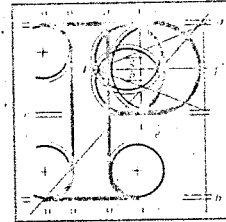


Our Case Number: ABP-318802-24

Planning Authority Reference Number:



An
Coimisiún
Pleanála

Dr. Gordon Reid
Bracken
Boardee
Carrigaline
Co. Cork

Date: 20 November 2025

Re: Proposed development of a resource recovery centre (including waste-to-energy facility)
in Ringaskiddy, County Cork.

Dear Sir / Madam,

An Coimisiún Pleanála has received your recent submission in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter. Please accept this letter as a receipt for the fee of €50 that you have paid.

The Commission will revert to you in due course with regard to the matter.

Please be advised that copies of all submissions / observations received in relation to the application will be made available for public inspection at the offices of the local authority and at the offices of An Coimisiún Pleanála when they have been processed by the Commission.

More detailed information in relation to strategic infrastructure development can be viewed on the Commission's website: www.pleanala.ie.

If you have any queries in the meantime please contact the undersigned officer of the Commission. Please quote the above mentioned An Coimisiún Pleanála reference number in any correspondence or telephone contact with the Commission.

Yours faithfully,

Kevin McGettigan

Kevin McGettigan
Executive Officer
Direct Line: 01-8737263

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To:

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Observation on SID application – case reference PA04.318802, Ringaskiddy, Co Cork.
Proposed development of a waste incinerator by Indaver NV, t/a Indaver Ireland.

Submitted by Dr Gordon Reid, Bracken, Boardee, Carrigaline, Co. Cork
17th November, 2025

Dear Inspector

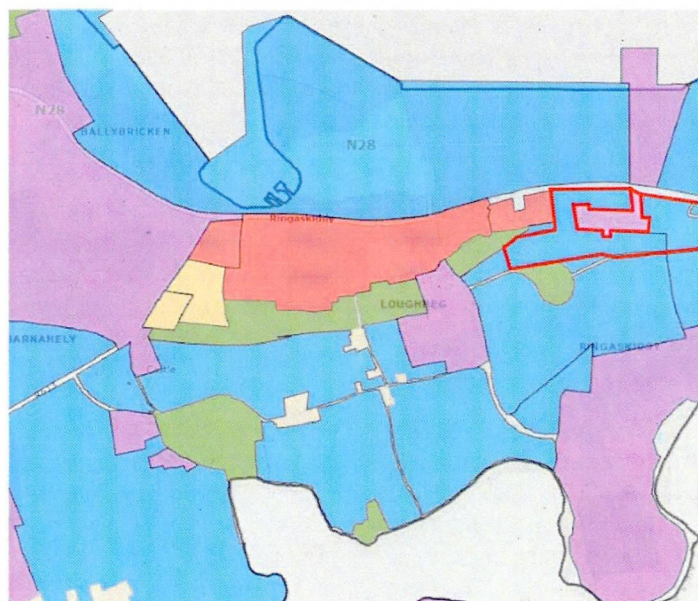
I wish to submit an observation on the above application. I would like to make three points: firstly, the zoning and the way it is presented in the Planning Report of the application; secondly, the misleading statements that are made in the Non-Technical Summary, and its use of inappropriate technical language whose meaning a non-specialist readership would not know; and thirdly, the lack of time for public participation in the decision on such a major project with such a huge volume of application documents.

1. The zoning and how it is presented in the application

In the Planning Report, pages 8-9, the zoning of the site is presented, with a map. The wording is this: ‘As illustrated in Figure 1, the site is predominantly zoned RY-I-15 and part zoned RY-I-09. The zoning objectives are as follows...’. It then continues by listing the zoning objectives: in brief, RY-I-15 is industrial, and RY-I-09 is mostly educational, with a possibility of office use by a company already established in Ringaskiddy. The zoning objectives for R-I-09 are virtually identical to those of RY-I-16, the land where UCC’s Beaufort Building stands (the home of MaREI, whose full name is now the ‘Research Ireland Centre for Energy, Climate and Marine’).

The following image shows page 8 from the Planning Report, with the map and the words quoted above.

