

*This Report has been cleared for submission to the Board by Programme Manager
Brian Meaney*

Signed:  Date: 29/10/2025

	OFFICE OF ENVIRONMENTAL SUSTAINABILITY
REPORT OF THE TECHNICAL COMMITTEE ON OBJECTIONS TO PROPOSED DETERMINATION	
TO:	Board of Directors
FROM:	Technical Committee INDUSTRIAL CONTROL AND ENVIRONMENTAL REGULATION PROGRAMME
DATE:	29 OCTOBER 2025
RE:	Objection to Proposed Determination for Carhue Piggeries Limited, Cooligboy, Timoleague, Bandon, County Cork, IEL Reg: P0621-03

Application Details	
Classes of Activity (under EPA Act 1992 as amended):	6.2 The rearing of pigs in an installation where the capacity exceeds – (a) 750 places for sows, or (b) 2,000 places for production pigs which are each over 30kg.
Licence application received:	15 November 2023
PD issued:	09 July 2025
First party objection received:	1
Third Party Objection received:	0
Submissions on Objections received:	0

Company

The licence application relates to an intensive pig rearing installation located in a rural location at Cooligboy, Timoleague, Bandon, County Cork. This installation has been licensed since 2003.

A licence review application was submitted to the Agency on 15 November 2023 proposing an increase in pig numbers housed at the installation, new pig housing and associated infrastructure, a revised site boundary, and a new storm water discharge point. The licence review also contained an assessment of compliance with Commission Implementing Decision (EU 2017/302) of 15 February 2017 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for the intensive rearing of poultry or pigs (CID IRPP) to allow incorporation of the requirements of this CID in the revised licence.

There were two submissions received in relation to the application and these were considered by the Board at PD stage.

Consideration of the Objection

The Technical Committee (TC), comprising of Linda Dalton-O'Regan (Chair) and Éilis Linehan of the Office of Environmental Sustainability (OES), 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 and the documents associated with the industrial emissions licence application.

This report considers one first party objection dated 05 August 2025. The objection raised is summarised below. However, the original objection should be referred to for greater detail and further expansion of particular points.

First Party Objection

The licensee has made one main point of objection which relates to control measures to minimise ammonia emissions to air specified in Condition 6 of the Proposed Determination (PD).

A. Condition 6. Control and Monitoring

The licensee objects to Condition 6.21, which requires the licensee to use one or a combination of applicable techniques listed in BAT 30 of CID IRPP to reduce ammonia emissions to air from each pig house. This condition specifies the use of frequent slurry removal to external storage for houses 1, 2, and 4-19, and the use of slurry cooling for new houses 20, 21, 22 and 23. The licensee states that this condition is contrary to what was proposed in the licence application.

The licensee requests that Condition 6.21 be revised to:

- a) detail that frequent slurry removal is applicable to all pig houses on-site, and
- b) provide the discretion for the licensee to implement a slurry cooling system either in lieu of, or in addition to, frequent slurry removal where the licensee feels it may be operationally or economically advantageous.

It is stated in the objection that the above "is in keeping with the modelling reports submitted and Agency guidance".

As detailed in the objection, during the construction of new pig houses 20-23, the plumbing and pipe network required to facilitate slurry cooling was installed at the base of the tanks under each house as it is not practical to retrofit this infrastructure after the concrete tank bases have been poured. However, a significant amount of additional infrastructure is required to fully implement the slurry cooling system including above ground plumbing and heat exchange equipment, which is not yet installed. The plumbing and pipe network was installed as a contingency to facilitate slurry cooling at a later date if it is determined to be a necessary emissions abatement technique.

Technical Committee's Evaluation:

The TC acknowledges that according to the CID IRPP, in order to reduce ammonia emissions to air from each pig house, BAT is to use one or a combination of techniques listed in BAT 3 and one or a combination of techniques listed in BAT 30. The TC notes that, in order to comply with BAT 3 and 30 requirements, the licensee proposed three techniques in the documentation submitted as part of the licence review application, received 15 November 2023, including:

- a) utilisation of slurry cooling with heat recovery, as per BAT 30(b), in shallow under-house slurry tanks in the four new pig houses (Houses 20, 21, 22, and 23).
- b) frequent removal of slurry, as per BAT 30(a)(1), from all pig houses and transfer to an off-site anaerobic digester. Slurry removal would be sufficiently frequent such that slurry depth does not exceed 800 mm.
- c) reduced crude protein content in feed, in combination with multiphase feeding, to reduce the total nitrogen excreted, and consequently ammonia emissions, in accordance with BAT 3.

