This report has been cleared for submission to Board by the Programme Manager Frank Clinton.
Signed: Date: 16/4/12

Environmental Protection Agency

OFFICE OF CLIMATE, LICENSING & RESOURCE USE

REPORT OF THE TECHNICAL COMMITTEE ON OBJECTIONS TO LICENCE CONDITIONS

TO:	Directors	
FROM:	Technical Committee	**- Environmental Licensing Programme**
DATE:	13 April 2012	
RE:	Objection to Proposed Determination for: Anglo Beef Processors, Ireland t/a ABP, Waterford Reg: P0205-02	

Application Details	
Location of activity:	Christendom, Ferrybank, Waterford
Class(s) of activity:	7.4.1 The operation of slaughterhouses with a carcass production capacity greater than 50 tonnes per day.
Section 87(1)(b) notice issued:	28 July 2011
Licence review form received:	3 October 2011
Section 90(7) notice issued:	23 November 2011
Information under Section 90(7) received:	21 December 2011
PD issued:	31 January 2012
First party objection received:	27 February 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 Anglo Beef Processors, Ireland t/a ABP Waterford for the installation located at Christendom, Ferrybank, Waterford, Co. Waterford, IPPC licence register number P0205-01.

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

Anglo Beef Processors Ireland trading as ABP Waterford carries out the slaughter, boning, cold storage and freezing of cattle and fresh fat rendering at its installation in Christendom, Ferrybank, Waterford. The installation has the capacity to slaughter 1000 cattle/day. Process and sanitary effluent are treated at the on-site waste water treatment plant (WWTP). The process effluent discharges to the Middle Suir Estuary.

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 Objections and this report details the Committee's comments and recommendations following the examination of the objections together with discussions with the Inspector, Ann Marie Donlon, who also provided comments on the points raised. The Technical Committee consulted with Agency Senior Inspector Patrick Byrne.

This report considers the first party objection. No third party objections were received. The main issues raised in the objections 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 twenty three points of objection.

A.1. Introduction

The introduction states:

> The waste water treatment plant comprises of preliminary (dissolved air flotation (DAF), balancing, screening)...

The licensee objects to the order in which the stages of screening are listed and requests that the licence be amended in accordance with the schematic submitted with the licence review which lists them as "Screening, DAF and Balancing"

> Technical Committee's Evaluation: The TC recommends that the introduction is amended to reflect the schematic diagram of the waste water treatment plant.

Recommendation: For the purposes of clarity the sixth sentence in the third paragraph of the introduction should be amended to read as follows:

The waste water treatment plant comprises of preliminary (**screening, dissolved air flotation (DAF), and balancing)...**

A.2. Condition 2.2.2.8 –Maintenance Programme

Condition 2.2.2.8 states

> The licensee shall establish and maintain a programme for maintenance of all plant and equipment based on the instructions issued by the manufacturer/supplier or installer of the equipment. Appropriate record keeping and diagnostic testing shall support this maintenance programme. The licensee shall clearly allocate responsibility for the planning, management and execution of all aspects of this programme to appropriate personnel (see Condition 2.1 above).

The licensee objects to the inclusion of "all plant and equipment" in this condition and requests that the condition is only applicable to plant and equipment used for the control and abatement of emissions from the installation. The licensee states processing plant is excluded from IPPC Conditions under Section 86(1)(a)(v) of the Protection of Environment

Act 2003. The licensee requests that only "*plant and equipment used for the control and abatement of emissions*" be subject to this constraint.

The licensee also states that while much of this Maintenance Programme is already being carried out it requires another 6 months in order to become fully compliant with the proposed licence conditions.

Technical Committee's Evaluation: This is a standard condition in IPPC licences and provides for the control of on-site processes for the protection of the environment. Condition 2.2.2.8 is considered a preventative measure to minimise and control emissions from the installation. Also Section 83(5)(a)(iii) of the Environmental Protection Acts 1992 to 2011 requires that the Agency shall not grant a licence unless it is satisfied that '*any emissions from the activity or any premises, plant, methods, processes, operating procedures or other factors which affect such emissions will comply with, or will not result in the contravention of, any relevant standard...'*. The Technical Committee (TC) considered the wording of the condition with regard to both Section 83(5)(a)(iii) and Section 86(1)(a)(v) of the EPA Acts 1992-2011.

The maintenance programme for the installation is considered important as any plant and equipment which is not properly maintained could cause an increase in an emission. The maintenance programme is considered a general programme and does not have to be specific to every piece of plant and equipment. The condition requires the licensee to 'establish' a maintenance programme and it does not expect the maintenance programme to be fully established upon the date of grant of the licence. The TC recommends that this condition should remain unchanged.

Recommendation: No change.

A.3. Condition 2.2.2.9 – Efficient Process Control

Condition 2.2.2.9 states:

The licensee shall establish and maintain a programme to ensure there is adequate control of processes under all modes of operation. The programme shall identify the key indicator parameters for process control performance, as well as identifying methods for measuring and controlling these parameters. Abnormal process operating conditions shall be documented, and analysed to identify any necessary corrective action.

The licensee states that the purpose of the IPPC licence is to control all emissions to the environment and not how operations are carried out. The licensee states that this is not within the remit of the licence or regulated by the Environmental Objectives (Surface Water) Regulations 2009. The licensee objects to this condition and requests that it be deleted.

Technical Committee's Evaluation: This is a standard condition in IPPC licences and provides for the control of on-site processes for the protection of the environment. Condition 2.2.2.9 (Efficient Process Control) is considered necessary to control emissions from the installation. Also Section 83(5)(a)(iii) of the Environmental Protection Acts 1992 to 2011 requires that the Agency shall not grant a licence unless it is satisfied that '*any emissions from the activity or any premises, plant, methods, processes, operating procedures or other factors which affect such emissions will comply with, or will not result in the contravention of, any relevant standard..'*.

According to the Reference Document on Best Available Techniques in the Slaughterhouses and Animal By-products Industries (May 2005) "*it is important to have systems in place to ensure that procedures are known, understood and complied with, therefore effective environmental management includes 'efficient process*

control'". In line with the BREF document for the sector 'efficient process control' is considered a necessary element of an environmental management system. The TC recommends that this condition should remain unchanged.

Recommendation: No change

A.4. Condition 3.6.1 – Bunded Storage Areas

Condition 3.6.1 states:

> All tank, container and drum storage areas shall be rendered impervious to the materials stored therein. Bunds shall be designed having regard to Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2004).

The licensee states that future installations of bunds will be designed according to Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2004), however, it is not possible to retrofit existing bunds in compliance with this condition.

Technical Committee's Evaluation: The first sentence of this condition is in the licensee's current licence P0205-01 (Condition 9.3.1). Condition 3.6.1 is a standard condition which is used in IPPC licences to control the storage of potentially polluting substances, in order to ensure adequate protection of surface water and groundwater. The TC has examined the Agency's guidance note on 'Storage and Transfer of Materials for Scheduled Activities' (2004), which states that for all installations it is necessary to complete a risk assessment to determine the risk of pollution associated with an installation. The licensee is required to demonstrate that the existing containment measures are adequate. The guidance note states that for existing installations, a risk assessment should be completed according to the criteria in Section 5.2 and '*based on the outcome of the risk assessment and agreement with the site {OEE} inspector a bunding philosophy for the installation can be agreed.*' The technologies identified in the guidance note, unless otherwise specifically stated, are regarded as representing BAT for new activities. It is envisaged that existing facilities will progress toward attainment of the specific requirements and associated timeframes will be identified on a case by case basis. For instance, many organisational measures identified in the guidance document, such as testing of storage tanks and piping systems can be implemented equally for both new and existing installations.

