132.1	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd.,W0082-2	Ballykeeffe Townland,Dock Road,Limerick,-,Ireland		
Within the Country	15 01 02	No	106.68	plastic packaging	R3	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd.,W0082-2	Ballykeeffe Townland,Dock Road,Limerick,-,Ireland		
Within the Country	15 01 06	No	861.063	mixed packaging	R3	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd.,W0082-2	Ballykeeffe Townland,Dock Road,Limerick,-,Ireland		
To Other Countries	15 01 10	Yes	0.275	packaging containing residues of or contaminated by dangerous substances	R1	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Recyclefuel S.A.,D3200/61080/RGPED/2008/2/AP,Zoning Industriel d'Ehin,B-4480 Engis,.,.,Belgium	Zoning Industriel d'Ehin,B-4480 Engis,.,.,Belgium
To Other Countries	15 01 10	Yes	1.59	packaging containing residues of or contaminated by dangerous substances	R3	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Lindenschmidt KG Umweltservice,04 714 98089,Krombacher Strabe 42-46,57223,Kreutzal,.,Germany	Krombacher Strabe 42-46,57223,Kreutzal,.,Germany
Within the Country	15 01 10	Yes	0.158	packaging containing residues of or contaminated by dangerous substances	R4	M	Weighed	Offsite in Ireland	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Enva Ireland Ltd.,W0041-01,Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland

To Other Countries	15 02 02	Yes	0.091	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	R1	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Lindenschmidt KG Umweltservice,04 714 98089,Krombacher Strabe 42-46,57223,Kreutzal,.,Germany	Krombacher Strabe 42-46,57223,Kreutzal,.,Germany
Within the Country	16 05 04	Yes	0.036	gases in pressure containers (including halons) containing dangerous substances	R4	M	Weighed	Offsite in Ireland	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Enva Ireland Ltd.,184-1,Clonminam Ind. Est.,Portlaoise,Co. Loaise,-,Ireland	Clonminam Ind. Est.,Portlaoise,Co. Loaise,-,Ireland
To Other Countries	16 05 06	Yes	6.364	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	R1	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Lindenschmidt KG Umweltservice,04 714 98089,Krombacher Strabe 42-46,57223,Kreutzal,.,Germany	Krombacher Strabe 42-46,57223,Kreutzal,.,Germany
Within the Country	17 01 07	No	828.56	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	R5	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd.,W0082-2	Ballykeeffe Townland,Dock Road,Limerick,-,Ireland		
Within the Country	20 01 01	No	26.43	paper	R3	M	Weighed	Offsite in Ireland	National Document Management Group Ltd. t/a Shred-It,WFP-DC-09-0011-01	5 Parkwest Ind. Est.,-,Dublin,Dublin 12,Ireland		
Within the Country	20 01 01	No	0.0	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd.,W0082-2	Ballykeeffe Townland,Dock Road,Limerick,-,Ireland		
Within the Country	20 01 02	No	36.63	glass	R5	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd.,W0082-2	Ballykeeffe Townland,Dock Road,Limerick,-,Ireland		
Within the Country	20 01 21	Yes	0.641	fluorescent tubes and other mercury-containing waste	R5	M	Weighed	Offsite in Ireland	Irish Lamp Recycling Co. Ltd.,WFP-KE-14-0072-01	Woodstock Ind. Est.,Kilkenny Road,Athy Co. Kildare,.,Ireland	Irish Lamp Recycling Co. Ltd.,WFP-KE-14-0072-01,Woodstock Ind. Est.,Kilkenny Road,Athy Co. Kildare,.,Ireland	Woodstock Ind. Est.,Kilkenny Road,Athy Co. Kildare,.,Ireland
To Other Countries	20 01 25	No	19.424	edible oil and fat	R3	M	Weighed	Abroad	Bensons Products Ltd.,LN-53763	Oakfield Refinery MacDermott Road,Widnes,Cheshire,WA 8 OPF,United Kingdom		
To Other Countries	20 01 25	No	1.275	edible oil and fat	R1	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Lindenschmidt KG Umweltservice,04 714 98089,Krombacher Strabe 42-46,57223,Kreutzal,.,Germany	Krombacher Strabe 42-46,57223,Kreutzal,.,Germany
Within the Country	20 01 33	Yes	0.056	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries	R11	M	Weighed	Offsite in Ireland	Irish Lamp Recycling Co. Ltd.,WFP-KE-14-0072-01	Woodstock Ind. Est.,Kilkenny Road,Athy Co. Kildare,.,Ireland	Irish Lamp Recycling Co. Ltd.,WFP-KE-14-0072-01,Woodstock Ind. Est.,Kilkenny Road,Athy Co. Kildare,.,Ireland	Woodstock Ind. Est.,Kilkenny Road,Athy Co. Kildare,.,Ireland
Within the Country	20 01 35	Yes	4.126	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and and 20 01 23 containing hazardous components	R4	M	Weighed	Offsite in Ireland	Irish Lamp Recycling Co. Ltd.,WFP-KE-14-0072-01	Woodstock Ind. Est.,Kilkenny Road,Athy Co. Kildare,.,Ireland	Enva Ireland Ltd.,184-1,Clonminam Ind. Est.,Portlaoise,Co. Loaise,-,Ireland	Clonminam Ind. Est.,Portlaoise,Co. Loaise,-,Ireland
Within the Country	20 01 38	No	69.1	wood other than that mentioned in 20 01 37	R3	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd.,W0082-2	Ballykeeffe Townland,Dock Road,Limerick,-,Ireland		
Within the Country	20 01 40	No	981.472	metals	R4	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd.,W0082-2	Ballykeeffe Townland,Dock Road,Limerick,-,Ireland		
Within the Country	20 03 01	No	12.64	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd.,W0082-2	Ballykeeffe Townland,Dock Road,Limerick,-,Ireland		
Within the Country	20 03 01	No	598.894	mixed municipal waste	R1	M	Weighed	Offsite in Ireland	Greenstar Env. Services Ltd.,W0082-2	Ballykeeffe Townland,Dock Road,Limerick,-,Ireland		
Within the Country	20 01 25	No	14.86	edible oil and fat	R3	M	Weighed	Offsite in Ireland	McDonnell Farms Biogas Ltd.,WFP/LK/2011/50/R2/T1	Dunmoylan,Shanagolden,Co. Limerick,.,Ireland		

