

OBJECTION

**by Zero Waste Alliance Ireland to the
Application to An Bord Pleanála by Indaver
Ireland Limited for Planning Permission for a
Proposed Resource Recovery Centre at
Ringaskiddy, County Cork
*An Bord Pleanála Reference PL04.PA0045***

**Túr na Gaoithe
Philipstown HBX
Castleblaney Road
Dundalk
County Louth**

09 March 2016

ZERO WASTE ALLIANCE IRELAND

Towards Sustainable Resource Management

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Philipstown HBX
Castleblaney Road
Dundalk
County Louth**

09 March 2016

The Secretary,
An Bord Pleanála,
64 Marlborough Street,
Dublin 1.

Dear Sir,

**Objection by Zero Waste Alliance Ireland
to the Application to An Bord Pleanála by Indaver Ireland Limited for
Planning Permission for a Proposed Resource Recovery Centre at
Ringaskiddy, County Cork**

An Bord Pleanála Reference PL04.PA0045

Zero Waste Alliance Ireland (ZWA) is an environmental NGO, primarily concerned with the way in which society deals with discarded materials and goods, whether from domestic, commercial or industrial sources, how these become “waste”, and how such “waste” may be prevented by re-design along ecological principles and by more thorough adherence to the waste hierarchy.

We are concerned that the proposed development of an incineration facility at Ringaskiddy, described in the planning application as a Resource Recovery Centre, is an unsuitable, unnecessary and inappropriate development for the planned site, and we are attaching a submission which sets out our objections to the development.

The principal reasons for our objection to the development are:

- burning additional quantities of waste would lead to an increase in emissions to the atmosphere, which are likely to exacerbate the existing air quality problems in the local area, would be contrary to Ireland’s obligations under the Stockholm Convention, and contrary to Ireland’s international obligation to reduce greenhouse gas emissions in order to mitigate climate change;
- the applicant appears not to have taken into account the cumulative impacts of emissions to the atmosphere from the proposed incinerator together with other industrial sources of atmospheric contamination in the Cork Harbour area;


- the applicant appears not to have taken fully into account the adverse health effects of these emissions, and particularly the effects of PM₁₀ and PM_{2.5} particulates;
- the applicant has failed to justify a need for the proposed incinerator, and has not comprehensively examined alternative processes for dealing with the planned intake of wastes, such as waste elimination, segregation at source, waste reduction, avoiding the use of hazardous substances, etc.;
- alternative sites have not been examined in a logically appropriate manner;
- the proposed waste intake would contain significant quantities of organic substances which could be more appropriately dealt with by composting or anaerobic digestion; and,
- the proposed facility is not a “recovery” facility (i.e., a designated waste-to-energy plant, with a high rate of energy recovery), but is a “disposal” facility (i.e., an incinerator for the partial destruction of waste, with limited recovery of the embodied energy in the wastes); and we submit that this would be a retrograde step in Ireland’s overall waste management policy, and should not be granted planning permission by the Board.

Please consider the above brief points in this covering letter as part of our overall objection to the above mentioned planning application; and we trust that you will find our submission relevant.

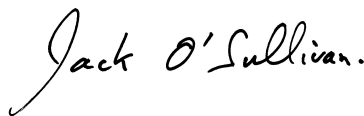
In making this objection we are supported by the **Green Economy Foundation**, an environmental non-government organisation working on a variety of issues, from farming to economics, biodiversity and climate change.

We enclose a cheque for €100.00 in payment of the statutory fee for making an objection (€50.00) and for requesting an oral hearing (€50.00).

Yours sincerely,



Ollan Herr



Jack O'Sullivan

On behalf of Zero Waste Alliance Ireland.

ZERO WASTE ALLIANCE IRELAND

Towards Sustainable Resource Management

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1. INTRODUCTION AND PRELIMINARY COMMENTS

On 13 January 2016, Indaver Ireland Limited applied to An Bord Pleanála for planning permission for a “waste to energy facility”, to be located on a site near Ringaskiddy, County Cork. The application was made under Section 37E of Planning & Development Act, 2000, as amended by the Planning and Development (Strategic Infrastructure) Act, 2006, which allows a developer to make an application directly to An Bord Pleanála, thereby by-passing the relevant Planning Authority, which in this case is Cork County Council.