Recommendation: No change

A.5. Condition 3.12 – Heavy Fuel Oil

Condition 3.12 states:

> All boilers on-site shall be operated using heavy fuel oil. The licensee shall incorporate into a Schedule of Environmental Objectives and Targets set out in Condition 2 of this licence the feasibility of using an alternative to HFO as a fuel for the boiler(s).

The use of natural gas and diesel operated steam raising boilers has been approved by the Agency (Letter ref:P0205-01/ap36ma.docx). The licensee states that a new boiler house was constructed with two new boilers, which can operate on Heavy Fuel Oil/diesel and natural gas. The licensee states that currently the boilers operate on natural gas. The licensee requests that this condition be deleted.

Technical Committee's Evaluation: The TC notes that the replacement of heavy fuel oil with natural gas where possible is considered BAT for the slaughtering sector in accordance with the BAT Guidance Note on Best Available Techniques for the Slaughtering Sector (EPA, 2008). The TC notes that the boilers currently operate on

natural gas, based on the licensee's objection. The TC recommends that Condition 3.12 is replaced with the recommended condition which requires the licensee to use natural gas in the boilers on-site and an alternative fuel such as heavy fuel oil or diesel may be used with the prior agreement of the Agency.

Recommendation: Amend Condition 3.12 to read as follows:
Natural gas shall be used in the boilers on site. An alternative fuel may be used with the prior written agreement of the Agency.

A.6. Condition 3.13 - Storage and Transfer of Organic Waste/Organic Fertiliser

Condition 3.13 states:

The licensee shall provide a minimum of 16 weeks storage of organic waste/organic fertiliser on-site or at storage locations as agreed by the Agency. The licensee may provide less than 16 weeks storage if the licensee has a contract for the transfer of organic waste/organic fertiliser to a person authorised or exempted under and in accordance with the Waste Management Acts 1996 to 2011 or the Environmental Protection Agency Acts 1992 to 2011 to undertake the collection and recovery of the organic waste/organic fertiliser.

1) *According to the licensee all organic fertilisers (including paunch and WWTP sludge) are not stored on-site. The licensee states that the facility in use has adequate off-site storage facilities for 16 weeks in accordance with the condition. The licensee submitted a legal opinion from A & L Goodbody to support their objection. The legal opinion concludes that*
   a) *"lairage manure and paunch are excluded from the requirements of the Waste Management Acts by virtue of Section 3, as amended,*
   b) *WWTP sludge fulfils the criteria set out in Article 25 {Article 27} of the 2011 Waste Management Regulations, and as such is a by-product , not a waste,*
   c) *As none of the materials are regulated by the Waste Management Acts, and as a consequence do not come within the scope of the Waste Management Facility Permit Regulations, no waste collection permit, facility permit or certificate of registration is required for their transport, storage or use,*
   d) *As manure and paunch fall within the ambit of the Animal By-Products Regulation, hauliers should be registered to carry animal by-products."*

   The licensee states that "it is the company's legal opinion and advice that the Waste Management Regulations and corresponding legislation confirms that organic materials produced at meat processing premises such as lairage (livestock) manure, paunch (digestive tract content), waste water treatment plant (WWTP) sludge are organic fertilisers and should be treated as such rather than as a waste. The licensee states that lairage manure, paunch and waste water treatment plant sludge are included in the definition of 'organic fertiliser' and 'fertiliser' in S.I. No. 610 of 2010, European Communities (Good Agricultural Practice for Protection of Waters) Regulations {Nitrates Regulations}. According to the licensee, materials are managed as fertiliser and supplied as lawful fertiliser to others for their use and benefit to enhance growth on land. The licensee states that all of these organic products should not be considered or regarded as 'waste'. The licensee states that Section 4(1) of the European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) defines waste as 'any substance or object which the holder discards or intends or is required to discard.'

The licensee states that Article 9 of the Animal By-Products Regulations (EC/1069/2009) classifies 'manure' and 'digestive tract content' as Category 2 animal by-products and Article 13 authorises the application of manure and digestive tract content to land. According to the licensee, the Nitrates Regulations apply to the use of all fertilisers, including manure, digestive tract content and sludge, on farmlands and sets statutory standards, limits and prohibitions in relation to use, which are binding on the users of fertilisers. According to the licensee, the transfer and use of the above organic fertilisers are not subject to the control of waste legislation and are not a licensable activity under the IPPC licensing system. The licensee accepts that storage capacity for 16 weeks production of organic fertiliser is required, but maintains that much of it may be provided outside the installation in a manner that complies with the Nitrates Regulations. The licensee states that they can only be responsible for the storage locations within the installation. According to the licensee, contracts in relation to storage capacity located on independent customers' holdings to satisfy the 16 weeks storage capacity for organic fertilisers generated on-site are available at the installation. The licensee states that organic fertilisers transferred to the owners/occupiers of such storage becomes the property of those persons.

2) *The licensee believes that the following requirements should be removed from their industry's IPPC licences:*
   a) *To carry out soil sampling on land that belongs to the users of the organic fertilisers we supply.*
   b) *To complete Nutrient Management Plans for the land that belongs to the users of the organic fertilisers we supply.*
   c) *To provide 16 week storage at our installations or to be responsible for storage facilities on land that belongs to the users of the organic fertilisers we supply.*
   d) *To only allow users with a Waste Collection Permit to transfer the organic fertilisers from our installations.*
   e) *To only allow storage facilities with a Certificate of Registration to store the organic fertilisers we produce.*
3) *The licensee states that Condition 8.1 is more than adequate to meet the requirements of this condition.*

The licensee suggests that a separate section be detailed with the title "Fertilisers" to remove ambiguity and clarify the characterisation of these materials.

Technical Committee's Evaluation:

1) The TC notes that the Waste Management Acts 1996 to 2011 do not apply to faecal matter (Section 3(1)(g)) and does not apply to animal by-products to the extent that they are covered by the Animal by-products Regulations ((EC) No. 1069/2009) (Section 3(2)(b)). However, the TC notes that waste water treatment plant (WWTP) sludge is considered a waste and is not excluded under article 3(1) or 3(2) of the Waste Management Acts 1996 to 2011. On this basis the term 'organic waste/organic fertiliser' is used throughout the licence. The TC notes that the objector states that the waste water treatment plant sludge fulfils the criteria of Article 25 of the Waste Management Regulations 2011, in that waste water treatment plant sludge is a by-product, not a waste. The TC believes reference to Article 25 is an error, the TC notes that there is, however, provision under Article 27 of the European Communities (Waste Directive)

Regulations 2011 for the licensee to classify a material as a by-product rather than a waste. The licensee (economic operator) must notify the Agency of the decision and grounds for the decision that a substance or object (material) is to be regarded as a by-product. The TC acknowledges that the definition of 'organic fertiliser' in the Nitrates Regulations (S.I. No. 610 of 2010) includes industrial by-products and sludges. However, waste water treatment plant sludge is still considered to be a waste unless declared otherwise. The TC notes that ABP have notified the Agency (OEE) that they have classified WWTP sludge as a by-product, under Article 27 of the European Communities (Waste Directive) Regulations 2011. OEE are currently assessing the notification.