To Other Countries	07 01 04	Yes	0.437	other organic solvents, washing liquids and mother liquors	R2	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Lindenschmidt KG Umweltservice,04 714 98089,Krombacher Strabe 42-46,57223,Kreutzal,.,Germany	Krombacher Strabe 42-46,57223,Kreutzal,.,Germany
Within the Country	**20 01 25**	**No**	0.252	edible oil and fat	R9	M	Weighed	Offsite in Ireland	Enva Ireland Ltd.,184-1	Clonminam Ind. Est.,Portlaoise,Co. Laoise,-,Ireland		
To Other Countries	06 02 04	Yes	0.84	sodium and potassium hydroxide	R1	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Lindenschmidt KG Umweltservice,04 714 98089,Krombacher Strabe 42-46,57223,Kreutzal,.,Germany	Krombacher Strabe 42-46,57223,Kreutzal,.,Germany
Within the Country	06 02 04	Yes	0.978	sodium and potassium hydroxide	D9	M	Weighed	Offsite in Ireland	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Enva Ireland Ltd.,W0041-01,Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland
To Other Countries	06 02 05	Yes	1.604	other bases	R1	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Lindenschmidt KG Umweltservice,04 714 98089,Krombacher Strabe 42-46,57223,Kreutzal,.,Germany	Krombacher Strabe 42-46,57223,Kreutzal,.,Germany
Within the Country	06 02 05	Yes	0.607	other bases	D9	M	Weighed	Offsite in Ireland	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Enva Ireland Ltd.,W0041-01,Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland
To Other Countries	12 01 09	Yes	0.004	machining emulsions and solutions free of halogens	R1	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Lindenschmidt KG Umweltservice,04 714 98089,Krombacher Strabe 42-46,57223,Kreutzal,.,Germany	Krombacher Strabe 42-46,57223,Kreutzal,.,Germany
To Other Countries	13 02 08	Yes	0.025	other engine, gear and lubricating oils	R1	M	Weighed	Abroad	Enva Ireland Ltd.,W0041-01	Smithstown Ind. Est.,Shannon,Co. Clare,.,Ireland	Lindenschmidt KG Umweltservice,04 714 98089,Krombacher Strabe 42-46,57223,Kreutzal,.,Germany	Krombacher Strabe 42-46,57223,Kreutzal,.,Germany

* 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

AECOM
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30th March 2016

Brian Shiel,
Safety, Health & Environment Lead,
Wyeth Nutritionals Ireland Ltd.
Askeaton,
Co. Limerick

Dear Brian,

Summary of Changes made to Decommissioning Management Plan, March 2016.

This letter presents a summary of the updates made to the DMP report as part of the annual review of the DMP. The latest DMP was issued on 24th March 2016 entitled "Wyeth Nutritionals Ireland Limited - Decommissioning Management Plan (DMP) Review 2016" and was prepared by AECOM Infrastructure and Ireland Limited.

The DMP was updated in accordance with latest EPA Guidance and was carried out as part of compliance with Condition 10.2.2 of the sites IE licence.

"10.2.2 The plan shall be reviewed annually and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the written agreement of the Agency"

With regard to the changes that were made to the DMP the following outlines the main changes which were made:

- There has been no change to the licence status at the site since the previous revision of the DMP and the only operational change that occurred was the decommissioning of the Line 3 packaging line which was replaced with new equipment including a central depalletising unit. This will increase the overall site production output. In addition, a Sodium Hypochlorite above ground storage tank was also decommissioned. The DMP was updated to take account of these changes.

- The previous version of the DMP (dated September 2014) was submitted to the EPA by Wyeth in Q4 2014, however, AECOM understand that no formal approval of the Sep 2014 DMP was received from the EPA. Based on our experience of preparing DMPs for various other IE/IPC licensed sites in Ireland, and noting the clarifications/amendments requested on same from the EPA, AECOM have incorporated certain changes/updates to the Wyeth DMP which are considered necessary to obtain formal EPA approval of the DMP. These include:

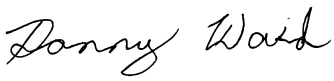
    - Updating the operational performance of the site to take account of any incidents, complaints and non-compliances since the previous DMP update;
    - A more detailed assessment of the types of waste which would be encountered during a closure scenario was undertaken and a more detailed breakdown of these wastes was also

provided. This has resulted in an overall increase in the amount of waste that will have to be disposed of during a close down scenario and the associated costs of disposal of same;
- The testing and validation of the sites drainage systems during the decommissioning phase which had not previously being included is now included as are the costs for same;
- There has been a slight increase in costs associated with documentation, certification, monitoring, validation and final audit of the closure process;
- A review of the number of staff involved in the decommissioning phase has resulted in a significant increase in the staff costs associated with the decommissioning phase;
- Costs have also been include for a testing programme associated with the decontamination of equipment at the site;
- The contingency applied in the preparation of the previous DMP was 15%. This has been increased to 20%.

- The net effect of the various changes outlined above is an overall increase in the amount of financial provisions required to fully implement the DMP from € 2,460,965 (September 2014 estimated provision required) to €3,565,681 (March 2016 estimated provision required).

I hope all the above is clear, if you require any clarification on the above please do not hesitate to contact me.

Yours sincerely



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Danny Ward
Principal Environmental Consultant

IED Licence Noise Control Plan 2015
Wyeth Nutritionals Ireland Ltd
Askeaton, Co. Limerick

June 2015

Report No. 454

Ossian Geraghty & Associates Ltd
Fawcetts Bridge, Dunally, Sligo
Ph: 085 801 8733
E-mail: ogeraghty@ossian-geraghty.com

IED Licence Noise Control Plan 2015

Wyeth Nutritionals Ireland Ltd

Askeaton, Co. Limerick

Executive Summary

Ossian Geraghty & Associates Ltd (OGA) was engaged by Brian Shiel from Wyeth Nutritionals Ireland Ltd to prepare a noise mitigation and control programme for their Limerick site, as required in IED licence, ref no. P0395-03, issued by the Environmental Protection Agency, (EPA).

The licence assigns a noise limit ($L_{eq,30min}$) of 55dB(A) by day and 45dB(A) by night at noise sensitive locations. In addition, there shall be no clearly audible tonal or impulsive noise component in the noise emission from the activity at noise sensitive locations.