The Ammonia Impact Assessment (AIA) prepared by the licensee, received on 15 November 2023, incorporated all three of the above mitigation measures to reduce ammonia emissions.

The TC acknowledges that, following a request for further information issued by the Agency on 31 January 2024, an updated AIA was received on 31 May 2024. As part of the updated AIA, the licensee removed the proposal to use slurry cooling at new pig houses 20-23 in the modelling assessment, implementing only techniques (b) and (c) above. One reference remained in the updated AIA to slurry cooling, but the objection states that "This statement is relevant to an older draft of the AIA, when slurry cooling was being considered".

The TC acknowledges that the updated AIA was completed in line with the Agency's *'Licence Application Instruction Note 1 (IN1), Assessment of the impact of ammonia and nitrogen on Natura 2000 sites from intensive agriculture installations'* (Version 2, 2023). Modelling results complied with evaluation criteria specified in IN1 at sensitive receptors modelled at Natura 2000 sites.

The TC notes that while Condition 6.21.3.2 of the PD requires slurry cooling at pig house numbers 20-23, Condition 6.21.3.3 of the PD states that “The technique or combination of techniques listed, in Condition 6.21.3.2 of this licence can be varied, with the approval of the Agency, subject to no net increase in ammonia emissions from the installation”. Thus flexibility around the technique to be applied was envisaged as part of the PD.

The TC notes that the Inspector’s Report (IR) states that, following implementation of all three techniques, (a) to (c) above, ammonia emissions from the installation would be approximately 18 tonnes per annum (p.a.).

The TC has considered the impact of removing the requirement to utilise slurry cooling in pig houses 20-23. The existing installation emits approximately 31 tonnes of ammonia p.a. Following implementation of frequent slurry removal in all pig houses in combination with nutritional management to reduce ammonia emissions, the installation will emit approximately 21 tonnes of ammonia p.a., demonstrating that a net reduction in ammonia emissions from the installation will be achieved through the application of these mitigation techniques. This meets the requirements of BAT and is in accordance with Agency guidance IN1.

In the interest of clarity, and following examination of the objection and associated application documents, the TC recommends amending Condition 6.21 as following:

- a) to require frequent slurry removal for all pig houses on-site, and
- b) to specify that the licensee may use a slurry cooling system to reduce ammonia emissions at pig houses 20, 21, 22 and 23.

Having reviewed references to slurry cooling throughout the PD, the TC also recommends the following:

- a) updating Condition 6.1 to detail that the test programme for a slurry cooling system with heat recovery installed in Houses 20, 21, 22 and 23 must be completed within three months of date of commencement of the operation of the slurry cooling system,
- b) amending Schedule A.2 to detail that frequent slurry removal is applicable to all pig houses on-site,
- c) amending Schedule B.1 to detail that emission limit values (ELVs) in *Table B1-1* apply to both old and new pig houses (Houses 1, 2, and 4 to 23), and that the lower ELVs specified for Houses 20 to 23 are only applicable following implementation of a slurry cooling system,
- d) amending Schedule C.1.2 to detail that measurement of control parameters listed for Houses 20, 21, 22 and 23 are only applicable following implementation of a slurry cooling system,
- e) amending the ‘Decision and Reasons for Decision’ to remove reference to slurry cooling.

In addition, the TC recommends the following correction of a clerical error:

- a) removing a minor typographical error from the 'Decision and Reasons for Decision', i.e., an out of place question mark.

Reason for Decision:

The TC has reached its conclusion on the basis of the following considerations:

- a) Proposed ammonia reduction techniques in the updated AIA, dated 31 May 2024, comply with both BAT 30 and BAT 3 requirements.
- b) Following implementation of frequent slurry removal in all pig houses, in combination with nutritional management to reduce ammonia emissions, a net reduction in ammonia emissions from the installation will be achieved as required in Agency guidance (from approximately 31 tonnes p.a. for the existing installation to approximately 21 tonnes p.a. for the proposed installation).
- c) A slurry cooling system may be implemented at Houses 20, 21, 22 and 23 at a future date to further reduce ammonia emissions from the installation.

Recommendation:

Amend Condition 6.1 and 6.1.1 as follows:

6.1 Test programme

Animal house numbers specified below are as per the drawing titled "Carhue Piggeries Ltd. General Arrangement" received by the Agency as part of the application on 31 May 2024. The licensee must prepare a test programme for the slurry cooling with heat recovery system installed in the new animal housing (in pig houses 20, 21, 22, and 23) to control emissions to atmosphere.