The TC notes that the licensee has no use for the organic waste/organic fertiliser generated on-site, which includes waste such as WWTP sludge, within the installation boundary. Organic fertiliser has the potential to be a waste if not managed appropriately. The PD identifies what is considered necessary for the appropriate management of the organic waste/organic fertiliser, including WWTP sludge, e.g., storage, maintenance of records and identification of lands on which it may be used as a fertiliser and preparation of a Nutrient Management Plan (NMP). If the management of organic waste/organic fertiliser, on-site or its transfer off-site is not in accordance with the licence, it may not be considered a fertiliser.

The licensee is required to satisfy the Agency that adequate storage capacity is available for the organic waste/organic fertiliser generated, the storage may be provided on-site or at storage locations off-site. The TC considers that it is necessary for the licensee to maintain such information on-site for inspection as the licensee has no use within the installation boundary for the organic waste/organic fertiliser generated on-site. The licensee has confirmed that they do not have adequate storage on-site for 16 weeks in accordance with Condition 3.13. Condition 3.13 allows the Agency to be satisfied on an on-going basis that organic waste/organic fertiliser is being managed and stored appropriately and is unlikely to cause significant environmental pollution.

The TC considers that the condition as worded, effectively allows the licensee to have less than 16 weeks on-site storage capacity as the condition includes the clause **'or at storage locations as agreed by the Agency'.** The TC understands that alternative off-site storage facilities could provide some of the required organic waste/organic fertiliser storage capacity where the licensee provides evidence to the Agency of a contract providing exclusive access to adequate alternative storage capacity outside the installation.

The TC recommends that the licensee be required to maintain details of storage capacity available for organic waste/organic fertiliser on-site for inspection by authorised persons.

2) (a) Soil Sampling and (b) Nutrient Management Plan
The licence requires the licensee to demonstrate by means of a NMP (which may be based on Nitrogen and Phosphorus Statements issued by the Department of Agriculture, Food and the Marine) that there are adequate lands available for use of the organic waste/organic fertiliser arising at the installation.

The licence, by means of *Schedule C.6 Land used for Landspreading,* specifies requirements in relation to soil sampling, for example frequency and analysis methods. However, the licensee can avoid the requirement to soil sample the lands on which organic waste/organic fertiliser may be used by the preparation of the required Nutrient Management Plans (8.13.1(v)) based on Nitrogen and Phosphorus Statements issued by the Department of Agriculture, Food and the Marine or by assuming a soil phosphorus index of 3.

Schedule C.6 relates to lands on which organic waste/organic fertiliser from the installation may be used/recovered as fertiliser. The NMP demonstrates that there are adequate lands available for use/recovery of the organic waste/organic fertiliser arising at the installation. The EPA Acts have not in any way been superseded or amended by other national regulations such as those relating to the use of organic waste/organic fertiliser (European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010). Condition 8.13, and specifically Conditions 8.13.4 & 8.13.5, as well as *Schedule C.6* of the PD, are included in the licence for the purposes of satisfying the Agency that the licensee has, on an annual basis, been able to identify adequate suitable lands that may be used for the use of the organic waste/organic fertiliser. Thus, the Agency can be satisfied on an on-going basis that organic waste/organic fertiliser is unlikely to cause significant environmental pollution.

Condition 8.13.4 of the PD requires soil monitoring to be undertaken in accordance with *Schedule C.6: Ambient Monitoring, Land Used for Landspreading.* The TC recommends that *Schedule C.6* be amended as per Schedule 1 of S.I. No. 610 of 2010, whereby the maximum sampling for lands, in exceptional cases where soil types and cropping of lands were similar during the previous five years, is reduced from 12 hectares to 8 hectares.

2) (c) Storage of organic waste/organic fertiliser

This has been addressed in point 1) (of Objection A.7) above.

2) (d) Waste Collection Permit and (e) Certificate of Registration.

The TC notes that the Waste Management (Collection Permit) Regulations 2007, as amended, do not apply to the collection and transport of animal by-products, other than catering waste, within the meaning of the EC (Animal By-Products) Regulations. However, waste water treatment plant sludge is still considered to be a waste unless declared otherwise.

The TC notes that a circular letter was issued by the Agency to licensees in the Food and Drink sector on 30 September 2010, which outlines the status of the regulation of off-site storage facilities being used by activities licensed by the EPA. Assuming the organic waste/organic fertiliser to be stored offsite is classified as waste (and not classified as a by-product under Article 27 of the European Communities (Waste Directive) Regulations 2011), the licensee is required to comply with current waste regulations. Condition 3.13 provides two options to the licensee in relation to off-site storage, 1) *provide a minimum of 16 weeks storage of organic waste /organic fertiliser on-site or at storage locations {off-site} as agreed by the Agency,* or (2) .... *the licensee may provide less than 16 weeks storage if the licensee has a contract for the transfer of organic waste/organic fertiliser to a person authorised or exempted under and in accordance with the Waste Management Acts 1996 to 2011 or the Environmental*

Protection Agency Acts 1992 to 2011 to undertake the collection and recovery of the organic waste/organic fertiliser. The TC notes that correspondence dated 31 January 2012 from Meat Industry Ireland/IBEC in relation to 'the removal of conditions associated with organic fertiliser from IPPC licences in the meat processing installations' has been received by the Agency.

3) The TC does not consider that Condition 8.1 meets the requirements of this condition as it relates to the disposal or recovery of waste on-site and therefore does not cover the storage of organic waste/organic fertiliser on or off-site.

Recommendation:

1) Amend Condition 3.13 as follows:

The licensee shall provide a minimum of 16 weeks storage of organic waste/organic fertiliser on-site or at storage locations **off-site** as agreed by the Agency. The licensee shall demonstrate the minimum storage capacity within six months of the date of grant of licence. The licensee may provide less than 16 weeks storage if the licensee has a contract for the transfer of organic waste/organic fertiliser to a person authorised or exempted under and in accordance with the Waste Management Acts 1996 to 2011 or the Environmental Protection Agency Acts 1992 to 2011 to undertake the collection and recovery of the organic waste/organic fertiliser. **Details of storage capacity available for organic waste/organic fertiliser shall be maintained on-site for inspection by authorised persons at all reasonable times.**

2) Amend *Schedule C.6 Land Used for Landspreading* as follows:

C.6 Land used for Landspreading

Monitoring Location: All lands included in the landbank

Conditions	Monitoring Frequency [Note 2]	Analysis Method/Technique Note 3 & 4
Soil Sampling [Note 1]	Prior to the preparation of an NMP or Every six years	Morgan's P test Morgan's P test

Note 1: **The sampling area shall not exceed 4 hectares. Exceptionally, where soil types and cropping of lands were similar during the previous five years, a sample area of up to 8 hectares shall be deemed acceptable.**

Note 2: The licensee may assume 'Index 3' for preparation of nutrient management plans.

