



The Environment Agency
- 5 SEP 2012
COTIX

This document has been cleared for submission to the Board by the Programme Manager, Frank Clinton
Signed: N. Kearey Date: 5/9/12

**OFFICE OF THE
COMMISSIONER FOR
CLIMATE, LICENSING &
RESOURCE USE**

**REPORT OF THE TECHNICAL COMMITTEE ON
OBJECTIONS TO LICENCE CONDITIONS**

TO:	Directors
FROM:	Technical Committee - Environmental Licensing Programme
DATE:	5 September 2012
RE:	Objection to Proposed Determination for: Pfizer Nutritionals Ireland Limited, Coolrahee, Askeaton, Co. Limerick, IPPC Reg. No.: P0395-03

Application Details	
Location of activity:	Coolrahee, Askeaton, Co. Limerick
Class(s) of activity:	7.2.2 The manufacture of dairy products where the processing capacity exceeds 50 million gallons of milk equivalent per year, not included in paragraph 7.2.1. and 2.1 The operation of combustion installations with a rated thermal input equal to or greater than 50 MW.
Section 87(1)(b) notice issued:	28 July 2011
Licence review form received:	03 November 2011
PD issued:	16 May 2012
First party objection received:	11 June 2012

Environmental Objectives Regulations Review

Reason for Licence Review

On the 28 July 2011, the Environmental Protection Agency initiated a review of the IPPC licence held by Pfizer Nutritionals Ireland Ltd for the installation located at Coolrahee, Askeaton, Co. Limerick, IPPC licence register number P0395-02.

The reasons for initiating the review are in light of the requirements under the following regulations:

- (1) The European Communities Environmental Objectives (Surface Waters) Regulations 2009.
- (2) The European Communities Environmental Objectives (Ground Water) Regulations 2010.

Company

The installation produces a range of Infant Nutritional products including canned powder baby food and liquid Ready-To- Feed formula in glass bottles and Tetra-Packs. The plant is located in a rural area outside the town of Askeaton. Process waste water and sanitary waste water are treated at the on-site waste water treatment plant, which discharges to the Deel Estuary (SH_060_0600).

Consideration of the Objection

The Technical Committee, comprising of Jennifer Cope (Chair) and Marie O'Connor, has considered all of the issues raised in the Objection and this report details the Committee's comments and recommendations following the examination of the objection together with discussions with the Inspector, Ann Marie Donlon, who also provided comments on the points raised.

This report considers the first party objection. No third party objections were received. The main issues raised in the objection are summarised below. However, the original objection should be referred to for greater detail and further expansion of particular points.

First Party Objection

The applicant makes nine points of objection.

A.1. Condition 3.8 – Silt Trap and Oil Separators

Condition 3.8 states:

Silt Traps and Oil Separators

The licensee shall, within six months of date of grant of this licence, install and maintain silt traps and oil separators at the installation:

- (i) Silt traps to ensure that all storm water discharges, other than from roofs, from the installation pass through a silt trap in advance of discharge;
- (ii) An oil separator on the storm water discharge from yard areas. The separator shall be a Class I full retention separator.

The silt traps and separator shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids).

The licensee states that the installation of silt traps and oil separators on all stormwater emissions is excessively onerous. The licensee states that they have seven stormwater emission points and installation of silt traps and oil separators would result in excessive cost and disruption to the site over a prolonged period. The licensee states that they would be technically difficult to install at some points and would not represent BAT. The licensee has identified that two emission points SW4 (the RTF loading and car park area) and SW 2 (the warehouse loading area) that could potentially contain oil.

The licensee does not believe that there is any reason to expect that silt or suspended solids will be present in significant amounts from any of the yards and request that the requirement to install a silt trap be removed.

The licensee suggests that the submission be amended as follows:

Condition 3.8

Oil separators

The licensee shall, within six months of date of grant of this licence, install and maintain oil separators at the installation prior to emission points SW2 and SW4. The separator shall be

Class 1 full retention separator and shall be in accordance with IS EN-858-22:2003 (separator systems for light liquids).

Technical Committee's Evaluation: The TC notes that the current licence, P0395-02, does not require the licensee to install and maintain silt traps and oil separators at the installation.

The TC recommends that some flexibility is provided in the condition to give the licensee the opportunity to determine whether silt traps are required at the installation, in order to eliminate any risk to the receiving waters from on-site activities. The TC also recommends that there is some flexibility provided in relation to the type of oil separator and the standard to which the silt traps and separator shall meet. The TC recommends that condition 3.8 be amended to include 'unless otherwise agreed with the Agency' as outlined below.