The application is the third attempt by Indaver Ireland Ltd to obtain planning permission for a “waste to energy facility” at the same location (see Section 3.8 below); and, given the widespread and strong opposition to the previous planning applications, and the previous decision by An Bord Pleanála to refuse planning permission, it would appear that a more rational decision by the applicant would be to abandon further attempts to use the subject site, and to either select a more suitable site or to develop improved methods for re-use and recycling of the materials which the applicant proposes to incinerate.

While we must accept that the applicant’s business planning is a matter for Indaver Ireland and the parent company in Belgium (Indaver NV), it must surely appear to any independent observer that a plan to construct yet another incinerator in the face of world-wide concern about greenhouse gas emissions and climate change, together with increasing emphasis on recycling and re-use, must be somewhat misguided. The application also appears to be at variance with Indaver’s own statement on the company’s website which proclaims that ...

“Indaver offers high-quality, sustainable and cost-efficient Total Waste Management solutions to large scale industry and public authorities. For each type of waste we offer a tailored solution thanks to our 25 years of expertise and our wide range of in-house facilities and processing possibilities with third parties”.

The Indaver Group's website also describes the company as a "Partner to the Circular Economy", and states that ...

"Waste management companies have an active role to play in this process, particularly in the transition to a circular economy";

and, in the company's vision statement:

"The global population is growing at lightning speed and unsustainable pressure is being put on raw materials and energy, which are growing scarcer by the second. We have to start using materials and energy more intelligently. Indaver is helping to work towards the transition from a linear economy, in which raw materials are only used once, to a circular economy in which the emphasis lies on sustainability through added value.

In a circular economy materials that are recovered from waste streams are reintroduced as high-quality raw materials for their original purpose, or to make new products. So there is no need to use any new raw materials. Waste management therefore plays a crucial role in closing loops.

Indaver wants to bring waste back into the materials chain as much as possible. We break waste down into its original components and then recover them. This is how we obtain materials for industrial processes that do not differ in quality from the original product whatsoever. We ensure that hazardous or harmful substances stay out of the food and materials chain".

These are statements which Zero Waste Alliance Ireland could fully support, as they are very close to our own policy which we describe in Section 2 below. For these reasons we find it all the more difficult to understand why Indaver Ireland is yet again making a third planning application for an incinerator, and therefore we consider it essential and consistent with EU policy and our own policy to oppose the application.

2. ZERO WASTE ALLIANCE IRELAND (ZWA)

At this point we consider that it is appropriate to mention the background to our submission, especially the policy and strategy of ZWA.

Zero Waste Alliance Ireland (ZWA) was established in May 1999 as an alliance of local citizens' groups from many locations in Ireland who were concerned about the management of landfills and the quantities of waste being sent to landfill for disposal at that time, and the alliance subsequently developed into a national confederation of local residents' groups, supported by some of Ireland's principal environmental organisations, with the objectives of:

- i) sharing information, ideas and contacts,
- ii) finding and recommending environmentally sustainable and practical solutions to the growing domestic, municipal, industrial and agricultural waste management crisis in Ireland;
- iii) lobbying Government and local authorities to implement environmentally sustainable waste management practices, including clean production, elimination of toxic substances from products, re-use, recycling, segregation of discarded materials at source, and other beneficial practices;
- iv) lobbying Government to follow the best international practice (for example, the policies and practices of countries such as New Zealand, Australia and many other countries, regions and cities which have adopted the policy of Zero Waste) and EU recommendations by introducing fiscal and economic measures designed to penalise the manufacturers of products which cannot be re-used, recycled or composted at the end of their useful lives, and to financially support companies making products which can be re-used, recycled or are made from recycled materials;
- v) raising public awareness about the long-term damaging human and animal health and economic consequences of landfilling and of the destruction of materials by incineration; and,
- vi) maintaining contact and exchanging information with similar national networks in other countries, and with international zero waste organisations.