2.2 Zoning

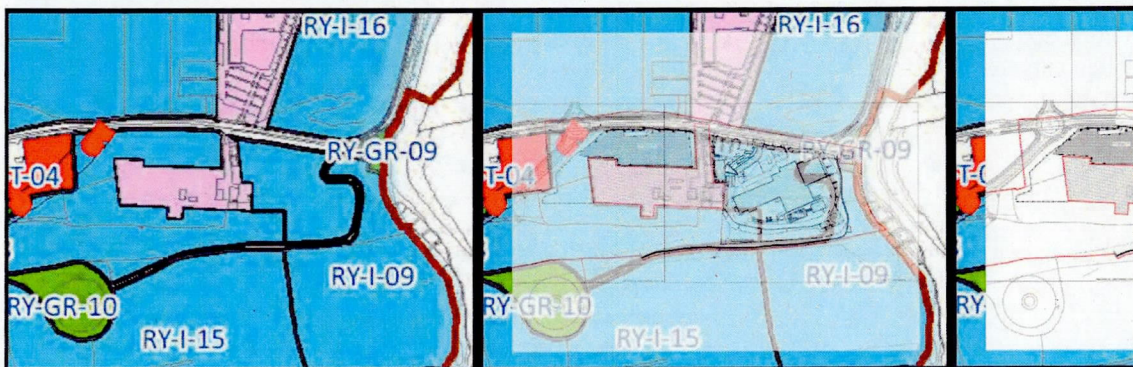


The site for the proposed incinerator is thus presented as 'predominantly' industrial, and 'part' educational. *This presentation has the potential to seriously mislead any reader. In truth, the piece of land on which the proposed incinerator would be built is not predominantly zoned as industrial: it is almost entirely in the part zoned for educational use.*

This is made clear by an excellent composite map created by my daughter, Catriona Gannon-Reid, which is shown below.

Composite map of Indaver site showing that the incinerator would be almost land zoned for education (RY-I-09).

by Catriona Gannon-Reid



The left and right panels above are unaltered and drawn from the County Development Plan and the current planning application respectively. The centre panel is an accurately scaled superimposition (by reference to land features such as the Hammond Lane Metals site, the road, and the Martello Tower) of the left and right panel. It is clear that, apart from a very small corner of the building, the incinerator site is entirely contained within the education zone, RY-I-09.

It will be noted from the left panel that the map presented in the County Development Plan has labels on each of the zones, so it is obvious which part of the land is RY-I-09 and which is RY-I-15. In contrast, the map presented by Indaver completely lacks labels, so that it is impossible to understand from their map which part of the land is in which zone. One must go to the County Development Plan, as I had to do, to find that out.

I think it is reasonable to expect an applicant to give fair and accurate information to An Coimisiun Pleanála, and that in a section on zoning, the information and map should actually clarify the zoning. But in this case, the map fails to show which zone is which, and *the information given in the application actually gives an impression that is the opposite of the truth. The site of the proposed incinerator is not 'predominantly zoned RY-I-15', it is almost entirely in the educational zone RY-I-09.*

A second point relating to the zoning of the land is that only a part of RY-I-09 is owned by Indaver, and the larger part of it would remain unused, and in other ownership, if the incinerator were built. But if the incinerator is occupying that part of RY-I-09 owned by Indaver, one wonders how the rest of RY-I-09 could possibly be used in conformity with the zoning objectives. If the incinerator were built alongside the existing Hammond Lane Metals, there would be no road access to the upper part of RY-I-09 between them. *It is hard to see how the zoning objectives for the remaining upper part of RY-I-09 could then*

be achieved. With the lower part completely occupied by an incinerator and the upper part unusable because there is no road access, the zoning objective of RY-I-09 would have been completely defeated.

2. Inaccuracy and inadequacy of the Non-Technical Summary

(a) In relation to the zoning of the site

The other part of the planning application where accurate information on the zoning is essential is in the Non-Technical Summary (NTS). While the Planning Report is probably to be read primarily by planning specialists, the NTS is explicitly for the benefit of members of the local and wider community, to explain to them what is intended by Indaver. Many members of the public would not have read the County Development Plan, and may not be familiar with which zone is which, and the zoning objectives for each. They depend on the applicant to tell them, clearly and honestly.

In this regard, the NTS can only be described as quite shocking. I will list the most obvious issues with it.

1. On page 18, in the 'Planning' section, the document states that '*The Ringaskiddy Resource Recovery Centre is proposed for an appropriately zoned area* designated in the Cork County Development Plan 2022-2028 as *an Industrial Area*'. In view of what I have written above, *this can only be described as misleading.*

2. Unlike the Planning Report, the NTS does not say anything misleading about the educational zoning of RY-I-09, *simply because it does not say anything about educational zoning at all!* It presents the zoning of the entire area as industrial, which is misleading. Unfortunately, the fact that the two educational zones, RY-I-09 and RY-I-16, are still in blue with the 'I' code makes it easier to pretend that these are simply industrial zones like any of the other blue zones on the County Development Plan map, and the NTS makes full use of that loophole.