Recommendation: Amend Condition 3.8 as follows:

Silt Traps and Oil Separators

The licensee shall, within six months of date of grant of this licence, install and maintain silt traps and oil separators at the installation:

- (i) Silt traps to ensure that all storm water discharges, other than from roofs, from the installation pass through a silt trap in advance of discharge; **unless otherwise agreed with the Agency.**
- (ii) An oil separator on the storm water discharge from yard areas. The separator shall be a Class I full retention separator, **unless otherwise agreed with the Agency.**

The silt traps and separator shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids), **unless otherwise agreed with the Agency.**



A.2. Condition 4.5 – Noise

Condition 4.5 states:

Noise

Noise from the installation shall not give rise to sound pressure levels (Leq, T) measured at noise sensitive locations of the installation which exceed the limit value(s).

The licensee states that Condition 4.5 is not BAT for the installation. The licensee states that noise monitoring reports have demonstrated that we are compliant with the 45/55 dB(A) nighttime/daytime limits at noise sensitive locations. The licensee suggests the following:

Noise

Noise from the installation shall not give rise to sound pressure levels (Leq, T) measured at noise sensitive locations of the installation that exceed the limit value(s) by more than 2 dB(A).

Technical Committee's Evaluation: The TC notes that the current licence (P0395-02) does permit an excess of 2 dB(A) above the standard 55/45 dB(A) noise limits. However, the Inspector's report states that the Office of Environmental Enforcement (OEE) advised that noise is a significant aspect of the activity that has generated complaints. According to the Inspector's report, the OEE advised that there were 16

noise complaints recorded in 2010, 6 recorded in 2011 and 2 so far in 2012. As part of the review, there were three submissions from one individual relating to noise.

The Agency's *Guidance Note for Noise: Licence Applications, Surveys & Assessments in Relation to Scheduled Activities (NG4)* (April 2012) states that noise attributable solely to on-site activities, expressed as a free field value at any noise sensitive location, should not generally exceed a $L_{Ar, T}$ value of 55 dB by daytime, 50 dB $L_{Aeq, T}$ by evening and 45 dB $L_{Aeq, T}$ during night-time and does not provide a 2 dB(A) leeway. The Proposed Determination updates the noise limits and interpretation in line with BAT. The practice of permitting a 2 dB(A) tolerance has largely been discontinued in licences as it does not represent BAT and therefore was not included in the PD.

As the standard 55/45 dB(A) limits are considered BAT for the installation, the TC recommends no change to this condition.

Recommendation: No change

A.3. Condition 6.14.2 – Noise mitigation and control programme

Condition 6.14.2 states:

For noise sources, the licensee shall prepare a noise mitigation and control programme to reduce noise emissions. This programme must specify target noise levels for key equipment and highlight specific goals and a time scale, together with noise mitigation and control measures having regard to Agency guidelines 'Guidance Note for Noise in relation to Schedule Activities, 2nd Edition' (2006). The programme and a report on the implementation of this programme shall be submitted to the Agency as part of the AER.

The licensee requests that Condition 6.14.2 be deleted. The licensee states that while "complaints have been made to the EPA regarding noise emanating from our site we believe that the complaints are without foundation as we have carried out monitoring and found that our noise levels are in compliance with the licence and not tonal in nature." According to the licensee at no time has the EPA informed them that the installation is in non-compliance with their licence, therefore as a site which considers itself in compliance with licence limits the licensee believes that cost of implementing a source specific noise monitoring programme would be excessive.

Figure 6 in Section 8 of the recently published guidance from the EPA titled 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' specifies criteria under which such a Noise Mitigation and Control Programme would be deemed necessary.

The licensee strongly believes that a number of the suggested criteria for considering our facility 'high risk' have not been met, namely;

- *The installation has always complied with its licence limits, especially in relation to monitoring at NSLs.*
- *The installation noise is broadband in nature.*
- *The licensee has investigated the complaints and have not found any evidence to corroborate their claims.*

Technical Committee's Evaluation: The TC notes that according to the Inspector's report, the Office of Environmental Enforcement (OEE) advised that noise is a significant aspect of the activity that has generated complaints. According to the EPA *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Schedule Activities (NG4)* published April 2012, a noise management programme is required if 'there is a history of justifiable noise complaint'. The Inspector's report

states that the OEE advised that there were 16 noise complaints recorded in 2010, 6 recorded in 2011 and 2 so far in 2012. As part of the review, there were three submissions from one individual relating to noise.