ZWAI initially had nearly 50 affiliated organisations and groups throughout Ireland, including all the principal environmental NGOs (An Taisce, Voice, Friends of the Earth Ireland, Earthwatch Leitrim, Earthwatch Sligo, Friends of the Irish Environment, Cork Harbour for a Safe Environment (CHASE), Kinsale Environment Watch, the Irish Doctors Environmental Association (IDEA)), and more than 40 active local groups developing and implementing new ways to address Ireland's waste problems.

In Galway, the efforts of the **ZWAI** group "Galway for a Safe Environment" had a major impact on the waste management policy of the City Council, resulting in a pilot-scale recycling initiative which spread city-wide with significant benefits.

2.1 Our Basic Principles

Human communities must behave like natural ones, living comfortably within the natural flow of energy from the sun and plants, producing no wastes which cannot be recycled back into the earth's systems, and guided by new economic values which are in harmony with personal and ecological values.

In nature, the waste products of every living organism serve as raw materials to be transformed by other living creatures, or benefit the planet in other ways.

Instead of organising systems that efficiently dispose of or recycle our waste, we need to design systems of production that have little or no waste to begin with.

There are no technical barriers to achieving a “zero waste society”, only our habits, our greed as a society, and the current economic structures and policies which have led to the present environmental, social and economic difficulties.

“Zero Waste” is a realistic whole-system approach to addressing the problem of society’s unsustainable resource flows – it encompasses waste elimination at source through product design and producer responsibility, together with waste reduction strategies further down the supply chain, such as cleaner production, product repairing, dismantling, recycling, re-use and composting.

2.2 What We are Doing

Zero Waste Alliance Ireland has prepared a detailed policy document on waste management, and we continue to lobby Government on the issue of sustainable resource management, and to express our concern at the failure to address Ireland’s waste problems at a fundamental level.

In recent years, as many older landfills were closed or became better managed (primarily as a consequence of the implementation of European Directives, Irish legislation transposing these Directives, the development of a waste licensing regime by the Environmental Protection Agency, and the establishment of the Office of Environmental Enforcement in 2003), the number of affiliated groups concerned about the adverse environmental and public health effects of landfills decreased considerably, and ZWAI has concentrated more on the objective of ensuring Ireland’s compliance with waste management policy, especially waste reduction and elimination, and the promotion of re-use, repair and recycling.

ZWAI strongly believes that Ireland, as an EU Member State, has a binding obligation under the Stockholm Convention to significantly reduce emissions of persistent organic pollutants (POPs). Merely holding our submissions at present levels, or preventing an increase in either toxicity or volume, is not an adequate response to the aims of the Stockholm Convention. Instead, Irish State organizations, including the Department of the Environment and the EPA, should implement policies aimed at ensuring very significant reductions in the emissions of POPs; and, in some situations, reducing such emissions to zero.

ZWAI further believes that Ireland should have a policy of not sending our wastes for further treatment or recycling to developing countries where local populations are being exposed to dioxins and other very toxic POPs. Relying on those particular countries’ infrastructure to achieve our “recycling” targets is not acceptable from a global ecological and societal perspective.

In recent years, Zero Waste Alliance Ireland has made the following submissions in response to public consultations:

- a) in September 2011, to the Department of the Environment, Community and Local Government, on waste policy;
- b) in September 2012, to the Environmental Protection Agency, on the Agency's draft National Implementation Plan (NIP) for the Stockholm Convention;
- c) in December 2013, to Dublin City Council Regional Waste Coordinator in response to a notice of intention to commence preparation of regional waste management plans;
- d) in January and February 2014, to the Department of the Environment, Community and Local Government, on proposals for the regulation of household waste collection and for dealing with used or end-of-life tyres;
- e) in January 2015, to the Eastern & Midlands Regional Waste Coordinator, Dublin, on the Eastern and Midlands Draft Regional Waste Management Plan 2015 – 2021;
- f) in March 2015, to the Environmental Protection Agency in response to the Agency's public consultation on the National Inspection Plan 2015-2017 for Domestic Wastewater Treatment Systems; and,
- g) in April 2015, to Irish Water, on the Draft Water Services Strategic Plan.