Note 3: Peach, M. and English, L. (1944) 'Rapid micro chemical test'. *Soil Science* 57:167 **or as otherwise specified by the Department of Agriculture, Food and the Marine.**

Note 4: Soil analysis shall only be carried out by a soil-testing laboratory **that meets the requirements of the Department of Agriculture, Food and the Marine.**

A.7. Condition 4.3 – Noise

Condition 4.3 states:

Noise from the installation shall not give rise to sound pressure levels (Leq, 15 minutes) measured at the NSLs of the installation which exceed the limit value(s).

The licensee requests the following amendment, in-line with PDs for licences P0188-02 and P0191-02:

"Noise from the installation shall not give rise to sound pressure levels (Leq, 15 minutes) measured at the NSLs of the installation which exceed the limit values by more than 2dB(A)."

Technical Committee's Evaluation: The current licence (P0205-01) does not permit an excess of 2 dB(A) above the standard 55/45 dB(A) noise limits. This 2 dB(A) tolerance historically applied to installations where compliance with the standard limits may have been prohibitive in the short to medium term. 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.

The Agency's *Guidance Note for Noise in Relation to Scheduled Activities (2nd Edition, 2006)* states that noise attributable to on-site activities should not exceed a free-field $L_{Ar,\ T}$ value of 55 dB by daytime and 45 dB $L_{Aeq,\ T}$ during night-time at any noise sensitive location (NSL). In December 2011, the Agency issued a revised draft *Guidance Note for Noise (NG4)* for public consultation. Once published, NG4 will supersede previous Agency guidance on noise.

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.8. Condition 5.5 – Temperature of Discharges

Condition 5.5 states:

Discharges from the installation shall not artificially increase the ambient temperature of the receiving water by more than 1.5°C outside the mixing zone. In relation to temperature, the mixing zone shall not exceed 25% of the cross sectional area of the estuary at any point.

The licensee objects to Condition 5.5, in relation to the temperature in the mixing zone not exceeding 25% of the cross sectional area of the estuary at any point. The licensee states that as the estuary is transitional water body, tidal movement is a factor in this mixing zone under different conditions a new determination of mixing zone is necessary. The licensee states that the mixing zone is affected by temporal changes due to seasonal changes, neap and spring tides.

The licensee states that the Environmental Objective (Surface Waters) Regulations 2009 do not refer to the mixing zone exceeding the cross sectional area by more than 25%. Therefore the licensee requests that the condition read as follows:

"Discharges from the installation shall not artificially increase the ambient temperature of the receiving water by more than 1.5°C outside the mixing zone."

Technical Committee's Evaluation: In order for the licensee to demonstrate compliance with the first part of Condition 5.5, the licensee is required to establish the extent of the mixing zone. The Agency considers the mixing zone shall not exceed 25% of the cross sectional area of the estuary at any point, to ensure that it does not impact the free passage of fish and significantly affect the aquatic ecosystem. The TC notes that if there are no thermal discharges from the installation the requirements of this condition are likely to be already met. The TC recommends no change to this condition.

Recommendation: No change

A.9. Condition 6.7 - Programme for the Identification and Reduction of Fugitive Emissions

Condition 6.7 states:

> The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions using an appropriate combination of best available techniques. This programme shall be included in the Environment Management Programme.

The licensee requests that this condition be removed on the grounds that such a programme has already been submitted in respect of ABP Waterford's previous IPPC Licence No. P0205-01 and was verified by the Agency.

> Technical Committee's Evaluation: The TC notes that the licensee has previously prepared a programme for the identification and reduction of fugitive emissions. Therefore the TC recommends that the condition is amended to require the licensee to maintain a programme for the identification and reduction of fugitive emissions.

Recommendation: Amend Condition 6.7 to read as follows:

The licensee shall **maintain** a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions using an appropriate combination of best available techniques. This programme shall be included in the Environment Management Programme.

A.10. Conditions 6.17 and 11.2 – Impact of discharge on shellfish

Condition 6.17 states:

> Shellfish Waters
>
> 6.17.1 The licensee shall, within eighteen months of the date of grant of licence, carry out an assessment of the impact of the discharge(s) from the installation on the microbiological quality of the shellfish in the designated shellfish waters in consultation with the Sea Fisheries Protection Authority (SFPA), the Marine Institute and Bord Iascaigh Mhara (BIM). A report on the assessment shall be submitted as part of the AER.
>
> 6.17.2 Where the assessment outlined in Condition 6.17.1 indicates that the discharge(s) are having a deleterious microbiological effect on the quality of shellfish in the designated shellfish waters, the licensee shall install UV or other appropriate disinfection system within the timeframe identified.
>
> 6.17.3 Where a UV or other appropriate disinfection system is installed the licensee shall ensure that it is operating to the designed disinfection efficiency at all times. The disinfection efficiency of the system shall be measured to demonstrate that the system is operated within its design range. The records from this verification process shall be recorded and maintained.

Condition 11.2 states

> In the case of any incident relating to discharges to water, the licensee shall notify the Local and Water Services Authority and the Department of Agriculture, Food and the Marine and in the case of discharges likely to impact a designated shellfish water, the Marine Institute (MI), Sea Fisheries Protection Authority (SFPA), Food Safety Authority of Ireland (FSAI) and an Bord Iascaigh Mhara (BIM), as soon as practicable after such an incident.

The licensee objects to these conditions and requests their removal on the basis that the installation was not identified as a pressure in relation to shellfish in the Waterford Harbour

Pollution Reduction Programme which was also acknowledged in the Inspector's Report. The licensee feels that it is wrong to base the requirement for an assessment on "anticipation" and refers to the Inspector's Report which states:

"It is anticipated that the installation is not likely to be a significant contributor; but an assessment is required to confirm this."

The licensee also questions these conditions on the grounds that the licence review was initiated in relation to the EO (Surface Waters) Regulations 2009 and not the Shellfish Waters Regulations (S.I. No. 268 of 2006) as amended. The licensee also refers to the Table 3 of the IR which lists the reason for change as "SW Regs and Clarifies meaning". The licensee requests that Condition 11.2 be deleted from the licence.

Technical Committee's Evaluation: The installation is identified as a pressure in the Suir Estuary Water Management Unit (WMU) Action Plan, however it is not clear from the WMU Action Plan whether this installation is causing a risk. The designated shellfish area in the Barrow Suir Nore Estuary (SE_100_0100) is located 7 km downstream from the process effluent discharge point. The discharge was not identified as a pressure in the Waterford Harbour Pollution Reduction Programme. However, the shellfish area is affected by faecal contamination and dissolved inorganic nitrogen (DIN) and the discharge from the installation has a bacteriological load. Therefore the proposed determination requires the licensee to access the contribution from the installation to the faecal contamination at the shellfish area and where it is considered a significant contributor to take such appropriate remedial measures such as UV treatment. The Inspector's report states that the WWTP treats over 4,000 population equivalents. The TC does not consider that the assessment is too onerous for the licensee. The TC notes that Waterford Waste Water Discharge licence (Register No. D0022-01, final licence issued 06 January 2010) primary discharge point is located approximately 3.9 km downstream of the installation's final effluent discharge and requires an assessment of the impact of the discharge(s) on the microbiological quality (including viruses) of the shellfish in the adjacent designated shellfish waters is to be submitted as part of their second Annual Environmental Report. This assessment may assist the licensee when undertaking their assessment. As there is a Pollution Reduction Programme in place, the TC recommends that the condition is amended to require the licensee to consult with the Sea Fisheries Protection Authority (SFPA), the Marine Institute and Bord Iascaigh Mhara (BIM), as appropriate.