The licensee must also prepare a noise mitigation and control programme to reduce noise emissions where applicable, in accordance with 6.14.2 of IED licence, ref no. P0395-03.

The survey consisted of the measurement of noise levels at noise sources throughout the site. The survey was undertaken on the 26th June 2015. The measurement of noise sources onsite was undertaken in conjunction with the annual IED Environmental Noise Survey 2015, OGA Report 437.

The primary aim of this noise mitigation and control programme is to identify any noise source onsite that contributes to excessive noise at the noise sensitive locations, in excess of the noise limits set out in IED licence, ref no. P0395-03.

Objectives

The objectives of this assessment were to:

- determine the noise emissions from the various external noise sources onsite;
- record the octave spectra of the identified noise sources;
- undertake an assessment of tonal and impulsive noise for each of the noise sources assessed; and
- identify noise sources where mitigation or noise control may be required.

The survey methodology followed the Environmental Protection Agency (EPA) Office of Environmental Enforcement (OEE)"Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities", NG4, (April 2012), and *ISO 1996 "Description and measurement of environmental noise"*.

The measurement duration at each item of plant was of a sufficient duration to measure the average noise level. A summary of noise terminology is given in Appendix A.

Noise measurements and reporting were undertaken by Ossian Geraghty BSc, MSc of Ossian Geraghty & Associates Ltd.

Findings

The average sound pressure levels were determined and octave spectra measured from noise sources across the Wyeth Nutritionals site.

An assessment of tonal and impulsive noise was undertaken subjectively for each of the noise sources assessed, and no tonal or impulsive noise sources were detected.

The site was fully compliant with the noise limits in IED Licence P0395-03 for 2015, at all noise sensitive locations, see report OGA Ref 437. On this basis no specific noise sources have been selected for mitigation and control for 2015.

It is recommended that an acoustic review be undertaken of any scheduled major equipment maintenance or upgrades of onsite noise sources.

Statement of Limitations

This report has been prepared in accordance with the agreement between Wyeth Nutritionals Ireland Ltd and Ossian Geraghty & Associates Ltd.

Within the limitations of the agreed upon scope of services, this work has been undertaken and performed in a professional manner, in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by members of its profession and consulting practice. No other warranty, expressed or implied, is made.

This report is solely for the use of Wyeth Nutritionals Ireland Ltd and any reliance on this report by third parties shall be at such party's sole risk and may not contain sufficient information for purposes of other parties or for other uses. This report shall only be presented in full and may not be used to support any other objective than those set out in the report, except where written approval with comments are provided by Ossian Geraghty & Associates Ltd.

IED Licence Noise Control Plan 2015

Wyeth Nutritionals Ireland Ltd

Askeaton, Co. Limerick

Table of Contents

1. Introduction

Ossian Geraghty & Associates Ltd (OGA) was engaged by Brian Shiel from Wyeth Nutritionals Ireland Ltd to prepare a noise mitigation and control programme for their Limerick site, as required in IED licence, ref no. P0395-03, issued by the Environmental Protection Agency, (EPA).

The licence assigns a noise limit ($L_{eq,30min}$) of 55dB(A) by day and 45dB(A) by night at noise sensitive locations. In addition, there shall be no clearly audible tonal or impulsive noise component in the noise emission from the activity at noise sensitive locations.

The licensee must also prepare a noise mitigation and control programme to reduce noise emissions where applicable, in accordance with 6.14.2 of IED licence, ref no. P0395-03.

The survey consisted of the measurement of noise levels at noise sources throughout the site. The survey was undertaken on the 26th June 2015. The measurement of noise sources onsite was undertaken in conjunction with the annual IED Environmental Noise Survey 2015, OGA Report 437.

The primary aim of this noise mitigation and control programme is to identify any noise source onsite that contributes to excessive noise at the noise sensitive locations, in excess of the noise limits set out in IED licence, ref no. P0395-03.

2. Objectives

The objectives of this assessment were to:

- determine the noise emissions from the various external noise sources onsite;
- record the octave spectra of the identified noise sources;
- undertake a subjective assessment of tonal and impulsive noise for each of the noise sources assessed; and
- identify noise sources where mitigation or noise control may be required.

3. Methodology

The survey methodology followed the Environmental Protection Agency (EPA) Office of Environmental Enforcement (OEE)"Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities", NG4, (April 2012), and *ISO 1996 "Description and measurement of environmental noise"*.

The measurement duration at each noise source was of a sufficient duration to measure the average noise level. A summary of noise terminology is given in Appendix A.

An assessment of tonal and impulsive noise was undertaken subjectively at each noise source.

Noise measurements and reporting were undertaken by Ossian Geraghty BSc, MSc of Ossian Geraghty & Associates Ltd.

3.1 Measurement Details and Conditions

The survey conditions and instrumentation used are detailed in Table 1. A Bruel & Kjaer 2250 Type 1 sound level meter was used, which measured broadband noise levels, and real time octave spectra. The sound level meter calibration was checked before and after measurement using a Bruel & Kjaer 4231 Calibrator. Calibration Certificates are presented in Appendix B.

Table 1. Survey Conditions and Instrumentation details.					
Survey conditions					
Survey period	Friday 26th June 2015				
Weather conditions	26/06/2015	Cloudy, sunny spells, moderate westerly wind, 3-5 m/s, Temperature 18°C - 21°C			
Measurement period	Average noise levels were measured at each unit of plant/equipment.				
Plant operating conditions	The plant was operating normally throughout survey.				
Survey personnel	Ossian Geraghty BSc, MSc, Ossian Geraghty & Associates Ltd.				
Instrumentation details					
Manufacturer	**Instrument**		**Calibrated by**	**Calibration Ref**	**Last Laboratory Calibration**
Bruel & Kjaer	SLM 2250, Serial No. 2506360, with 1/2" FF 0V Class 1 Microphone s/n: 2566383 - and UA-1650 90mm windshield		Gracey & Associates	2015-0501	June 2015
Bruel & Kjaer	Calibrator 4231 Serial No. 2445811		Gracey & Associates	2014-0205	December 2014

4. Review of Noise Complaints

There were seven complaints received between July 2014 and June 2015. In four of the cases an investigation found that the complaint was attributed to an abnormality that was quickly resolved through maintenance actions. In two complaints that were both received in February 2015 investigations were carried out but nothing was found outside of normal plant operations. No action was taken and there were no similar follow-on complaints. The most recent complaint that was received in June 2015 was investigated, nothing was found that could be attributed to above normal noise levels and no action was taken. When the complainant was contacted to inform them of the results of the investigation, they said that the noise had stopped.