It will be clear that ZWAI is primarily concerned with the very serious issue of discarded materials and goods, whether from domestic, commercial or industrial sources, how these become "waste", and how such "waste" may be prevented by re-design along ecological principles and by more thorough adherence to the waste hierarchy.

ZWAI is represented on the Government's Waste Forum, is a member of the Irish Environmental Network and the Environmental Pillar, and is funded by the Department of the Environment, Community and Local Government, through IEN.

ZWAI maintains working relationships with Zero Waste New Zealand Trust, with the Grass Roots Recycling Network in the United States, the Community Resources Network Scotland (CRNS), with the Global Anti-Incinerator Alliance (Global Alliance for Incinerator Alternatives), and with other international environmental organisations.

In making this objection to the above mentioned planning application by Indaver, we are supported by the **Green Economy Foundation**, an environmental non-government organisation working on a variety of issues, from farming to economics, biodiversity and climate change.

Zero Waste Alliance Ireland is a registered charity, and our directors are Ollan Herr, Seán Cronin, Richard Auler and Jack O'Sullivan.

3. REASONS FOR OBJECTING TO THE APPLICATION

3.1 Inappropriate Naming of the Proposed Incinerator: Not Recovery, but Disposal

As stated in the planning application, the proposed development will consist principally of a waste-to-energy facility (waste incinerator with energy recovery) for the treatment of up to 240,000 tonnes per annum of residual, household, commercial and industrial non-hazardous and hazardous waste which is currently landfilled or exported. Of the 240,000 tonnes of waste, up to 24,000 tonnes per annum of hazardous waste will be treated at the facility.¹

In chapter 2 of the EIS (Policy and Planning Framework), the proposed development is described as “*providing thermal recovery capacity for non-hazardous residual waste (300,000 tpa), industrial waste and hazardous waste (50,000 tpa).*” While the figures stated in the planning application and the applicant’s EIS are different, we would not regard this as significant, but this inconsistency must be considered as an indication of uncertainty or lack of care in the preparation of the planning application and the EIS.

The proposed facility cannot be described as a “Resource Recovery Centre” as it appears that the only material resource to be recovered would be some relatively small quantities of ferrous and non-ferrous metals extracted from the incinerator bottom ash (EIS, chapter 4, section 4.13.1, page 36).

From a materials recovery and energy perspective, it would be much more advantageous and technically easier to extract these metals from the waste stream before incineration; from which we can logically argue that incineration is an unnecessary step in the metals recovery process.

The bottom ash, after extraction of metals, will have no further use, and would have to be sent to landfill, unless an ash recovery facility were to be constructed in Ireland (EIS, chapter 4, section 4.13.2, page 37).

The proposed development will create a further and more difficult disposal problem in that the boiler ash and flue gas cleaning residues amounting to approximately 5-7% by weight of the waste input (EIS sections 4.13.3 and 4.13.4, page 37), and generated at a rate of approximately 8 tonnes per hour (EIS, Table 4.6, page 38), will have to be sent to a landfill for hazardous waste or to salt mines in Germany.

The applicant is incorrect in stating that “*the heat produced by the combustion process will be recovered*”, as this statement suggests that the entire calorific value of the materials to be burned will be recovered in the form of usable heat energy. Figure 4.16 in the applicant’s EIS shows that only 21 MW of electricity will be generated as a result of burning materials with a calorific value of

¹ Completed Planning Application Form, dated 11 January 2015 in error (should be dated January 2016); answer to question 9.

80 MW, i.e., 25% efficiency, and this degree of “efficiency” is noted in section 4.13.7 of the EIS.

It is therefore our submission that the proposed incinerator will recover only a fraction of the embodied energy in these materials, that the proposal does not meet the R1 energy efficiency criteria for energy recovery, and that the process is inherently inefficient, and much less efficient than re-use or recycling of the same materials.

The Waste Framework Directive 2008 distinguishes between disposal and recovery operations, based on the efficiency of energy recovery. Those classified as recovery activities are placed firmly higher on the waste hierarchy, and above the level of disposal.