The TC considers that due to the number of complaints received by the licensee and EPA it is appropriate to require the licensee to prepare a noise mitigation and control programme to reduce noise emissions. The TC recommends no change to Condition 6.14.2.

Recommendation: No change

A.4. Schedule B.2 Emissions to Water

Schedule B.2 Emissions to Water states:

Emission Point Reference No: SW1
Name of Receiving Waters: Deel estuary (SH_060_0600)
Location of discharge point: 133614E, 151496N

Volume to be emitted: Maximum in any one day: 2,800 m³
Maximum in any one hour: 126 m³

Parameter	Emission Limit Value	
	mg/l	kg/day
pH	6 - 9	
Toxicity	5 TU	
BOD	40	100
Suspended Solids	50	--
Total Nitrogen	15	--
Ammonia (as N)	10	--
Total Phosphorus (as P)	0.75	--
Oils, Fats and Greases	15	---

The licensee objects to the reduction in the total phosphorus emission limit value from 2.0 mg/l in their current licence to 0.75 mg/l in Schedule B.2 Emissions to Water of the Proposed Determination. The licensee states that they are consistently compliant with their current emission limit value of 2.0 mg/l for total phosphorus. However, according to the licensee if the proposed new limit applied, they would have exceeded the emission limit value six times in 2011 and 10 times in 2010. The licensee states that while their biological treatment plant performs very well, the limit of 0.75 mg/l for total phosphorus leaves no room for the natural variations in performance experienced in biological waste water treatment plants.

The licensee states that orthophosphate levels are on average < 25% of total phosphorus levels. The licensee states that assuming that all phosphorus was orthophosphate, EPA analysis as reported in the EPA Inspector's report confirms that there is no environmental impact.

The licensee states that the EPA Guidance Note in Best Available Techniques for the Dairy Processing Sector (2008) specifies concentration levels of between 2 and 5 mg/l for total phosphorus.

The licensee proposes an emission limit value of 1.5 mg/l for total phosphorus, which is lower than the suggested achievable levels set out in the BAT Guidance Note for the sector.

Technical Committee's Evaluation: The BAT Guidance Note on the Best Available Techniques for the Dairy Processing Sector (2008) sets out limit values for emissions to waters, expressed in terms of mg/l. The guidance note states that 2-5 mg/l for total phosphorus is achievable using BAT for waste water treatment. However, establishing emission limit values within a licence for direct discharges to surface water from a WWTP and storm water discharges must ensure that the quality of the receiving water is not impaired or that the current environmental quality standards are not exceeded. The TC notes that the emission limit value for total phosphorus in the current licence (P0395-02) is 2 mg/l.

According to the Inspector's report, the total phosphorus data provided indicates that total phosphorus levels are generally less than 0.75 mg/l. The proposed determination specifies an emission limit value of 0.75mg/l for total phosphorus. The Inspector's report states that "if the emission was all orthophosphate the environmental quality standard would be observed but orthophosphate is a component of total phosphorus, so the proposed ELV is conservative."

According to the licensee orthophosphate levels are on average <25% of total phosphorus levels. The TC considers that an emission limit value of 1.5 mg/l for total phosphorus as requested by the licensee would be appropriate to ensure compliance with the European Communities Environmental Objectives (Surface Water) Regulations, 2009.

The TC recommends that the emission limit value for total phosphorus be amended from 0.75mg/l to 1.5mg/l. The TC recommends that an emission limit value of 0.75mg/l for orthophosphate be specified in *Schedule B.2 Emissions to Water* to ensure the environmental quality standard of 0.060 mg/l for orthophosphate required in the European Communities Environmental Objectives (Surface Water) Regulations, 2009 would be achieved. The TC recommends that *Schedule B.2* is amended as below.