5. Results

5.1 Sound Pressure Levels at Noise Sources

The average sound pressure levels were determined at noise sources throughout the site. Detailed noise measurement results are presented in Appendix C.

5.2 Tonal and Impulsive Analysis

The Annual Noise Survey of Noise Sensitive Locations (NSLs), undertaken on the May 25th and 26th 2015, did not detect any clearly audible tonal component in the noise at any of the measurement positions during daytime, evening or night-time measurements.

When undertaking the measurement of noise sources each of the noise source was assessed subjectively for tonal and impulsive noise. The measured noise levels were broadband in character at all the noise sources assessed. There were no clearly noticeable tones or impulsive sounds audible from noise sources at Wyeth Nutritionals Ireland Ltd. Measured noise octave spectra data is shown in Appendix C.

6. Discussion

The daytime, evening and night-time noise levels were compliant with the IED licence requirements for the site at all noise sensitive locations, OGA Report 437.

There was no clearly audible tonal or impulsive component in the noise at any of the noise sensitive locations positions, daytime, evening and night-time, OGA Report 437.

As no tonal or impulsive noise sources were detected at noise sensitive locations and the broadband noise is within IED Licence limits, no specific recommendations for noise reductions have been made.

A review of noise complaints was undertaken between July 2014 and July 2015 and did not indicate any on-going noise issue.

Any scheduled equipment upgrades or major maintenance work of site noise sources will undergo an acoustic review to determine the optimum noise control techniques.

7. Conclusion

The average sound pressure levels were determined and octave spectra measured from noise sources across the Wyeth Nutritionals site.

An assessment of tonal and impulsive noise was undertaken subjectively for each of the noise sources assessed, and no tonal or impulsive noise sources were detected.

The site was fully compliant with the noise limits in IED Licence P0395-03 for 2015, at all noise sensitive locations, see report OGA Ref 437. On this basis no specific noise sources have been selected for mitigation and control for 2015.

It is recommended that an acoustic review be undertaken of any scheduled major equipment maintenance or upgrades of onsite noise sources.

IED Licence Noise Control Plan 2015

Wyeth Nutritionals Ireland Ltd

Askeaton, Co. Limerick

Appendix A: Noise Terminology

Noise Terminology

dB(A)	a logarithmic noise scale, called the decibel. The "A" indicates that a frequency weighting has been applied to take account of the variation in the sensitivity of the human ear as a function of frequency.
L_{Aeq}	the average noise level during the measurement period. It includes all noise events. The L_{Aeq} value has been found to correlate well with human tolerance of noise, and is the value normally used in setting and monitoring industrial noise limits.
L_{A90}	the noise level exceeded for 90% of the time. It is generally taken as being representative of the steady background noise at a location. It tends to exclude short events such as cars passing, dogs barking, aircraft flyovers etc., and provides a good estimation of steady plant noise, when there is significant interference from other noise sources.
L_{A10}	the noise level exceeded for 10% of the time, and is a measure of the higher noise levels present in the ambient noise.
L_{Amax}	The highest noise level during a specified time period or during a specified number of events expressed as the absolute maximum level of the root-meansquare (r.m.s.) sound pressure level using time weighting 'F'.
L_{AS}, L_{AF}	the live displayed noise level, updated at 1 second intervals, measured with the instrument's response time set to standardised "Slow" or "Fast" response. The live meter reading provides survey personnel with corroborative data for determining the noise level due to a specific audible sound source. The highest value measured is termed LAmax, and the lowest level detected is termed L_{Amin}.
Total Noise	the overall noise level (L_{Aeq}), due to all noise noises (also termed ambient noise).
Specific Noise	a component of the total noise that can be quantified and attributed to a specific source.
Residual Noise	the noise level that would exist in the absence of the specific noise source
Noise Profile	noise level logged at short intervals (10 second intervals in this survey).

IED Licence Noise Control Plan 2015

Wyeth Nutritionals Ireland Ltd

Askeaton, Co. Limerick

Appendix B Certificates of Calibration

CERTIFICATE OF CALIBRATION

ISSUED BY	Gracey & Associates	BSI CERTIFICATE	FS 25913
DATE OF ISSUE	04 June 2015	CERTIFICATE NUMBER	2015-0501
DATE OF CALIBRATION	04 June 2015		
CALIBRATION INTERVAL	12 months		PAGE 1 OF 1

Gracey & Associates
Barn Court Shelton Road
Upper Dean PE28 0NQ
Tel: 01234 708835
Fax: 01234 252332
www.gracey.com

TEST ENGINEER
Jamie Bishop

APPROVING SIGNATORY
Greg Rice

Equipment **B&K 2250, s/n: 2506360**
Description Hand Held Analyser, Bruel & Kjaer UK Limited

Customer Gracey & Associates
Barn Court, Shelton Road, Upper Dean, PE28 0NQ

Standards
BS EN 60651 Class 1
BS EN 60804 Class 1

Conditions

Atmospheric Pressure	101.4 kPa
Temperature	21.3 °C
Relative Humidity	40.6 %

Calibration Reference Sources

Equipment	S/N	Last Cal	Equipment	S/N	Last Cal
Druck DPI 141	479	08-Nov-13	Vaisala HMP23	S2430007	30-Oct-13
HP 34401	3146A29376	07-Jul-14			

Notes

We certify that the above product was duly tested and found to be within the specification at the points measured (except where indicated). Measurements are traceable to UKAS reference sources from the UK National Physical Laboratory. Where no national or international standards exist, traceability is to standards maintained by the manufacturer. Our Quality Management System has been assessed to comply with BS EN ISO 9001:2008 - BSI Certificate number FS 25913. Tests were carried out in environmental conditions controlled to the extent appropriate to the instrument's specification. All relevant test certificates are available for inspection.
The uncertainties are for a confidence probability of not less than 95%.