To ensure the requirements of the Environmental Objectives Regulations are met, the impact of the process effluent discharge on the receiving water was assessed. This assessment included the potential impact of the process effluent on the shellfish area. The provisions of the Shellfish Regulations have been incorporated in the licence, to ensure the protection of the designated shellfish area in the Barrow Suir Nore Estuary.

Condition 11.2 is a standard licensing condition, which ensures that the relevant authorities are notified of any incidents relating to discharges to water. The TC recommends no change to Condition 11.2.

Recommendation: *Condition 6.17 states:*

Shellfish Waters

6.17.4 The licensee shall, within eighteen months of the date of grant of licence, carry out an assessment of the impact of the discharge(s) from the installation on the microbiological quality of the shellfish in the designated shellfish waters in consultation with the Sea Fisheries Protection Authority (SFPA), the Marine Institute and Bord Iascaigh

Mhara (BIM), **as appropriate**. A report on the assessment shall be submitted as part of the AER.

6.17.5 Where the assessment outlined in Condition 6.17.1 indicates that the discharge(s) are having a deleterious microbiological effect on the quality of shellfish in the designated shellfish waters, the licensee shall install UV or other appropriate disinfection system within the timeframe identified.

6.17.6 Where a UV or other appropriate disinfection system is installed the licensee shall ensure that it is operating to the designed disinfection efficiency at all times. The disinfection efficiency of the system shall be measured to demonstrate that the system is operated within its design range. The records from this verification process shall be recorded and maintained.

A.11. Condition 8.2.1 – Transportation of Animal Carcasses and Tissue

Condition 8.2.1 states:

> Animal tissue or carcasses sent off site for disposal/recovery shall be transported in covered, leak-proof containers.

The licensee objects to Condition 8.2.1 as it is placed under condition 8.2 'Waste sent off-site.....' and according to the licensee animal tissue and carcasses are not waste. Animal tissue and carcasses are covered by the Animal by-products legislation and are the responsibility of the Department of Agriculture, Food and the Marine. According to the licensee they do not fall under the control of the Waste Management Acts (2006-2011).

> Technical Committee's Evaluation: The TC notes that the definition of 'animal by-products' in the Animal by-products Regulations ((EC) No. 1069/2009) means *entire bodies or parts of animals, products of animal origin or other products obtained from animals, which are not intended for human consumption, including oocytes, embryos and semen.* The TC notes that the Waste Management Acts 1996 to 2011 does not apply to animal by-products to the extent they are covered by the Animal by-products Regulations ((EC) No. 1069/2009) (Section 3(2)(b)). Therefore the TC recommends that Condition 8.2.1 be renumbered to read Condition 8.3.

Recommendation: Renumber Condition 8.2.1 to Condition 8.3 and renumber the following conditions accordingly.

8.3 Animal tissue or carcasses sent off-site for disposal/recovery shall be transported in covered, leak proof containers.

A.12. Condition 8.2.2 - Transportation of Organic Fertiliser via Public Road

Condition 8.2.2 states:

> The transport of organic waste/organic fertiliser via the public road shall be carried out in sealed containers/ covered trailers, as appropriate such that no spillage can occur.

The licensee objects to Condition 8.2.2 as it should not fall under Waste Section of Condition 8.2 but should be dealt with in a separate condition.

> Technical Committee's Evaluation: The TC recommends that Condition 8.2.2 be renumbered to read Condition 8.4.

Recommendation: Renumber Condition 8.2.2 to Condition 8.4 and renumber the

following conditions accordingly:

8.4 The transport of organic waste/organic fertiliser via the public road shall be carried out in sealed containers/ covered trailers, as appropriate such that no spillage can occur.

A.13. Condition 8.11 - Daily Removal of Animal By-products

Condition 8.11 states:

> Animal by-products stored on-site pending recovery/disposal shall be placed in leak proof containers which shall be covered at all times except during loading and shall at a minimum be removed daily, unless otherwise agreed by the Agency.

The licensee objects to this condition as it is not possible to remove animal by-products on a daily basis due to specific retention times for each type of animal by-product. According to the licensee, in order to test for diseases such as BSE, animal by-products must remain on-site until laboratory results confirm they are BSE free, which in the case of BSE takes 24 hours.

The licensee states, furthermore, quantities of by-product produced daily do not merit daily removal and transport to a rendering installation can be up to 60 miles away. The licensee states this would generate additional transport emissions without any benefit. The licensee states there is no need to remove them daily as all animal by-products are segregated and no fugitive emissions arise from these trailers while on site when covered. The licensee proposes that the condition be amended as follows:

"Animal by-products stored on-site pending recovery/disposal shall be placed in a leak proof container which shall be covered at all times except during loading and shall be removed as required."

> Technical Committee's Evaluation: The Agency acknowledges that some animal by-products cannot be released before they are 24 hours old. However, the risk of odour nuisance increases as the animal by-products age particularly in the warmer months of April to September inclusive, therefore animal by-products shall be transported from the installation as soon as practicable after the 24 hours. The TC considers that a daily service would ensure that animal by-products are removed as soon as practicable after the 24 hours. It is the experience of the Technical Committee that in order to minimise odour potential at the installation and the rendering installation in receipt of the animal by-products, animal by-products are required to be as fresh as practicable when transported to the rendering installation. Therefore, the TC considers that the requirement for the removal of animal by-products on a daily basis is necessary to prevent/reduce the risk of odour nuisance at the installation and the rendering installation. The rendering installations are required to receive animal by-products as soon as practicable. The TC recommends no change to this condition.
>
> The TC considers that the wording of Condition 8.11, specifically 'unless otherwise agreed by the Agency', already facilitates changes which may be agreed with the Agency.

Recommendation: No change.

A.14. Condition 8.13 - Organic Waste/Organic Fertiliser recovery by landspreading

Condition 8.13 states:

> Organic waste/organic fertiliser shall only be recovered by landspreading subject to the following conditions and the prior agreement of the Agency:.....

The licensee objects to Condition 8.13 in its entirety. As per objection A.4 the licensee objects to use of the term "organic waste". They propose that "organic waste" be deleted from the condition completely and replaced by "organic fertiliser".

Technical Committee's Evaluation:

Section 83(5)(a)(v) of the EPA Acts 1992 to 2011 states that:

The Agency shall not grant a licence or revised licence for an activity-

(a) unless it is satisfied that-.....

(v) any emissions from the activity will not cause significant environmental pollution,...

The Agency issued the PD on the basis that all organic waste/organic fertiliser would be landspread in accordance with a pre-approved nutrient management plan (NMP). The NMP would demonstrate, to the satisfaction of the Agency, a need for fertiliser on identified lands that may be provided by organic waste/organic fertiliser generated at the installation.