6.1.1 The test programme must be completed **within three months of date of commencement of the operation of the slurry cooling system**~~within six months of the date of grant of this licence.~~

Amend Condition 6.21.2.2 as follows:

6.21.2.2 The licensee must ensure that animal housing is constructed to use the following technique in **all pig houses**~~Houses 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19~~ on-site, to reduce ammonia emissions:

- (a) a vacuum system for frequent slurry removal to external storage.

Amend Condition 6.21.3 as follows:

6.21.3 Slurry cooling

6.21.3.1 Animal house numbers specified in this licence are as per the drawing titled "Carhue Piggeries Ltd. General Arrangement" received by the Agency as part of the application on 31 May 2024.

6.21.3.2 The licensee ~~may~~**must** use the following technique, in pig house numbers 20, 21, 22, and 23, to reduce ammonia emissions:

(a) slurry cooling.

6.21.3.3 The technique or combination of techniques listed, in Condition 6.21.3.2 of this licence can be varied, with the approval of the Agency, subject to no net increase in ammonia emissions from the installation.

6.21.3.4 **Following implementation of a slurry cooling system, S**~~slurry,~~
~~in all slurry tanks,~~ must be cooled to 15 °C or lower.

6.21.3.5 **Following implementation of a slurry cooling system, T**~~the~~
licensee must measure slurry temperature at an adequate number of locations, such as to demonstrate that slurry is being cooled in each slurry storage tanks,
as per the requirements of Condition 6.21.3.4 of this licence.

6.21.3.6 Heat must be recovered from the slurry cooling process and reused on-site.

Amend Schedule A.2 Animal Numbers per Housing Type at the Installation as follows:

Table A.2-1

Animal House Numbers/Reference <small>Note 1</small>	Housing Type	Animal Class	Animal Numbers <small>Note 2</small>
Houses 20, 21, 22, and 23	Shallow pit with frequent slurry removal Slurry cooling	Dry sows Farrowing sows Weaners Production pigs	480 240 3,910 4,980
Houses 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19	Deep pit with frequent slurry removal	Dry sows Farrowing sows Weaners Production pigs	750 280 3,090 4,310

Note 1: Animal House numbers/references as per drawing titled "Carhue Piggeries Ltd. General Arrangement" received by the Agency as part of the application on 31 May 2024.

Note 2: Total animal numbers can be varied, with the approval of the Agency, subject to no net increase in odour or ammonia emissions from the installation.

Amend Schedule B.1 Emissions to Air as follows:

Table B.1-1 Note 1

Source of Emissions:	Pig houses 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19, 20, 21, 22 and 23 <small>Note 2</small>
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Parameter	Source of Emissions	Emission Limit Note 3	Monitoring Frequency	Monitoring/ Analysis Method/ Technique
Ammonia (as NH ₃)	Houses containing mating/gestating sows	1.6 kgNH ₃ /animal place/year	Annually	Refer to BAT 25
	Houses containing farrowing sows (including piglets)	3.2 kgNH ₃ /animal place/year		
	Houses containing weaners	0.3 kgNH ₃ /animal place/year		
	Houses containing production pigs	1.5 kgNH ₃ /animal place/year		
Odour		N/A	Annually	Refer to BAT 26
Dust		N/A	Annually	Refer to BAT 27

Note 1: Table B.1-1 does not apply to Pig Houses 20, 21, 22, and 23 if a slurry cooling system is implemented and utilised at these pig houses.

Note 2: Animal House numbers/references as per drawing titled "Carhue Piggeries Ltd. General Arrangement" received by the Agency as part of the application on 31 May 2024.

Note 3: The limits listed can be varied, with the approval of the Agency, subject to no net increase in ammonia emissions from the installation.