CERTIFICATE OF CALIBRATION

ISSUED BY	Gracey & Associates	BSI CERTIFICATE	FS 25913
DATE OF ISSUE	04 June 2015	CERTIFICATE NUMBER	2015-0506
DATE OF CALIBRATION	04 June 2015		
CALIBRATION INTERVAL	12 months		PAGE 1 OF 2

Gracey & Associates
Barn Court Shelton Road
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Tel: 01234 708835
Fax: 01234 252332
www.gracey.com

TEST ENGINEER
Jamie Bishop

APPROVING SIGNATORY
Greg Rice

Equipment **B&K 4189, s/n: 2566383**
Description Microphone - 1/2" FF 0V, Bruel & Kjaer UK Limited

Customer Gracey & Associates
Barn Court, Shelton Road, Upper Dean, PE28 0NQ

Standards
BS EN 61672 Class 1

Conditions

Atmospheric Pressure	101.7 kPa
Temperature	20.5 °C
Relative Humidity	44.0 %

Calibration Data

Sensitivity -24.50 dB

Calibration Reference Sources

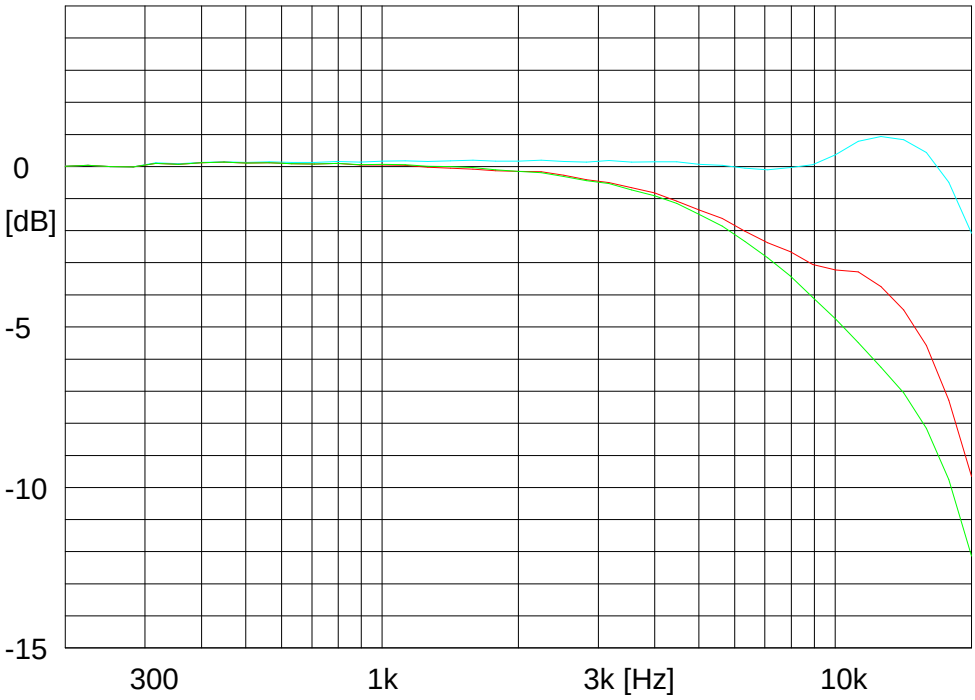
Equipment	S/N	Last Cal	Equipment	S/N	Last Cal
B&K 4134 L	1935995	12-Mar-15	Druck DPI 141	479	08-Nov-13
HP 34401	3146A16728	31-Oct-14	Nor 1253	22456	12-Mar-15
Stanford DS36	33213	24-Oct-13	Vaisala HMP23	S2430007	30-Oct-13

Notes

We certify that the above product was duly tested and found to be within the specification at the points measured (except where indicated). Measurements are traceable to UKAS reference sources from the UK National Physical Laboratory. Where no national or international standards exist, traceability is to standards maintained by the manufacturer. Our Quality Management System has been assessed to comply with BS EN ISO 9001:2008 - BSI Certificate number FS 25913. Tests were carried out in environmental conditions controlled to the extent appropriate to the instrument's specification. All relevant test certificates are available for inspection.

The uncertainties are for a confidence probability of not less than 95%.

Microphone Calibration Certificate



Bruel and Kjaer
Type: 4189

Serial no: 2566383

Sensitivity: 59.4 mV/Pa
-24.5 dB re. 1 V/Pa

Date: 04/06/2015

Signature:

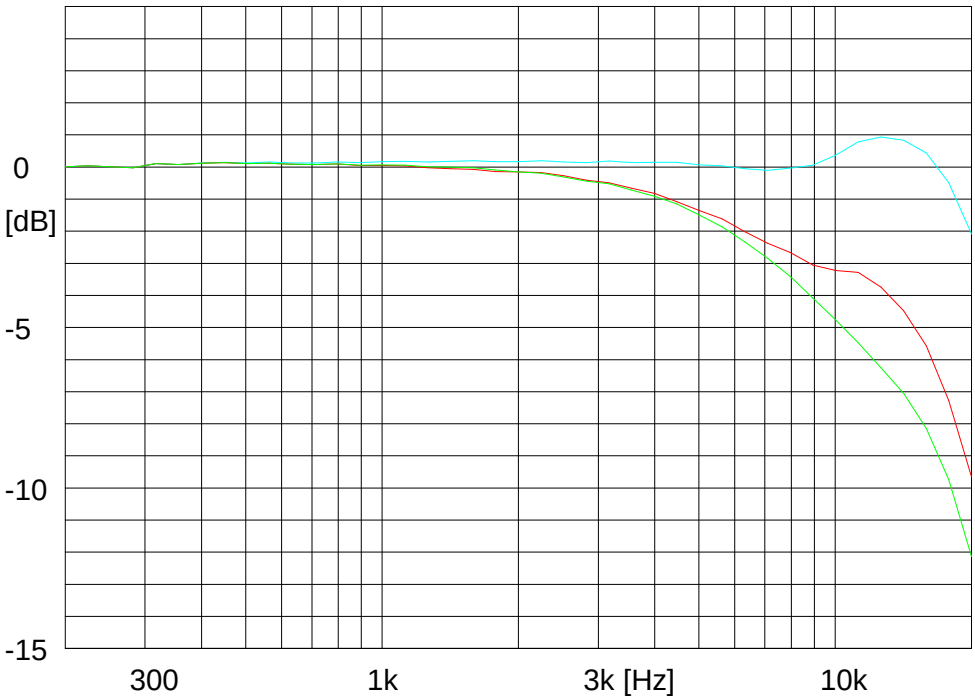
Measurement conditions:	
Polarisation voltage:	0.0 V
Pressure:	101.73 kPa
Temperature:	20.5 ℃
Relative humidity:	44.0 %RH

Results are normalised to the reference conditions.