Recommendation: Amend <i>Schedule B.2 Emissions to Water</i> as follows:

Emission Point Reference No: SW1
Name of Receiving Waters: Deel estuary (SH_060_0600)
Location of discharge point: 133614E, 151496N
Volume to be emitted: Maximum in any one day: 2,800 m³
Maximum in any one hour: 126 m³

Parameter	Emission Limit Value	
pH	6 - 9	
Toxicity	5 TU	
	mg/1	kg/day
BOD	40	100
Suspended Solids	50	--
Total Nitrogen	15	--
Ammonia (as N)	10	--
Total Phosphorus	1.5	
Orthophosphate	0.75	--
Oils, Fats and Greases	15	---



A.5. Schedule C.2.3 Monitoring of Storm Water Emissions

Schedule C.2.3. Monitoring of Storm Water Emissions states:

Emission Point Reference No: SW2 (133469E, 151516N)
SW3 (133466E, 151656N)
SW4 (133658E, 151018N)
SW5 (133634E, 151090N)
SW6, SW7, SW9 (monitoring location to be agreed by the Agency) ^{Note 1}

Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Weekly	Standard method
BOD	Weekly	Standard method
Total Ammonia	Weekly	Standard method
Total Nitrogen	Weekly	Standard method
Visual Inspection	Daily	Sample and examine for colour and odour.

Note 1: Monitoring at emission point reference numbers SW6, SW7, SW9 shall commence within twelve months of the date of grant of this licence.

The licensee states that the requirement for daily inspections on all seven points, coupled with weekly grab sample analysis is excessive. As per Objection No.1 above, the licensee has identified that emission points SW2 and SW4 could potentially contain oil and are happy to continue to monitor these emissions points as per Schedule C.2.3.

The licensee proposes that the monitoring frequency for SW2, SW4 and SW5 remains as per Schedule C.2.3. However, the licensee requests that the frequency of visual inspections for emission points SW3, SW6, SW7 and SW9 be reduced from daily to weekly and grab analysis be reduced from weekly to monthly.

Technical Committee's Evaluation: The TC considers that weekly visual inspections and monthly monitoring of SW3, SW6, SW7 and SW9 for pH, BOD, total ammonia and total nitrogen is reasonable for storm water emissions. The TC recommends that the frequency of monitoring be amended from daily to weekly visual inspections for SW3, SW6, SW7 and SW9. The TC recommends that the frequency of monitoring be amended from weekly to monthly for SW3, SW6, SW7 and SW9 for pH, total ammonia and total nitrogen.

The TC notes that Condition 6.7 of the PD states that the frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the agreement of the Agency following evaluation of test results.

Recommendation: Amend C.2.3 Monitoring of Storm Water Emissions as follows:

Emission Point Reference No: SW2 (133469E, 151516N)
 SW4 (133658E, 151018N)
 SW5 (133634E, 151090N)

Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Weekly	Standard method
BOD	Weekly	Standard method
Total Ammonia	Weekly	Standard method
Total Nitrogen	Weekly	Standard method
Visual Inspection	Daily	Sample and examine for colour and odour.

Emission Point Reference No: SW3 (133466E, 151656N)
 SW6, SW7, SW9 (monitoring location to be agreed by the Agency) ^{Note 1}

Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Monthly	Standard method
BOD	Monthly	Standard method
Total Ammonia	Monthly	Standard method
Total Nitrogen	Monthly	Standard method
Visual Inspection	Weekly	Sample and examine for colour and odour.

Note 1: Monitoring at emission point reference numbers SW6, SW7, SW9 shall commence within twelve months of the date of grant of this licence.

A.6. Schedule C.6 Ambient Monitoring – Groundwater monitoring

Schedule C.6 states:

Emission Point Reference No's.: Bore-Holes BH101, BH201-204

Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Biannually	pH electrode/meter
COD	Biannually	Standard Method
Major Anions	Biannually	Standard Method
Major Cations	Biannually	Standard Method
Faecal coliforms	Biannually	Standard Method
Total coliforms	Biannually	Standard Method

The licensee requests that the requirement to monitor for faecal coliforms and total coliforms be removed from Schedule C.6. The licensee states that in the past coliforms have been found in groundwater, however this has been attributed to coliforms present in the estuary. The licensee states they have no control over groundwater intrusion from the estuary. The licensee submitted a Ground Water Assessment Report, dated 03 May 2012 carried out by URS Ireland Ltd in support of their objection.

Technical Committee's Evaluation: The TC notes that no aspect of the activity gives rise to point or diffuse source pollutant input to groundwater. The Inspector's report states that the Office of Environmental Enforcement have advised that bacteriological contamination was detected in the wells, but they are satisfied that contamination is from an off-site source associated with the nearby municipal waste water treatment plant (WWTP) (Reg. No. D0315-01) and tidal influences. The Ground Water Assessment Report submitted in support of this objection concludes that historical data indicated a negative impact on the groundwater quality at well BH202 adjacent to the River Deel, in terms of bacteriological quality, is due to the Limerick County Council WWTP. Based on the above the TC recommends that the requirement to monitor groundwater in *Schedule C.6* for faecal coliforms and total coliforms be removed.