The requirement for the Agency to be satisfied that 'any emissions from the activity will not cause significant environmental pollution' has not in any way been superseded by other national legislation, including S.I. No. 610 of 2010 (implementing the Nitrates Directive) and S.I. No. 252 and S.I. No. 253 of 2008 (in relation to Animal By-Products).

The PD does not require the licensee to monitor or control the activities of the customer farmers who use/recover as fertiliser the organic waste/organic fertiliser arising from the installation. The licence requires the licensee to demonstrate by means of a nutrient management plan (which may be based on Nitrogen and Phosphorus Statements issued by the Department of Agriculture, Food and the Marine) that there are adequate lands available for the use/recovery of the quantity of organic waste/organic fertiliser arising at the installation.

The TC considers that it is necessary for the licensee to provide such information as the licensee has no use within the installation boundary for the quantity of organic waste/organic fertiliser generated on-site. Condition 8.13 allows the Agency to be satisfied on an on-going basis that the organic waste/organic fertiliser is being managed appropriately, that there is a certainty of use/recovery and, therefore, that the organic waste/organic fertiliser is not likely to cause significant environmental pollution.

The TC recognises that Condition 8.13 and sub-conditions could be re-worded to provide greater clarity in relation to the licensee's responsibilities and requirements. However, the sub-conditions as proposed below continue to require the licensee to provide details of where the organic waste/organic fertiliser generated on-site may be used/recovered as fertiliser, including identified lands and nutrient management plans. The recommended associated changes outlined below include definitions for 'customer farmers' and 'customer farmers' lands' to be included in the glossary and 'Client List' and 'Buffer zone' to be deleted from the Glossary. The TC recommends the deletion of condition 8.13.2, 8.13.7 and the deletion of the last sentence of Condition 8.13.5 of

the PD as they apply to the customer farmers and/or are controlled by S.I. No. 610 of 2010.

Recommendation: Amend Condition 8.13 and renumber accordingly as follows:

8.13 Organic waste/organic fertiliser shall only be recovered by landspreading subject to the following conditions and the prior agreement of the Agency:

8.13.1 The licensee shall, prior to the first of January each year, submit to the Agency and maintain on-site **for inspection by authorised persons** the following information:

(i) Projected figures for annual production of organic waste/organic fertiliser and the nitrogen and phosphorus content of the organic waste/organic fertiliser;

(ii) Summary table of customer farmers **who may receive ~~receiving~~** organic waste/organic fertiliser. This table shall be updated, based on a nutrient management plan, as required to include additional lands acquired during the year. The table shall include as a minimum 'Customer Code' (Name, to be maintained on-site), 'Townlands' and 'Quantity of Organic Waste/Organic Fertiliser;

(iii) **A m**ap (scale of 1:50,000) showing the location of farms where organic waste/organic fertiliser may be **~~recovered~~ used**;

(iv) **A d**eclaration by suitably qualified person that lands, for **receipt ~~recovery~~** of organic waste/organic fertiliser have been inspected and are suitable for **use ~~landspreading~~**, and

(v) A nutrient management plan for all lands demonstrating adequate capacity for **~~recovery~~ use** of organic waste/organic fertiliser generated at the installation. Nutrient management plans shall be to the satisfaction of the Agency and shall be agreed prior to the movement of organic waste/organic fertiliser. Nutrient management plans may be based on the 'Nitrogen and Phosphorus' Statements issued by the Department of Agriculture, Food and the Marine. Nutrient management plans shall be maintained on-site for inspection by authorised persons.

~~**8.13.2 The licensee shall maintain on-site for inspection by authorised persons maps (scale 1:10,560) showing land that may be used for recovery of organic waste/ organic fertiliser.**~~

8.13.2 The licensee shall ensure, in all cases where there is a transfer of organic waste/organic fertiliser from the installation to storage provided on **customer farmers' lands ~~farms in the client list~~**, that the **customer ~~recipient~~** farmer is advised of the need to store the organic waste/organic fertiliser in a purpose-built holding structure adequate for the protection of groundwater and surface water.

8.13.3 Soil monitoring shall be undertaken as outlined in *Schedule C.6: Ambient Monitoring, Land Used for Landspreading* of this licence and a summary report included as part of the Nutrient Management Plan.

8.13.4 Landspreading shall be carried out in accordance with S.I. No. 610 of 2010 European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010. ~~**All landspreading**~~

~~activities shall be carried out in such a manner as to avoid contamination of surface and groundwaters, and so as to minimise odour nuisance from the activity.~~

8.13.5 Landspreading from this activity shall take place only on lands agreed in advance in writing by the Agency. Alterations to this landbank are subject to prior written agreement with the Agency.

~~**8.13.7 Landspreading shall be undertaken to ensure an even spread of organic waste/organic fertiliser over land. Dewatered sludge shall be spread by rotary spreader or similar machine. Slurry shall be spread using soil injection, bandspreading or low trajectory splashplate methods. Any other method must be agreed in advance by the Agency.**~~

In the **Glossary of Terms,**

Include the following additional terms:

Customer Farmers: Farmers who may use organic waste/organic fertiliser generated at the installation as fertiliser on their lands.

Customer Farmers' Lands: The lands owned/managed by customer farmers.

Delete the following terms:

Buffer Zone Area: excluded from landspreading of organic waste/organic fertiliser.

Client List: A list of farmers and associated farmlands used for the landspreading of organic waste/organic fertiliser.

A.15. Condition 9.1 - Accident Prevention Procedure

Condition 9.1 states:

The licensee shall ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.

The licensee states that an Accident Prevention Procedure has been in place since 2005 as it was necessary as part of the 2005 licence amendment. It is reviewed annually. According to the licensee it is reviewed annually and updated as necessary in accordance with condition 12.1.1 of IPPC Licence No.P0205-01.

Technical Committee's Evaluation: The TC notes that the licensee has an Accident Prevention and Emergency Response Procedure in place. The TC recommends no change to this condition.

Recommendation: No change

A.16. Condition 9.2 – Emergency Response

Condition 9.2 states:

The licensee shall ensure that a documented Emergency Response Procedure is in place that addresses any emergency situation which may originate on-site. This procedure shall include provision for minimizing the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.

The licensee states that such a procedure has been in place since 2005 as it was necessary as part of a licence amendment in 2005. It is reviewed annually and updated as necessary.

Technical Committee's Evaluation: The TC notes that the licensee has an Emergency Response Procedure in place. The TC recommends no change to this condition.

Recommendation: No change.

A.17. Condition 10.2 - Decommissioning Management Plan

Condition 10.2 states:

10.2 Decommissioning Management Plan (DMP)

10.2.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for the decommissioning or closure of the site or part thereof. This plan shall be submitted to the Agency for agreement within six months of the date of grant of the 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 agreement of the Agency.

10.2.3 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Decommissioning Management Plans and Financial Provision when implementing Condition 10.2.1 above.

10.3 The Decommissioning Management Plan shall include, as a minimum, the following:

(i) a scope statement for the plan;

(ii) the criteria that define the successful decommissioning of the activity or part thereof, which ensures minimum impact on the environment;

(iii) a programme to achieve the stated criteria;

(iv) where relevant, a test programme to demonstrate the successful implementation of the decommissioning plan; and

(v) details of the costings for the plan and the financial provisions to underwrite those costs.