Therefore, notwithstanding the limited non-sustainable energy production, the proposed facility is not a ‘recovery’ operation but rather a ‘disposal’ operation within the context of the Waste Framework Directive 2008. Furthermore, hazardous waste incinerators are classified as disposal operations regardless of energy recovery. Therefore the proposal does not support the current waste management strategy in so far as the strategy requires wastes to be dealt with as far as possible by methods at the top of the Waste Management Hierarchy.

We also wish to draw the attention of the Board to the applicant’s statement that *“the principal function of the technology is to reduce the volume of waste going to landfill rather than to generate electricity efficiently”* (EIS section 4.13.7). It should be clear to the Board that the principal function of the proposed development is to dispose of waste, and that “recovery” is merely an incidental or secondary purpose of the facility.

When making a case to the Board for the designation of the proposed development as strategic infrastructure under Section 37E of Planning & Development Act, 2000, as amended by the Planning and Development (Strategic Infrastructure) Act, 2006, the applicant stated that the development *“constitutes a waste disposal installation for the incineration of hazardous waste and the incineration of non-hazardous waste with an annual intake capacity of greater than 100,000 tonnes”*. The applicant’s EIS supports this assertion.

It is therefore our submission that the proposed development must be considered by the Board as “disposal”, and therefore at the lowest level in the EU Waste Hierarchy; and we would add that any such proposal must be accompanied by robust and detailed arguments showing why the waste streams cannot be wholly or partially eliminated, prevented, or segregated at source; and why some or all of the materials to be burned cannot be re-used, prepared for re-use, recycled, or (in the case of biodegradable materials) composted or anaerobically digested. Neither the planning application nor the applicant’s EIS addresses these key requirements.

3.2 Failure by the Applicant to Provide Details of the Types and Quantities of the Wastes to be Burned

Neither the applicant's planning application nor the EIS give adequate information about the types and quantities of wastes to be burned in the proposed incinerator. Only the most general descriptions are provided, under the terms "aqueous wastes", "mixed solvents", "leachate from landfill sites", "municipal solid wastes", etc.

However, enough information is given to show that the aqueous wastes include mixed solvents and/or inks, contaminated water from fire fighting and clean up operations, storm water and leachate from landfill sites, etc.; while the solvents to be burned will consist of solvents with a high water content. Other wastes briefly mentioned include paint tins, rags and wipes contaminated with paints or oils, contaminated personal protective equipment and clothing, filters, absorbents, redundant over-the-counter medical preparations, medicines, and raw materials such as sugars, starches and gelatine tablet coatings.

No data are provided for the quantities of these wastes, and it therefore appears very doubtful that those wastes alone would be sufficient to make up the indicated 240,000 tonnes annual throughput of the proposed incinerator. Some of the listed types of waste, e.g., sugars, starches, gelatine, would be more appropriately treated by conversion to usable materials, or composted or digested to utilise the organic compounds which they contain. Burning these wastes would, we submit, be in contravention of Ireland's commitment to reduce greenhouse gas emissions.

3.3 Failure by the Applicant to Justify a Need for the Proposed Incinerator at the Present Time

There is little or no information in the planning application to justify a need for the proposed incinerator at Ringaskiddy, even though Chapter 2 of the EIS deals exhaustively with the current waste management policy and situation in Ireland. The need for the proposed development is based on having an alternative to landfill and to the export of waste by providing an "*indigenous thermal recovery infrastructure to replace landfill*" (EIS, section 2.5.3.2).

While it must be accepted that appropriate waste management facilities should be located in Ireland, it is our submission that neither landfilling nor incineration are the answer to Ireland's current high levels of export of recyclable materials and non-recyclable wastes. Instead, we submit that the emphasis should be on much higher levels of support for waste elimination and reduction, and for the provision of infrastructure and facilities for recycling and re-use.