Recommendation: Amend *Schedule C.6* as follows:

Schedule C.6 states:

Emission Point Reference No's.: Bore-Holes BH101, BH201-204

Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Biannually	pH electrode/meter
COD	Biannually	Standard Method
Major Anions	Biannually	Standard Method
Major Cations	Biannually	Standard Method

A.7. Condition 3.4 – Retention of samples

Condition 3.4 states:

In the case of composite sampling of aqueous emissions from the operation of the installation, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) shall be refrigerated immediately after collection and retained as required for EPA use.

The licensee requests clarification on how long the sample should be retained. The licensee requests that a sample be retained for no more than a 24 hour period.

Technical Committee's Evaluation: The purpose of this condition is to ensure that a correctly stored composite sample is available for EPA staff at all times. As each composite sample is taken over 24 hours, the samples should be retained for at least 24 hours, after which the sample will be replaced by the composite sample for the subsequent 24 hour sampling period. Where an incident has occurred or in the event of a non-compliance, the licensee may be required to retain the sample for longer. In such circumstances, the retention time should be clarified with the Office of Environmental Enforcement Inspector. The TC recommends no change to this condition.

Recommendation: No change.



A.8. Condition 3.10 – Catchment Collection system

Condition 3.10 states:

The provision of a catchment system to collect any leaks from flanges and valves of all over-ground pipes used to transport material other than water shall be examined. This shall be incorporated into a Schedule of Environmental Objectives and Targets set out in Condition 2 of this licence for the reduction in fugitive emissions.

The licensee states requests that this condition be deleted. The licensee states that there are already sufficient controls in place to protect against spills and leaks at the site such as visual inspections of surface water lines and bunding. The licensee states that all high risk areas drain to the onsite waste water treatment plant.

Technical Committee's Evaluation: Condition 3.10 is intended to prevent adverse environmental impact from materials transported on site. The condition requires the licensee to examine the requirement for the provision of a catchment system to collect leaks from flanges and valves of all over-ground pipes used to transport material other than water. The Schedule of Environmental Objectives and Targets, provides for a review of all operations and processes. It is appropriate to include the examination for the requirement of a catchment system in the Schedule.

If, as the licensee states, there are sufficient controls in place to protect against spills and leaks and all high risk areas drain to the on-site waste water treatment plant, then the requirement of the catchment system has been largely met. However, the licensee is required to examine on-site arrangements for a catchment system and incorporate it into the Schedule of Objectives and Targets. The TC recommends no change to this condition.

Recommendation: No change



A.9. Condition 6.10 – Drainage system

Condition 6.10 states:

The drainage system (i.e., gullies, manholes, any visible drainage conduits and such other aspects as may be agreed) and bunds, silt traps and oil separators shall be inspected weekly and desludged as necessary. All sludge and drainage from these operations shall be collected for safe disposal. The drainage system, bunds, silt traps and oil interceptors shall be properly maintained at all times.

The licensee requests that this condition be replaced with the following:

"The drainage system, bunds, silt traps and oil interceptors shall be properly maintained at all times."

The licensee considers that this requirement is not BAT for the installation as all surface water will be inspected on at least a weekly basis. According to the licensee this requirement seems excessive given the nature of their operations and the low level of contaminants that would reach the surface water system.

Technical Committee's Evaluation: This is a standard condition in IPPC licences, intended to provide a check on drainage infrastructure to ensure that it is maintained in good condition. It is not intended to be an exhaustive examination, and as such, only those parts of the drainage system which are readily visible are required to be inspected. The condition provides examples of parts of the drainage system that should be considered in the weekly inspection programme. It is for the licensee to ensure the drainage system is inspected and properly maintained at all times. The TC considers that the wording of the condition provides the flexibility for the licensee to decide how the drainage system is to be monitored to ensure it is properly maintained at all times. In addition, Condition 6.7 provides for the frequency of monitoring to be reduced with the agreement of the Agency, based on evaluation of results.

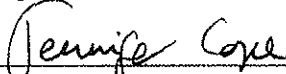
Recommendation: No change

Overall Recommendation

It is recommended that the Board of the Agency grant a licence to the licensee

- (i) for the reasons outlined in the proposed determination and
- (ii) subject to the conditions and reasons for same in the Proposed Determination, and
- (iii) subject to the amendments proposed in this report.

Signed



Jennifer Cope

for and on behalf of the Technical Committee