3. On page 23, in the section on Land Use and Future Trends, it is stated that '*As the site of the proposed facility is zoned industrial, it is probable that it would be developed for pharmaceutical or chemical manufacturing, or port use, if the proposed development does not proceed.*' Under the current zoning in the county Development Plan, *this is absolutely untrue!* If the proposed development does not proceed, then, according to the current zoning, the site on which the incinerator would have stood would instead be used to extend the existing educational campus, or possibly for offices for one of the existing operators in Ringaskiddy.

(b) Technical language

The NTS is intended to explain to non-specialist readers what is proposed. It should be understandable to a reader without a technical background in any of the relevant fields. In this regard, it is concerning that language is used that a lay reader would be unlikely to understand without at least consulting a dictionary or searching online, and in some cases asking a professional in the field (e.g. 'recovery code' and 'iterative stack design'). A non-exhaustive list of examples would include (I will use italics for the technical terms):

Page 13, in the section on residues from the plant: '*...cleaning residues will be suitable, after solidification, for use to backfill the void space in an underground salt mine, which can receive a recovery code*'. I do not know what a recovery code is – what kind of 'code' is being referred to? Who would grant it? Is this 'recovery' in terms of the EU waste hierarchy, which some but not all non-technical readers might know about? If it is recovery in this sense, how can that term be used to describe burial in a salt mine? The NTS makes no attempt to explain what a 'recovery code' means.

A later section on page 13, on the other hand, assumes that readers are flood management specialists. We are told that there is a risk of '*pluvial flooding*', leaving those readers who are not professionals in that field wondering what on earth '*pluvial*' flooding might be.

In the next sentence, we are told of flood protection levels of '4.55 m above *Ordnance Datum*' (which appears on page 35 simply as 'OD'). Most readers will have to look that up, and will still be left wondering whether OD is Ordnance Datum, and what Ordnance Datum might actually look like at Ringaskiddy, which is some distance from Malin Head. They might look up tide tables to try to figure it out, and then become seriously alarmed, because only last week as I write, we had a 4.6 metre tide at Ringaskiddy (it was on 6th November 2025), which was a perfectly normal full moon spring tide. Nothing in the NTS would reassure them that Chart Datum (on which tide measurements are based) is not the same as Ordnance Datum (at Malin Head), or give them any idea what the difference between the two is. In short, the NTS tells the ordinary reader nothing on this point. I suspect most people would instead want to know how much the site is to be raised relative to its present level.

The term '*freeboard*' is used soon after on the same page, and once again, a non-specialist reader would not know what this means, though they might better understand an explanation in terms of a safety margin.

On page 27, we are told that '*the stack height has been designed in an iterative fashion*'. Those who have recently completed Leaving Certificate Maths may be able to explain to less fortunate family members what iteration is, but even they might be at a loss to describe what this iterative design might entail, because it is not made clear at all. I have often used iterative methods in my work, and even I don't know what its application to stack design might involve.

On page 36, the term '*hydrocarbon interceptor*' is used twice, with no explanation. I can only presume from context that this is not something from the Star Wars films, which is what it sounds like, but I am just as much in the dark about its actual meaning as the ordinary residents around the Harbour are likely to be.

I have not tried to be exhaustive here, as time precludes a full reading of the NTS (I will return to the time issue later).

(c) Misleading statements: erosion and greenhouse gases

On page 14, we are told that there is a 'low risk that the amenity walkway and viewing platform could be impacted in 40 years' time', which is not consistent with what Chapter 13 of the EIS and its associated Appendices and planning drawings show. On the contrary, even the rather optimistic linear prediction of 0.5 m per year erosion would predict that the walkway will be gone within the initial 40-year period (10 years' planning and construction, 30 years' operation; see drawing C-000-060 'Estimated cliff retreat lines'). I am not at all an expert on erosion prediction, but does not require expertise to be able to recognise when a statement in the NTS is inconsistent with a drawing somewhere else in the application. ***It is not appropriate to describe something that the EIS clearly predicts will happen as a 'low risk'.***