The licensee objects to Condition 10.2 and 10.3 as the Decommissioning Management Plan was submitted to the Agency subsequent to the licence amendment in 2005. The licensee states that a closure, restoration and after care management plan was prepared in order to comply with Condition 7.7 of the current licence (P0205-01) in accordance with the relevant guidance. The licensee states that the closure restoration and after care management plan included a Decommissioning Management Plan which is amended on annual basis if necessary. The licensee states that having regard to the Environmental Liability Risk Assessment, the enforcement category for the ABP Waterford licence (P0205-01) was determined and submitted to the Agency in 2008. The licensee states that as this has already been undertaken, there is no need to do it again other than a review.

Technical Committee's Evaluation: This is a standard condition for IPPC licences to ensure the successful decommissioning of the activity or part thereof, which ensures minimum impact on the environment. I have consulted with the OEE who confirmed that a Decommissioning Management Plan has not been approved by the Agency to

date and request that this condition is maintained in the final licence. The TC considers that any works carried out under the current licence (P0205-01) can form the basis for the Decommissioning Management Plan (DMP). The TC considers the DMP is necessary for the protection of the environment and recommends no change.

Recommendation: No change.

A.18. Condition 11.15 - Organic Waste/Organic Fertiliser Register

Condition 11.15 states:

The licensee shall maintain an "organic waste/organic fertiliser register", which shall be to the satisfaction of the Agency. The register shall include as a minimum:

(i) The results of any analysis required under *Schedule C.4: Waste/Material Monitoring* of this licence;

(ii) Time and date of despatch/spreading of organic waste/organic fertiliser;

(iii) Name of contractor/person who transported the organic waste/organic fertiliser;

(iv) Name of contractor/person who landspread the organic waste/organic fertiliser, when landspread by or on behalf of the licensee;

(v) Name and address of farmer or facility who received the organic waste/organic fertiliser;

(vi) The quantity of organic waste/organic fertiliser in each consignment;

(vii) The quantity of nitrogen and phosphorus in each consignment; and

(viii) Details in accordance with Article 23 of S.I. No. 610 of 2010 European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010.

As per Objections A.6. and A.14., the licensee objects to the words "organic waste" throughout this condition and feel they should be replaced with "organic fertiliser". They propose that this amendment should also be applied to Glossary Terms; Buffer Zones, Client List, Landspreading, Conditions 3.13, 6.16, 8.2, 8.13, 11.15 and Schedule C.4. The licensee states that it is clear that the organic material generated on this site fall under the term 'fertilisers' as defined under the Nitrates Regulations.

Technical Committee's Evaluation: As discussed above in Objection A.6., the TC notes that waste water treatment plant sludge is considered a 'waste' under the Waste Management Acts 1996 to 2011. The TC also notes that organic fertiliser has the potential to be a waste if not managed appropriately. As discussed in Objection A.6., the term 'organic waste/organic fertiliser' is to be maintained throughout the licence.

The TC notes that parts of Condition 11.15 of the PD are not within the control of the licensee as they take place beyond the boundary of the installation. Therefore, the TC recommends that the condition be amended to remove sub-conditions that are not applicable to the licensee.

Recommendation: Amend Condition 11.15 to read as follows:

11.15 The licensee shall maintain **on-site for inspection by authorised persons** an "organic waste/organic fertiliser register", which shall be to the satisfaction of the Agency. The register shall include as a minimum:

(i) The results of any analysis required under *Schedule C.4: Waste **and** Material Monitoring,* of this licence*;*

(ii) ~~**Time and** **D**~~ate of despatch/spreading of organic waste/organic fertiliser;

(iii) Name of contractor/person who transported the organic waste/organic fertiliser;

~~**(iv) Name of contractor/person who landspread the organic waste/organic fertiliser, when landspread by or on behalf of the licensee;**~~

(iv) A record of the movement of organic waste/organic fertiliser to off-site organic fertiliser storage;

(v) Name and address of **customer** farmers or **the** facility, who received the organic waste/organic fertiliser;

(vi) The quantity of organic waste/organic fertiliser in each consignment;

(vii) The quantity of nitrogen and phosphorus in each consignment; and

(viii) Details in accordance with Article 23 of S.I. No. 610 of 2010 European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010 **and as otherwise specified by the Agency or Department of Agriculture, Food and the Marine.**

A.19. Condition 12.2.2 – Environmental Liabilities

Condition 12.2.2 states:

The licensee shall arrange for the completion, by an independent and appropriate qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA) which addresses the liabilities from past and present activities. The assessment shall include those liabilities and costs identified in Condition 10 for execution of the DMP. A report on this assessment shall be submitted to the Agency for agreement within twelve months or date of grant of this licence. The ELRA shall be reviewed as necessary to reflect any significant change on site, and in any case every three years following initial agreement. Review results are to be notified as part of the AER.

The licensee objects to this condition in its entirety as a fully costed ELRA was completed for the site in 2008 and submitted to the Agency. A Closure, Restoration and Aftercare Management Plan was prepared in order to comply with Condition 7.7 of the current licence (P0205-01). The licensee objects to its completion by an independent and appropriate qualified consultant. The ELRA was completed by the company in 2008 and it will be reviewed internally on a yearly basis.

Technical Committee's Evaluation: This is a standard condition in IPPC licences. I have consulted with OEE who confirmed that an ELRA has not been approved by the Agency to date and request that this condition is maintained in the licence. The TC

considers that any works carried out under the current licence (P0205-01) can form the basis for the ELRA. The TC considers that the ELRA is necessary to protect the environment and recommends no change.

Recommendation: No change.

A.20. Schedule C.2.1 – Control of Emissions to Water

Schedule C.2.1 states:

Emission Point Reference No: WEP1

Description of Treatment: Waste Water Treatment Plant

Control Parameter	Monitoring	Key Equipment [Note 1]
Balance Tank:		
Dissolved Oxygen	Daily	DO probe
COD	Daily	Digestion/Colorimetric
pH	Daily	pH probe
		Mixer/aerators pumps
DAF Unit(s)		
Suspended Solids	Monthly	Gravimetric
Aeration Tanks:		
Dissolved Oxygen	Continuous	Fixed DO Meter
Sludge settlement Test 30 minutes	Daily	Imhoff cone
MLSS	Weekly	Laboratory Tests
SVI	Weekly	Calculation
F/M ratio	Monthly	Calculation
Sludge age	Monthly	Calculation
		Surface Aerators
Settlement tank:		
Floating matter	Daily	Visual

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system

1) *The licensee requests that standby/spares requirement be placed in a separate table as per their current licence P0205-01, entitled 'Equipment'. The licensee requests that Note 1, Mixer/aerators pumps, Surface Aerators should be removed and placed in a table labelled 'Equipment'.*
2) *The licensee objects to the inclusion of a dissolved oxygen meter in the balance tank. The licensee states that these units are costly to maintain calibrate and do not provide useful information with regard to the operation of the balance tank. The balance tank is only used for mixing and not aeration, as a result they request that this requirement be removed from the schedule.*

Technical Committee's Evaluation:

1) The TC considers that *Schedule C.2.1* is appropriate and that the requirement for a separate table for 'Equipment' is not necessary. The TC considers that Note 1 of the

table in *Schedule C.2.1* is appropriate to ensure the operation of the abatement system and recommends that Note 1 is maintained in the Schedule.