Table B.1-2 Note 1

Source of Emissions:		Pig houses 20, 21, 22, and 23 Note 2		
Parameter	Source of Emissions	Emission Limit Note 3	Monitoring Frequency	Monitoring/ Analysis Method/ Technique
Ammonia (as NH ₃)	Houses containing mating/gestating sows	1.3 kgNH ₃ /animal place/year	Annually	Refer to BAT 25
	Houses containing farrowing sows (including piglets)	2.6 kgNH ₃ /animal place/year		
	Houses containing weaners	0.2 kgNH ₃ /animal place/year		
	Houses containing production pigs	1.2 kgNH ₃ /animal place/year		
Odour		N/A	Annually	Refer to BAT 26
Dust		N/A	Annually	Refer to BAT 27

Note 1: Table B.1-2 is only applicable if a slurry cooling system is implemented and utilised at Pig Houses 20, 21, 22, and 23.		
Note 2: Animal House numbers/references as per drawing titled "Carhue Piggeries Ltd. General Arrangement" received by the Agency as part of the application on 31 May 2024.		
Note 3: The limits listed can be varied, with the approval of the Agency, subject to no net increase in ammonia emissions from the installation.		
<u>Amend Schedule C.1.2 Control of the Slurry Cooling System to read as follows:</u>		
<i>Table C.1-2 Note 1</i>		
Description of point of measurement:		Animal houses 20, 21, 22, and 23 ^{Note 2}
Control Parameter	Analysis Frequency	Key Equipment
Slurry temperature	Continuously	Temperature probe
Slurry depth	Weekly	Depth meter
Other ^{Note 3}	As approved by the Agency	As approved by the Agency
Note 1: Control measures listed are only applicable if a slurry cooling system is implemented and utilised at Pig Houses 20, 21, 22, and 23.		
Note 2: Animal house numbers as per drawing titled "Carhue Piggeries Ltd. General Arrangement" received by the Agency as part of the application on 31 May 2024.		
Note 3: Additional parameters as established following completion of the test programme required under Condition 6.1 of this licence.		

Environmental Impact Assessment Directive – Reasoned Conclusion Update

The TC has reviewed the assessment in the Inspector's Report and, taking into account the objection, and the recommendations proposed by the TC, the TC considers that the potential significant direct and indirect effects of the activity have been identified, described and assessed in an appropriate manner as respects the matters that come within the functions of the Agency, and as required by Section 83(2A) of the Environmental Protection Agency Act 1992, as amended (hereafter referred to as the EPA Act).

It is considered that the monitoring, mitigation and preventative measures proposed in the IR, and as detailed in this TC report, will enable the activity to operate without causing environmental pollution, subject to compliance with the licence conditions included in the PD, with the inclusion of the amendments proposed in this report.

However, the TC is of the opinion that the below reason stated in the Proposed Determination should be amended to reflect the recommended changes set out in the objection received. The TC recommend the amendment of the following reason:

- a) Emissions to air will be mitigated through inclusion of abatement (including the use of low protein feed, slurry cooling, frequent slurry removal to an anaerobic digester); imposing emission limit values to comply with the CID; and implementing monitoring, maintenance and control measures.

<u>Amend 'Decision & Reasons for the Decision' of Licence to read as follows:</u>
Having assessed those potential effects, the Agency has concluded as follows:

- Emissions to air will be mitigated through inclusion of abatement (including the use of low protein feed, **and implementation of best available technique(s) to reduce ammonia emissions to air from each pig house**~~slurry cooling, frequent slurry removal to an anaerobic digester~~); imposing emission limit values to comply with the CID; and implementing monitoring, maintenance and control measures,
- Noise emissions will be mitigated through imposing daytime, evening-time and night time noise limits at noise sensitive locations, and implementing monitoring, maintenance and control measures, and
- Accidental leakages or spills will be mitigated through inspection and maintenance of bunds and tanks, and accident and emergency requirements specified in the RD.

Appropriate Assessment – Technical Committee Review

The TC has reviewed the Inspector's Appropriate Assessment in the Inspector's Report and, taking into account the objection received, and the recommendations proposed by the TC, the TC is of the opinion that the AA documented in the IR dated 09 June 2025 provides an adequate examination and evaluation of the effects of the activity on the European Sites concerned, Courtmacsherry Estuary SAC (001230), Courtmacsherry Bay SPA (004219), Clonakilty Bay SAC (000091), Clonakilty Bay SPA (004081), Seven Heads SPA (004191), Galley Head to Duneen Point SPA (004190), Kilkeran Lake and Castlefreke Dunes SAC (001061), and Old Head of Kinsale SPA (004021), in the light of their conservation objectives.

However, the TC is not satisfied that the reasons stated in the Proposed Determination are still appropriate and recommend the amendment of the following reason:

- a) The licensee has proposed a number of mitigation measures which comply with BAT to minimise emissions of ammonia and therefore, nitrogen deposition at the designated sites. This includes a commitment to use a low protein feed and multiphase diets, frequent slurry removal, and a slurry cooling system in the new buildings.