Free field response
Diffuse field response
Pressure (Actuator) response

Gracey & Associates
www.gracey.com

Microphone Calibration Certificate



Bruel and Kjaer
Type: 4189

Serial no: 2566383

Sensitivity: 59.4 mV/Pa
-24.5 dB re. 1 V/Pa

Date: 04/06/2015

Signature:

Measurement conditions:	
Polarisation voltage:	0.0 V
Pressure:	101.73 kPa
Temperature:	20.5 ℃
Relative humidity:	44.0 %RH

Results are normalised to the reference conditions.

Free field response
Diffuse field response
Pressure (Actuator) response

Gracey & Associates
www.gracey.com

Comment:

CERTIFICATE OF CALIBRATION

ISSUED BY	Gracey & Associates	BSI CERTIFICATE	FS 25913
DATE OF ISSUE	08 December 2014	CERTIFICATE NUMBER	2014-1205
DATE OF CALIBRATION	04 December 2014		
CALIBRATION INTERVAL	12 months		PAGE 1 OF 2

Gracey & Associates
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Upper Dean PE28 0NQ
Tel: 01234 708835
Fax: 01234 252332
www.gracey.com

TEST ENGINEER
Jamie Bishop

APPROVING SIGNATORY
Greg Rice

Equipment **B&K 4231, s/n: 2445811**
Description Calibrator - Acoustic - Class 1, Bruel & Kjaer UK Limited

Customer Gracey & Associates
Barn Court, Shelton Road, Upper Dean, PE28 0NQ

Standards
BS EN 60942 Class 1

Conditions

Atmospheric Pressure	100.9 kPa
Temperature	22.1 °C
Relative Humidity	36.0 %

Calibration Data

Output Level	94.04 dB
Frequency	999.97 Hz

Calibration Reference Sources

Equipment	S/N	Last Cal	Equipment	S/N	Last Cal
B&K 4134 L	1935995	02-Jul-14	Druck DPI 141	479	08-Nov-13
HP 34401	3146A16728	31-Oct-14	Nor 1253	22456	02-Jul-14
Stanford DS36	33213	24-Oct-13	Vaisala HMP23	S2430007	30-Oct-13

Notes

We certify that the above product was duly tested and found to be within the specification at the points measured (except where indicated). Measurements are traceable to UKAS reference sources from the UK National Physical Laboratory. Where no national or international standards exist, traceability is to standards maintained by the manufacturer. Our Quality Management System has been assessed to comply with BS EN ISO 9001:2008 - BSI Certificate number FS 25913. Tests were carried out in environmental conditions controlled to the extent appropriate to the instrument's specification. All relevant test certificates are available for inspection.
The uncertainties are for a confidence probability of not less than 95%.

Sound Calibrator Certificate

Calibrator: Bruel and Kjaer 4231

Serial no: 2445811

Level: 94.04 dB
Frequency: 999.97 Hz

The stated level is valid at reference conditions.
Frequency stability: 0.00 %

Measured according to IEC 60942.
The stated level is relative to 20µPa.
All results quoted are directly traceable to the National Physical Laboratory, London with a calculated uncertainty less than 0.10 dB (2×sd).

Reference conditions:
Pressure: 101.325 kPa
Temperature: 23.0 ℃
Relative humidity: 50 %RH

Measurement conditions:
Pressure: 100.94 kPa
Temperature: 22.1 ℃
Relative humidity: 36 % RH

Date: 04/12/2014

Signature:

Sound Calibrator Certificate

Calibrator: Bruel and Kjaer 4231

Serial no: 2445811

Level: 94.04 dB
Frequency: 999.97 Hz

The stated level is valid at reference conditions.
Frequency stability: 0.00 %

Measured according to IEC 60942.
The stated level is relative to 20µPa.
All results quoted are directly traceable to the National Physical Laboratory, London with a calculated uncertainty less than 0.10 dB (2×sd).

Reference conditions:
Pressure: 101.325 kPa
Temperature: 23.0 ℃
Relative humidity: 50 %RH

Measurement conditions:
Pressure: 100.94 kPa
Temperature: 22.1 ℃
Relative humidity: 36 % RH

Date: 04/12/2014

Signature:

Comment:

IED Licence Noise Control Plan 2015

Wyeth Nutritionals Ireland Ltd

Askeaton, Co. Limerick

Appendix C: Detailed Noise Measurement Results

Table C.1 Detailed Noise Measurement Results, Wyeth Nutritionals Ireland Ltd, June 2015													
Source	**Sound Pressure Level db(A)**	**Reference Distance[1]**	**Octave bands Sound Pressure Levels (dB)**									**Impulsive or Tonal Qualities**	**Periods of Emission**
			32	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**		
Drier 5	82.8	5 Meters	88.6	91.8	94.1	87.1	80.1	71.0	63.3	52.7	43.0	None detected	Variable
Drier 4	90.6	5 Meters	100	95.9	94.9	95.5	90.5	79.0	67.9	57.6	52.9	None detected	Variable
[2]Drier 3	85.4	5 Meters	88.5	89.2	84.4	79.2	82.3	73.2	64.2	53.7	45.5	None detected	Variable
[2]Drier 1	98.1	2 Meters	95.1	94.7	99.5	98.1	99.1	91.1	79.8	69.6	57.2	None detected	Variable
Drier Tower 5 Vents	69.9	5 Meters	74.5	69.1	69.0	72.2	71.4	60.1	56.2	49.8	41.0	None detected	Variable
Vent at base of stairs to drier towers	68.1	5 Meters	68.3	69.7	67.4	64.6	66.9	61.6	61.4	56.9	52.1	None detected	Continuous
AHU 27	74.2	2 Meters	75.9	74.7	75.5	77.8	73.0	68.3	63.2	56.5	48.4	None detected	Continuous
AHU 26	74.4	1 Meter	76.3	76.5	86.9	75.1	71.0	67.9	64.2	51.2	48.8	None detected	Continuous
AHU 22	79.9	3 Meters	78.3	77.7	81.2	84.8	72.6	76.7	68.7	61.9	51.4	None detected	Continuous
AHU 21	73.0	3 Meters	74.7	73.1	79.6	73.8	68.1	67.6	64.6	59.7	56.7	None detected	Continuous
Can Plant NE Stack	77.4	1 Meter	78.3	75.7	77.6	76.2	78.3	70.5	66.4	61.6	60.2	None detected	Continuous
Can Plant SW Stack	73.2	1 Meter	75.7	75.7	77.0	74.4	70.6	69.9	64.3	59.5	55.5	None detected	Continuous