2) The Agency considers that the monitoring of dissolved oxygen in the balance tank is necessary to control odour emissions and the TC recommends no change.
3) For the purposes of clarity the TC recommends that SVI and F/M ratio are included in the Glossary of Terms in the licence.
4) As per Objection A.21 and A.22 below, the TC recommends that that *Schedule C.2.1* be amended to include continuous monitoring of pH in the aeration tanks using a pH electrode/meter with recorder.

Recommendation:

In the **Glossary of Terms,**

Include the following additional terms:

SVI	**Sludge Volume Index**
F/M ratio	**Food to Mass ratio**

Amend *Schedule C.2.1 as follows:*

Emission Point Reference No: WEP1

Description of Treatment: Waste Water treatment plant

Control Parameter	Monitoring	Key Equipment [Note 1]
Balance tank:		
Dissolved Oxygen	Daily	DO probe
COD	Daily	Digestion / Colorimetric
pH	Daily	pH probe
		Mixer/ aerators
		pumps
DAF Unit (s)		
Suspended solids	Monthly	Gravimetric
Aeration tanks:		
Dissolved Oxygen	Continuous	Fixed DO Meter
pH	**Continuous**	**pH electrode/meter with**
Sludge settlement test	Daily	**recorder**
30 minutes		Imhoff cone
MLSS	Weekly	
SVI	Weekly	Laboratory tests
F/M ratio	Monthly	Calculation
Sludge age	Monthly	Calculation
		Calculation
		Surface aerators
Settlement tank:		
Floating matter	Daily	Visual

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.

A.21 and 22. *Schedule C.2.2 Monitoring of Emissions to Water*

Schedule C.2.2 states:

Emission Point Reference No: WEP1

Control Parameter	Monitoring Frequency	Key Equipment/Technique
Flow	Continuous	On-line flow meter with recorder
Temperature	Daily	Online temperature probe with recorder
pH	Daily	pH electrode/meter with recorder
Chemical Oxygen Demand	Daily [Note 1]	Standard Method
Biochemical Oxygen Demand	Weekly [Note 1]	Standard Method
Suspended Solids	Weekly [Note 1]	Standard Method
Ammonia (as N)	Weekly [Note 1]	Standard Method
Total Nitrogen (as N)	Weekly [Note 1]	Standard Method
Total Phosphorus (as P)	Weekly [Note 1]	Standard Method
Oils, fats and grease	Monthly	Standard Method

Note 1: All samples shall be collected on a 24 hour flow proportional composite sampling basis.

1) *The licensee objects to the inclusion of "pH electrode/meter with recorder" on emission point reference no: WEP1. The licensee states that the pH electrode/meter with recorder will be placed within the aeration basins in order to continuously monitor pH. This will ensure that fluctuations can be rectified prior to discharge to WEP1.The licensee requests that "with recorder" be removed as daily pH monitoring will be logged manually and not electronically. The licensee requests that Schedule C.2.1 be amended to reflect the continuous monitoring of pH within aeration tanks using a pH electrode with recorder.*
2) *The licensee requests that the monitoring frequency for oils, fats and greases (OFG) be reduced from "monthly" to "annually". The licensee states that OFG have been consistently compliant with the associated emission limit value of 15 mg/l. The licensee states that the levels recorded for OFG have been consistent month on month. The licensee views this as an unnecessary cost and refers to EPA correspondence pertaining to IPPC Licence No.P0190-01/ap26ts {this refers to Licence Register No. P0190-01, ABP Clones} which only requires annual monitoring.*

Technical Committee's Evaluation:

1) The TC notes that daily monitoring of pH is considered BAT for the slaughtering sector in accordance with the BAT Guidance Note on Best Available Techniques for the Slaughtering Sector (EPA, 2008). The TC considers that the requirement for a pH electrode/meter with recorder at WEP1 is unduly onerous in this case and recommends that 'with recorder' be deleted from *Schedule C.2.2. Monitoring of Emissions to Water.* The TC recommends that *Schedule C.2.1* be amended to include continuous monitoring of pH in the aeration tanks using a pH electrode/meter with recorder.

2) The TC notes that EPA correspondence (reference number P0205-01/ap38dm) pertaining to IPPC licence register number P0205-01 permits quarterly monitoring of oil, fats and greases. The licensee's request to reduce monitoring to annually was not agreed. The TC recommends that the monitoring frequency

for oil, fats and greases be amended to quarterly. The TC notes that Condition 6.6 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 *Schedule C.2.2 as follows:*

C.2.2 Monitoring of Emissions to Water

Emission Point Reference No: WEP1

Control Parameter	Monitoring Frequency	Key Equipment/Technique
Flow	Continuous	On-line flow meter with recorder
Temperature	Daily	On-line temperature probe with recorder
pH	Daily	pH electrode/meter
Chemical Oxygen Demand	Daily [Note 1]	Standard Method
Biochemical Oxygen Demand	Weekly [Note 1]	Standard Method
Suspended Solids	Weekly [Note 1]	Standard Method
Ammonia (as N)	Weekly [Note 1]	Standard Method
Total Nitrogen (as N)	Weekly [Note 1]	Standard Method
Total Phosphorus	Weekly [Note 1]	Standard Method
Oils, fats and greases	**Quarterly**	Standard Method

Note 1: All samples shall be collected on a 24 hour flow proportional composite sampling basis.

A.23. Schedule C.4 – Waste/Material Monitoring

Schedule C.4 Waste/Material Monitoring states:

Waste Class	Frequency	Parameter	Method
Organic waste/organic fertiliser	Annually	% Dry Matter, total N, total P, total K	Standard methods
Organic waste/organic fertiliser	Daily	Volume/Mass	As agreed with Agency
Other [Note 1]			

Note 1: Analytical requirements to be determined on a case by case basis.

The licensee states that the analysis of the nutrient content of organic fertiliser is carried out at various stages throughout the year as part of the site's nutrient management plan and it should not be classified as waste but as a 'fertiliser'. The licensee requests that waste class be replaced with 'fertiliser' and reference to 'organic waste' be deleted.

Technical Committee's Evaluation: The TC agrees that the word 'waste' should be removed from the title of the 'waste class' column as that column includes organic fertiliser such as faecal matter which is not considered as a waste. As per Objection

A.6, waste water treatment plant (WWTP) sludge is considered a waste and is not excluded under article 3(1) or 3(2) of the Waste Management Acts 1996 to 2011. The TC considers that the title should be changed to 'Waste **and** Material Analysis' to reflect waste types under the category "Other" which may be selected for monitoring, as per Note 1, on a case by case basis.

Recommendation: Amend *Schedule C.4* to read as follows:

C.4 ***Waste and Material Analysis***

~~Waste~~ Class	Frequency	Parameter	Method
Organic Waste/Organic Fertiliser (including WWTP sludge)	Bi-annually	% Dry Matter, total N, total P, total K	As agreed by the Agency
	Monthly	**Storage Capacity**	
	Daily	Volume/Mass **generated**	
Other [Note 1]			

Note 1: Analytical requirements to be determined on a case by case basis.

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