Amend 'Decision & Reasons for the Decision' of Licence to read as follows:

A Natura Impact Statement was received by the Agency on 15 November 2023 and updated on 31 May 2024. The Agency has completed the Appropriate Assessment of potential impacts on these sites and has made certain, based on best scientific knowledge in the field and in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, pursuant to Article 6(3) of the Habitats Directive, that the activities, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site, in particular at Courtmacsherry Estuary SAC (001230), Courtmacsherry Bay SPA (004219), Clonakilty Bay SAC (000091), Clonakilty Bay SPA (004081), Seven Heads SPA (004191), Galley Head to Duneen Point SPA (004190), Kilkeran Lake and Castlefreke Dunes SAC (001061), and Old Head of Kinsale SPA (004021), having regard to their conservation objectives and will not affect the preservation of these sites at favourable conservation

status if carried out in accordance with this licence and the conditions attached hereto for the following reasons:

- The installation is not located within a European site.
- The closest European site is approximately 1.3 km away.
- It is proposed that storm water run-off from the roof and paved areas will be directed into local watercourses. There will be no other direct discharge to surface waters or groundwater within the installation boundary.
- The storm water collection system includes a silt trap on all storm water lines prior to discharge of the storm water from the site.
- The risk of surface water or groundwater contamination because of accidental emissions during washing activities, or from spillage from the pig slurry tanks, is minimal, given the surface water pathway distance between the activity and a European site (approximately 2 km).
- Waste generated on-site will be handled and stored in a manner which will ensure there is no risk to European sites and will only be sent to appropriately authorised facilities.
- It is proposed that slurry will be exported to a nearby anaerobic digester, with the resulting digestate applied to farmlands in accordance with the Nitrates Regulations. The licence, if granted, relates to the site of the activity for which the licence application is made, i.e., the rearing of pigs within the installation boundary, and does not extend to the off-site anaerobic digester or lands beyond the installation boundary on which organic fertiliser may be used. Activities which can take place within European sites are restricted by legislation. All persons must obtain the written consent from the relevant Minister before performing particular operations on, or affecting, particular habitats where they occur on lands or waters within the SACs and SPAs.
- The closest European site is approximately 1.3 km away from the installation boundary (Courtmacsherry Estuary SAC and Courtmacsherry Bay SPA) and is considered to be outside of the zone of influence of noise emissions arising at the installation.
- The installation is in a rural area where the predominant farming activities involve the rearing of livestock. There are no other licensed intensive agricultural installations within a 5 km radius of the installation. There are two other licensed installations within a 5 km radius of the installation, a slaughterhouse and an anaerobic digester. These installations are each required to operate in accordance with the conditions of an EPA licence.
- The licence review is for the re-development of parts of the site. The upgrade of this site and reviewed licence will lead to improved environmental standards and efficiencies.

- The licensee has proposed a number of mitigation measures which comply with BAT to minimise emissions of ammonia and therefore, nitrogen deposition at the designated sites. This includes a commitment to use a low protein feed and multiphase diets, **and to implement best available technique(s) to reduce ammonia emissions to air from each pig house**~~frequent slurry removal, and a slurry cooling system in the new buildings.~~
- Air emissions were modelled by the licensee (as part of a NIS requested by the Agency) and by the Agency, with more refined input data. The modelling concluded that process emissions from the proposed pig numbers at the installation will not contribute significantly to ammonia levels and nitrogen deposition² at the European Sites.
- Regard has been had to the EPA's Licence Application Instruction Note 1 (IN1) *Assessing the Impact of Ammonia Emissions and Nitrogen Deposition from Intensive Agriculture Installations on European Sites* (Version 3, September 2024) in addition to the online screening tool SCAIL Agriculture as part of this Appropriate Assessment. The Agency is satisfied that no reasonable scientific doubt remains as to the absence of adverse effects on the integrity of those European Sites at Courtmacsherry Estuary SAC (001230), Courtmacsherry Bay SPA (004219), Clonakilty Bay SAC (000091), Clonakilty Bay SPA (004081), Seven Heads SPA (004191), Galley Head to Duneen Point SPA (004190), Kilkeran Lake and Castlefreke Dunes SAC (001061), and Old Head of Kinsale SPA (004021).

Overall Recommendation

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

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

Signed



Linda Dalton-O'Regan
for and on behalf of the Technical Committee