Continued on next page

Table C.1 Detailed Noise Measurement Results, Wyeth Nutritionals Ireland Ltd, June 2015													
Source	**Sound Pressure Level db(A)**	**Reference Distance[1]**	**Octave bands Sound Pressure Levels (dB)**									**Impulsive or Tonal Qualities**	**Periods of Emission**
			32	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**		
Continued from previous page													
Can Plant Tall Narrow Stack	79.2	1 Meters	76.9	76.8	77.0	76.4	77.5	74.7	71.3	64.5	61.3	None detected	Continuous
Beside AHU 19 Arrow style stack	99.5	3 Meters	75.0	74.4	75.4	80.4	84.3	83.8	97.2	90.2	84.0	None detected	Continuous
[2]AHU 18/19	85.8	0.5 Meters	83.4	81.1	83.1	89.1	82	80.9	76.8	71.3	64.3	None detected	Continuous
OHIO	80.3	5 Meters	95.0	80.5	86.1	79.4	78.9	75.1	71.4	63.0	54.4	None detected	Variable
Evaporator 5	91.3	1 Meter	87.2	96.3	94.1	89.5	90.4	85.7	82.3	76.9	70.5	None detected	Variable
Evaporator 4	86.8	1 Meter	79.1	79.1	84.8	87.4	84.7	80.8	78.3	73.1	67.7	None detected	Variable
Process 2 Cooler	79.8	1 Meter	75.9	80.2	78.8	76.0	74.6	73.5	73.0	71.4	69.5	None detected	Variable
[2]Evaporator 1 & 2	93.7	1 Meter	83.2	87.4	86.6	91.6	91.8	89.5	85.9	79	71.9	None detected	Variable
[2]Process 2X Evaporator	93.3	1 Meter	85.8	93.7	95.2	95.3	91.7	88.1	81.9	77.5	75.1	None detected	Variable
[2]Process 3 Evaporator	91.6	1 Meter	91.7	92.7	89.9	92.2	91.2	85.8	79.7	76.5	76.3	None detected	Variable
[2]SBU1 Recirculation Pump	76.5	1 Meter	65.2	67.7	70.2	76.2	71.2	70.3	72.2	65.3	59.5	None detected	Variable
Continued on next page													

Table C.1 Detailed Noise Measurement Results, Wyeth Nutritionals Ireland Ltd, June 2015

Source	Sound Pressure Level db(A)	Reference Distance[1]	Octave bands Sound Pressure Levels (dB)									Impulsive or Tonal Qualities	Periods of Emission
			32	63	125	250	500	1k	2k	4k	8k		
Continued from previous page													
[2]Evaporator 3	891.1	1 Meter	85.8	83.6	86.2	89.6	89.5	85.7	83.5	79	74.1	None detected	Variable
Cooling Tower 1	77.1	2 Meters	85.0	91.0	83.5	77.6	75.5	69.8	66.8	64.9	61.3	None detected	Variable
Cooling Tower 2	75.6	2 Meters	78.6	80.2	81.6	74.5	72.6	69.1	67.2	64.8	62.2	None detected	Variable
Cooling Tower 3	80.8	4 Meters	78.8	77.0	76.4	75.1	73.7	72.6	69.5	77.7	64.9	None detected	Variable
Boilerhouse Louvre Between CT2 & CT3	78.9	1 Meter	78.9	78.9	85.8	77.8	76.9	72.5	70.1	65.3	63.7	None detected	Variable
Steam Release Stack Boilerhouse Roof	83.6	1 Meter	81.2	76.5	75.7	71.6	72.5	76.2	79.8	74.8	70.6	None detected	Intermittent
Boiler house East Side Louvres	67.9	2 Meters	77.0	74.0	68.2	69.7	61.4	59.4	59.4	60.9	58.1	None detected	Intermittent
Boiler house East	67.8	10 Meters	74.0	70.3	69.7	67.8	65.2	61.5	59.6	57.3	52.2	None detected	Continuous
Boilerhouse West Side – 4 Pumps 3 on	78.6	0.5 Meters	76.8	73.8	76.2	76.2	77.3	72.7	69.3	69.6	60.4	None detected	Continuous
Boiler house west side, 7 pumps, 6 on	83.2	1 Meter	73.2	73.8	75.4	77.9	80.0	78.4	75.4	74.0	65.9	None detected	Continuous
CHP Plant East Side	75.3	5 Meters	80.3	79.2	73.8	71.7	67.0	72.6	64.7	65.9	64.4	None detected	Continuous

Continued on next page

Table C.1 Detailed Noise Measurement Results, Wyeth Nutritionals Ireland Ltd, June 2015													
Source	**Sound Pressure Level db(A)**	**Reference Distance[1]**	**Octave bands Sound Pressure Levels (dB)**									**Impulsive or Tonal Qualities**	**Periods of Emission**
			32	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**		
Continued from previous page													
CHP Plant West Side	69.5	5 Meters	76.9	77.1	70.0	69.3	64.7	64.8	60.0	59.6	58.7	None detected	Continuous
RTF Watermiser No 948 NE Corner	90.7	2 Meters	76.7	79.9	81.6	85.7	87.6	87.7	82.3	75.2	70.2	None detected	Variable
RTF Watermiser No 1140 NE Corner	93.0	1 Meter	78.0	89.7	90.4	89.2	92.8	87.8	82.0	78.4	77.0	None detected	Variable
RTF (Fans on wall East Side)	67.9	6 Meters	68.2	65.9	69.1	73.3	64.1	60.7	59.3	52.5	44.1	None detected	Continuous
Laboratory Stacks	77.2	1 Meter	77.4	78.2	76.2	73.5	73.8	71.4	71.0	64.2	57.6	None detected	Continuous
AHU16	87.7	1 Meter	84.1	88.2	87.5	83.2	82.5	82.3	78.1	77.2	82.3	None detected	Continuous
AHU9	72.8	1 Meter	73.2	74.4	73.1	68.2	75.7	62.5	58.0	55.6	47.5	None detected	Continuous
AHU10	69.6	1 Meter	73.2	76.5	74.1	71.9	65.7	62.5	60.5	59.7	58.4	None detected	Continuous
AHU15	72.2	1 Meter	74.4	77.7	74.6	70.5	69.3	67.1	64.5	61.3	52.2	None detected	Continuous
AHU14	71.1	1 Meter	74.3	75.8	71.3	68.3	66.1	66.8	65.0	56.6	44.9	None detected	Continuous
AHU13	79.8	1 Meter	79.9	80.4	80.1	80.6	76.6	76.7	69.2	61.4	56.9	None detected	Continuous
Continued on next page													