There are several mentions in the NTS of greenhouse gas emissions from the proposed incinerator, all implying that they will be reduced. For example, on page 28, it is stated that 'the export of surplus electricity to the national grid (18.5MW) will have a direct benefit in terms of preventing greenhouse gas emissions from the production of that electricity in fossil fuel based power stations. Some of the energy generated is renewable and will displace energy currently generated via fossil fuels.' Further on, on the same page, the NTS states that '...the proposed development will have in effect net positive GHG emissions...displacement of fossil-fuel burning power stations'. (Note that 'GHG' is not defined in the NTS; perhaps most people really do know what that means.) I presume that 'net positive GHG emissions' is meant to mean a good thing – not that greenhouse gas emissions will increase, which is what 'net positive GHG emissions' actually says. However, when we consider the evidence on CO₂

emissions from waste incineration, it appears that emissions actually would increase if we obtain electricity from the incinerator rather than a conventional power station. The IPCC¹ estimates that a minimum of 0.35 tonnes or a maximum of around 0.8 tonnes fossil CO₂ is generated per tonne of municipal waste (depending on CO₂ output per tonne of waste, and the biogenic fraction in waste), meaning that the 240,000 tonnes burned annually is expected to emit between 84,000 and 193,000 tonnes of CO₂ to export 18.5 MW of electricity (162,000 MWh per year). This is between 520 and 1190 kg CO₂ per MWh of electricity. The lower of these values is distinctly more than a gas-fired power station, and the higher is more even than burning coal, in agreement with a BBC investigation of these matters in the UK². These are very basic calculations from a lay scientist, but even on that basis it would seem that *the data do not support the unambiguous assertions in the NTS that CO₂ emissions will be reduced by generating electricity from waste instead of in fossil fuel-fired power stations.* The Coimisiún might wish to consider whether these unambiguous statements of ‘a direct benefit in terms of preventing greenhouse gas emissions’ are misleading.

(d) Misleading statements: health effects of incineration

I come now to something that *is* within my direct area of expertise, the health effects of incineration, beginning with the statement on page 22 of the NTS that ‘*An assessment was also undertaken of the potential effects of emissions from the proposed development on human health. The assessment concluded that no significant effects on human health are predicted from the proposed facility. The evidence is now very strong that well-run, modern incinerators have no adverse effect on the health of the communities around them.*’

During the oral hearing on this application in 2016, I was able to comment on the medical literature review in Chapter 6 (which previously appeared as a standalone section, Appendix 6.2), and to question its author. One issue that I had to raise repeatedly with him was the misleading way that he presented articles that actually showed adverse effects of incineration on human health, as if they proved it was harmless; or else used specious arguments to suggest that they are irrelevant. Unfortunately the judgement of Chapter 6 that there are no human health risks from incineration has been adopted uncritically in the NTS, making the latter document also misleading.

One example of both points mentioned above is the treatment of the health impact assessment in an article by Forastiere et al³, which is described in Chapter 6 of the 2025 EIS as ‘somewhat historical’; this is misleading, because the article was based on incinerators operating under current emissions limits. Chapter 6 quotes the article as saying that the health effects of incineration are ‘moderate’ when compared with other pollution sources like traffic emissions, without clarifying what was meant by ‘moderate’ in the article; the impression given is a little like describing it as ‘mostly harmless’. In truth, the Forastiere et al paper concluded that around 4000 years of life would be lost in a population of around 1.2 million living near incinerators in England, which, in the immediate environs of Cork Harbour, would correspond to around 100 years of life lost. This, the main conclusion of the article relating to incineration, is simply omitted in Chapter 6; in 2016 I pointed out to its author how misleading this was, and it is disappointing to see it being presented in the same way in 2025. Using only the word ‘moderate’ without making clear what Forastiere et al meant by it gives an impression that incineration does hardly any harm, a conclusion adopted and strengthened in the NTS which tells us of ‘no significant effect’ and ‘no adverse effect’.

I consider it very unfortunate that the author of the NTS has taken on trust the misleading reassurances provided by the author of Chapter 6 of the EIS. One hundred years of life lost as a

1 ‘Good Practice Guidelines and Uncertainty Management in National Greenhouse Gas Inventories’, pp. 455-468.