In this connection we would draw the Board's attention to the conclusions and recommendations of the Board's Senior Planning Inspector following the oral hearing of the appeal (ABP reference **PL04.131196**) against the decision by Cork County Council in May 2003 to refuse planning permission (planning reference S/01/6215), in which he stated that:

“2. It is considered that the proposed development of a hazardous waste incinerator facility, prior to any progress on the achievement of the waste prevention targets set out as a priority and first step in the National Hazardous Waste Management Plan, would be premature and, because of its scale, which is considerably in excess of the scale envisaged for thermal treatment in that Plan, would tend to inhibit the achievement of the Prevention Programme as provided for in the Plan. The proposed development would therefore be contrary to national policy in relation to hazardous waste management and disposal” (Inspector’s Report, page 72 of 377).

In section 3.1 above, we referred to the problems of dealing with the bottom ash, which would have to be sent to landfill, unless an ash recovery facility were to be constructed in Ireland, and the boiler ash and flue gas cleaning residues which would have to be exported to salt mines in Germany, given that there is no landfill for hazardous waste in Ireland. In the same report as that from which we have quoted above (ABP reference **PL04.131196**), the Board’s Senior Planning Inspector also concluded that:

“3. It is considered that the development of a hazardous waste incinerator facility, in the absence of the concurrent or prior provision of hazardous landfill capacity, would be premature, and would conflict, in a material way, with the provisions of the National Hazardous Waste Management Plan, in that no provision would be made for hazardous waste generated by the proposed development” (Inspector’s Report, page 72 of 377).

It is our submission that the above two conclusions by the Board’s Senior Planning Inspector are equally relevant to the current planning application, and that they support our position that a need for the proposed incinerator has not been justified.

3.4 Conflict with European Policy to Develop a “Circular Economy”

In the introductory section 1 above, we referred to the Indaver Group’s vision statement about the circular economy and the aim of recovering materials from waste streams to reintroduce them as high-quality raw materials for their original purpose, or to make new products. The outcome of the process is the removal of a need to use new raw materials, and role of waste management is to change the current linear system in which raw materials are extracted, turned into products and then discarded, to be landfilled or burned.

Europe’s new “*Circular Economy Package*” has been adopted by the European Commission to stimulate Europe’s transition towards a circular economy, with the aims of improving competitiveness, fostering sustainable economic growth and generating new jobs. The proposed actions will contribute to “closing the loop” of product lifecycles through greater recycling and re-use, and will bring benefits for both the environment and the economy. The plans will extract the

maximum value and use from all raw materials, products and waste, fostering energy savings and reducing greenhouse gas emissions.

The European Commission's proposals cover the full lifecycle from production and consumption to waste management and the market for secondary raw materials. This vital transition is being supported financially by the European structural and investment funds (ESIF), €650 million from Horizon 2020 (the EU funding programme for research and innovation), €5.5 billion from structural funds for waste management, and by investments in the circular economy at national level.

Making the transition to a circular economy means changing the way we design, produce and use materials, objects, equipment, machinery and everything else that is part of modern society. All of these products can be, and are being, re-designed to keep remanufacturing, refurbishing and recycling in mind; so that nothing is wasted, and every man-made material, metal or biodegradable part is up-cycled.

By using only renewable energy, society and industry will not have to damage or degrade the environment for hard-to-find, finite and expensive resources; and such a move to a circular economy would save Europe's businesses €600 billion, and would significantly reduce greenhouse gas emissions.

This policy and action programme is mentioned very briefly in Sections 2.2.1.1 and 2.2.1.3 in Chapter 2 of the applicant's EIS, together with a quotation from the European Commission's Roadmap for a Resource Efficient Europe; and the EIS states that:

"The proposed Ringaskiddy Resource Recovery Centre will contribute towards the reduction of landfill within Ireland, treating non-recyclable waste while supporting high quality recycling".

It is our submission that the proposed development, which we have shown in section 3.1 above, cannot by any stretch of the imagination be described as a "Resource Recovery Centre", and will not support recycling, as suggested by the applicant. It is not consistent with the European Commission's proposals for a Circular Economy, and its existence may put at risk the probability of other projects in Ireland being funded by the European Commission under the ESIF, Horizon 2020 and Structural Fund schemes mentioned briefly above.