Table C.1 Detailed Noise Measurement Results, Wyeth Nutritionals Ireland Ltd, June 2015													
Source	**Sound Pressure Level db(A)**	**Reference Distance[1]**	**Octave bands Sound Pressure Levels (dB)**									**Impulsive or Tonal Qualities**	**Periods of Emission**
			32	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**		
Continued from previous page													
AHU17	76.3	1 Meter	75.2	75.6	74.0	72.1	71.4	71.4	67.8	66.6	68.5	None detected	Continuous
Extraction Stack East Side Canteen Building	81.6	1 Meter	77.7	77.7	85.3	82.0	79.0	77.6	70.8	66.7	59.1	None detected	Continuous
Treated Effluent Buffer Tank Pump RHS	77.1	1 Meter	70.0	71.0	64.2	67.2	68.9	73.2	71.8	64.9	58.7	None detected	Variable
Treated Effluent Buffer Tank Pump LHS	78.4	1 Meter	76.4	72.5	68.2	66.9	69.6	72.5	74.4	66.3	59.7	None detected	Variable
Raw Effluent Tank Pump SW Side	86.5	5 Meters	76.1	67.6	71.6	75.2	86.5	80.3	78.5	71.9	62.1	None detected	Continuous
Raw Effluent Tank Pump NW Side	75.3	1 Meter	77.3	67.9	65.0	67.2	70.8	70.9	68.6	65.7	60.2	None detected	Continuous
Raw Effluent Tank Pump NE Side	79.7	1 Meter	79.8	68.1	65.9	75.5	75.7	77.4	70.1	65.0	57.7	None detected	Continuous
SBR Tank 1 Recirc Pump 1	78.0	1 Meter	66.7	69.0	69.4	78.1	71.8	68.7	67.4	64.2	56.0	None detected	Variable
SBR Tank 1 Recirc Pump 2	76.1	1 Meter	66.2	70.2	67.5	75.0	71.3	69.8	69.4	67.2	57.5	None detected	Variable
WWTP Blower Pump 03-FN-213	82.2	1 Meter	74.1	74.0	79.4	80.5	78.2	78.3	72.8	70.0	64.2	None detected	Variable
WWTP Blower Pump 03-FN-215	76.7	1 Meter	67.2	72.5	74.4	78.5	72.9	70.5	67.3	64.9	59.9	None detected	Variable

Notes. [1]Distance between the measurement source and the microphone. [2]Source not operating at time of the survey, previous data reported, August 2014.

Table C.2 Noise Abatement, Wyeth Nutritionals Ireland Ltd, June 2015	
Source	**Noise Control/Abatement**
Drier 5	n/a
Drier 4	n/a
Drier 3	INVC's Quiet Fan Technology
Drier 1	n/a
Drier Tower 5 Vents	n/a
Vent at base of stairs to drier towers	n/a
AHU 27	n/a
AHU 26	n/a
AHU 22	n/a
AHU 21	n/a
Can Plant NE Stack	n/a
Can Plant SW Stack	n/a
Can Plant Tall Narrow Stack	n/a
Beside AHU 19 Arrow style stack	n/a
AHU 18/19	n/a
OHIO	n/a
Evaporator 5	Screening
Evaporator 4	Screening
Process 2 Cooler	Screening
Evaporator 1 & 2	Screening

Continued on next page

Table C.2 Noise Abatement, Wyeth Nutritionals Ireland Ltd, June 2015	
Source	**Noise Control/Abatement**
continued from previous page	
Process 2X Evaporator	Screening
Process 3 Evaporator	Screening
SBU1 Recirculation Pump	Screening
Evaporator 3	Screening
Cooling Tower 1	n/a
Cooling Tower 2	n/a
Cooling Tower 3	n/a
Boilerhouse Louvre Between CT2 & CT3	n/a
Steam Release Stack Boilerhouse Roof	n/a
Boiler house East Side Louvres	n/a
Boiler house East	n/a
Boilerhouse West Side – 4 Pumps 3 on	n/a
Boiler house west side, 7 pumps, 6 on	n/a
CHP Plant East Side	n/a
CHP Plant West Side	n/a
RTF Watermiser No 948 NE Corner	n/a
RTF Watermiser No 1140 NE Corner	n/a
RTF (Fans on wall East Side)	n/a
Laboratory Stacks	n/a
Continued on next page	

Table C.2 Noise Abatement, Wyeth Nutritionals Ireland Ltd, June 2015	
Source	**Noise Control/Abatement**
continued from previous page	
AHU16	n/a
AHU9	n/a
AHU10	n/a
AHU15	n/a
AHU14	n/a
AHU13	n/a
AHU17	n/a
Extraction Stack East Side Canteen Building	n/a
Treated Effluent Buffer Tank Pump RHS	n/a
Treated Effluent Buffer Tank Pump LHS	n/a
Raw Effluent Tank Pump SW Side	n/a
Raw Effluent Tank Pump NW Side	n/a
Raw Effluent Tank Pump NE Side	n/a
SBR Tank 1 Recirc Pump 1	n/a
SBR Tank 1 Recirc Pump 2	n/a
WWTP Blower Pump 03-FN-213	Acoustic Enclosure
WWTP Blower Pump 03-FN-215	Acoustic Enclosure

Note: All noise measurements were undertaken post abatement.

NOTES

Noise controls on existing equipment:

- Acoustic enclosures, mufflers on exhausts and insulated ducting on the blowers in the wastewater treatment plant.
- Screening at the cooling towers on the boiler house roof.
- Mufflers filled on the vacuum pump exhausts for lines 2, 3 and 4.
- An acoustic panel on the plant room wall for the intermediate hoppers.

  INVC's Quiet Fan Technology fitted to Drier 3 Exhaust Fan.