Available from https://www.ipcc-nggip.iges.or.jp/public/gp/bgp/5_3_Waste_Incineration.pdf

2 ‘Burning rubbish now UK’s dirtiest form of power’, 15th October 2024. Available from <https://www.bbc.com/news/articles/cp3wxgje5pwo>

3 ‘Health impact assessment of waste management facilities in three European countries’, Forastiere et al, *Environmental Health* 10:53 (2011), available from <http://www.ehjournal.net/content/10/1/53>

result of an incinerator operating within the current EU Directive cannot be described as 'no significant effect' or 'no adverse effect'. The non-medical population around Cork Harbour deserve a more honest treatment of the health issues than they get in the NTS, or indeed in Chapter 6 of the EIS.

3. Inadequate time to assess the 'Significant Further Information', which is actually in volume terms equivalent to a completely new application.

I was asked by CHASE to review the dioxin modelling submitted as part of the 2025 Further Information, and submitted two reports, one on the modelling in the EIS and another, jointly with Dr Dara Fitzpatrick of UCC, on modelling in the NIS. Both reports required the review and analysis of other parts of the EIS and NIS on dioxin sampling and air quality, as well as comparison with the previous (2016) EIS and NIS, and similar documentation from earlier applications (by the same applicant at the same site) in 2001 and 2008. It will be evident from the level of analysis in these reports that they took a considerable time. I would have wanted to at least properly *read* the other parts of the EIS and NIS, and to give thorough attention to the NTS beyond the cursory reading that enabled the comments above.

In particular, I would have wanted to carry out a detailed and thorough scrutiny of Chapter 6 on human health, especially the literature review; but in the event, I was able only to skim through it and to notice the disappointing example referred to in 2(c) above. This is particularly unfortunate, as I examined the equivalent section of the 2016 EIS thoroughly, and questioned its author on it in detail at the Oral Hearing, which I believe was helpful to the Inspector on that occasion in exposing its weaknesses and misleading nature.

I am aware, though I am no lawyer, that there is a legal obligation under EU Directives, which I believe lies both on the Coimisiún and the applicant, and ultimately on the State, to ensure adequate public participation in environmental decisions. I have to say that the short time allowed for public consultation on this occasion has been dreadfully inadequate. It is instructive to compare the time allowed for public consultation (6 weeks, from 6th October till 17th November 2025) with that allowed to Indaver to assemble the further information (over a year from first notification on 4th June 2024 till the initial deadline of 30th June 2025), after which they were allowed an *extension* of a further two months until 29th August 2025. The total time allowed for public consultation was thus *less than the extension granted to Indaver*.

I had thought that perhaps the Coimisiún was constrained in law to a 6 week consultation period, and *was absolutely astonished to find from the correspondence that it was the applicant who decided the consultation period*. I'm afraid that I needed confirmation of that from CHASE's solicitor, Mr. Noonan, because I wondered whether I was misunderstanding what the correspondence seemed to say. There was no misunderstanding. I wonder whether the relevant EU Directives really intended that it would be the *applicant* who would set the period allowed for public consultation.

Given this short consultation period, I have not been able to do full justice to the enormous task that would have been necessary to scrutinise the entire application. Even the basic task of reporting on the dioxin modelling, sampling and air quality has required many nights of working until 2 - 4 am and has supplanted everything else I had been trying to do during that time. The health effects of this should not be underestimated. I am far from being the only one in that situation among CHASE's expert group; and we are better placed than most, through experience and familiarity, to tackle the task of examining the huge mass of documents. Ordinary lay people would have no chance.

In short, the obligation laid by the EU Directives on all parties, and on the State, to enable full public participation in this enormously important environmental decision is very far from having been fulfilled.

As a consequence, unless the Commission is minded to refuse permission on the basis of the already available evidence – and I would suggest, on the basis of my own evidence and that of others also in the CHASE submission, that there are already ample grounds for refusal – I would suggest that convening an oral hearing may be the only remaining option that could allow the obligation of public participation to be fulfilled. This is not only because of the time issue just mentioned. In view of the nature of the evidence provided in my and others' reports, which you will be able to read in the CHASE submission, I consider it essential that lay members of the community and CHASE experts be afforded the opportunity to question the applicant's representatives and consultants, in order to assist the Inspector and Commission to reach a well-founded judgement. I think that is the intention of the public consultation that the EU Directives prescribe must happen.

Yours faithfully,

Gordon Reid BSc (Hons), PhD

Senior Lecturer (retired), Department of Physiology, University College Cork

Author of the reports in the CHASE submission on Appendix 6.3 and related sections of the EIS, and co-author with Dr Dara Fitzpatrick of the report on Appendix 15 and related sections of the NIS.