3.5 Alternative Methods for Dealing with the Proposed Waste Streams have not been Adequately Examined

Chapter 3 of the applicant's EIS addresses alternatives, but must be considered deficient in that:

- i) consideration of alternative methods for dealing with the intended waste streams to be burned in the incinerator was confined to:

- export for energy recovery;
 - gasification or pyrolysis;
 - different types of incineration technology, e.g., use of a rotary kiln, fluidised bed combustion; and,
 - incineration without heat recovery; and,
- ii) no consideration was given to alternative technologies for recycling, preparing for re-use or other methods of dealing with the wastes which would be burned in the proposed incinerator.

It is our submission that a careful and case-by-case analysis of the waste streams generated by the industries from which the proposed incinerator would, if permitted, source its raw material would show significant opportunities for waste elimination, waste reduction and avoidance of toxic or hazardous materials in manufacturing or production. There are many examples world-wide to show that the replacement of hazardous by non-hazardous materials in production systems has led not only to an elimination of hazardous wastes, but has given the companies which have carried out these changes large savings in operating costs.

It is therefore our submission that, in the absence of any real, convincing or robust examination of alternatives, the Board should refuse planning permission.

3.6 Alternative Locations Not Adequately Examined or Considered

Chapter 3 of the applicant's EIS addresses alternatives, but must be considered deficient in that the search for other, or alternative, locations was confined to County Cork, which (given the spread of industrial waste generation sites throughout Ireland) we submit was a very restrictive approach, and is based solely on the applicant's business and economic considerations.

The site selection process was not based on the WHO or Basel Convention methodical 4 step process similar to 'threshold analysis' with exclusionary criteria, followed by comparative analysis of a number of sites using appropriate criteria. It is clear that only one site was planned from the start, based on the applicant's ownership of the land; and therefore the "site selection process" was restricted to the task of verifying the suitability of that single site using a number of criteria devised by the applicant. This included carefully selected criteria from the Guidelines (that suited the case and the exclusion of others that did not) , as well as adding others which are not in the WHO Guidelines.

It is our submission that alternative locations were not properly considered, that site ownership was the key determining factor in the site selection process, and that no regard was had to the WHO and Basel guidelines.

3.7 Unsuitability of the Proposed Site

3.7.1 Proximity of the National Maritime College of Ireland and the IMERC Campus

The National Maritime College of Ireland (NMCI, established in 2004, now with 450 students) is located on the northern side of the principal and only access road to the proposed incinerator site (road number L2545); it is immediately opposite the incinerator site, is less than 100 metres from the incinerator site, and includes a playing pitch for outdoor sports. The NMCI is one of a number of teaching and research buildings being constructed as the Irish Maritime and Energy Research Cluster (IMERC) campus, including the Beaufort Research Laboratory which was completed in 2015. IMERC is supported by University College Cork, by the Cork Institute of Technology and by the Irish Naval Service.

Locating an incinerator adjacent to this vital and expanding research and training facility is completely contrary to the Government's policy to develop IMERC as a "flagship" project in the areas of marine research, including renewable energy from marine sources. Under certain weather conditions, persons engaged in physical activity on the College's sports ground would be exposed to emissions from the incinerator stack.

3.7.2 The Proposed Development will Occupy an Area of Natural Vegetation with Amenity Value

The lands to the immediate south and west of the proposed Indaver site are in agricultural use; and the site itself is currently covered in scrub with some pockets of trees and open grass areas. The applicant's landscape design report states that the "*site has an unkempt character*", but in our opinion this statement completely fails to recognise the intrinsic value of the site as a small area of natural vegetation – in fact the only area of land which has been left to nature in the vicinity of Ringaskiddy. It could be a nature park.

As a consequence of the industrialisation of large areas of land around Ringaskiddy, there are now no areas of land which are neither agricultural nor industrial; i.e., no "wilderness" areas, no amenity areas, no place for wildlife, etc. Good planning demands that such areas should be set aside and maintained free from development, and the proposed site is an ideal candidate for this use.

3.7.3 Importance of the Ringaskiddy Martello Tower; its Setting and the Public Path

The Ringaskiddy Martello Tower is a Recorded Monument (ref. no. C 0087053); it is an important historic element in the area and is located on the top of the ridgeline south-west of the proposed development. It is legally protected under the National Monuments Acts, 1930-2004, and under part IV of the Planning and Development Act, 2000 - 2006). The Martello Tower is located only 25m from the boundary of the Indaver site, and the proposed process building would be located to the north-east of the Tower, at approximately 70m distance.

This Martello Tower is unique in Ireland as it has a moat. The original draw-bridge was replaced by a footbridge (in disrepair currently). The Martello Tower was built to protect Spike Island and Haulbowline, and it formed part of a series of fortifications to protect Cork Harbour and the military installations within the Harbour. It is the largest of the five towers in Cork Harbour, which further accentuated this function.

Ringaskiddy hill is the attendant ground for the Martello Tower, as it provides the setting for the tower to provide panoramic views of Cork Harbour. The landscape and the topography provide the setting for the original function of the tower. It was possible for the tower to perform its function only because of its location on an elevated position (see section 3.7.4 below).

The function of a protected structure is of significant importance, and sometimes protection of the structural integrity of a structure alone and without protection of its setting may lead to loss of the very reason why the structure was built. In this regard, section 13.8 3 of the Guidelines, which refers to effect on the special interest of a protected structure is of clear relevance.

The proposed development will have negative impacts on the built and cultural heritage arising from the works to be done and the imposition of such a large-scale set of buildings on the curtilage and surrounding site. The impact on Martello Tower and its curtilage could arise in two ways.

1. The first is impact on structural integrity of the tower by the works to be completed, e.g., noise , vibration, excavations, etc.;
2. The second impact on the tower would be in terms of impact on its setting, curtilage, and attendant grounds. In this regard its original function and its special interest today as an amenity, with the walking path being used, are very relevant.

We ask that investigations be carried out along the line of the original path and that preservation should be by record. This was accepted by the DoEH&LG previously. The subsequently forged path connecting the tower to the beach is mainly used by walkers (and partly by farm machinery). Therefore its function is one of an amenity walk, as such different from the original function of supply of materials and manpower to the Tower.

The proposed relocation of this path to outside the processing area of the proposed development is not acceptable, as it would be located in an area subject to serious coastal erosion. This will make the survival of the path during the lifetime of the proposed development very dubious and the replacement amenity will be lost in time.

The section of the proposed path along the southern boundary is quite confined by the mounding to screen the process building. This would negatively impact on the amenity quality of the path and the walk and render it unused.

3.7.4 Size and Scale of the Proposed Development would be Visually Dominant, Intrusive and Unsuitable for the Planned Location, and would adversely affect Recreational Amenities

Ringaskiddy hill is at 43 metres OD, and the proposed development would create a second and taller large mass along the water's edge. Presentation of a higher mass of considerable size at this location would also subjugate the supremacy of Ringaskiddy Hill and the biggest Martello Tower in the harbour, not only in terms of topography and height but also in terms of uninterrupted views all around the harbour. In doing so, it will block the direct line of sight between Spike Island and the Martello Tower. – its *raison d'être*. This impact is significant in terms of built heritage and cultural heritage.

Due to the mass, scale and location of the proposed processing buildings, the impact on the setting of the Martello Tower would be significant, as there would be severance of the Martello Tower from the network of historic fortifications around the harbour which were designed and situated to provide protection for the harbour in an integrated and cohesive way.

This essential features of location on the highest points around the harbour offer uninterrupted and panoramic views over the harbour and direct visual contact with each other. The proposed development will provide a significant intrusion into this network and lead to loss of cohesion of the elements. The direct impact on the setting of the Martello Tower would be significantly negative.

There are various initiatives, and plans locally to enhance the amenity and recreational nature of the wider harbour area with particular emphasis now placed on Spike Island's historic relevance. These initiatives are based on the landscape, history, natural amenity value and built heritage qualities of the harbour as an economic and touristic resource.

The visual and heritage quality of the harbour as an economic resource is recognised in the Cork County Development Plan, CASP and a number of initiatives such as the Cork Harbour Integrated Management Strategy, Cork Harbour Forum, and an application for designation of the Harbour as a UNESCO world heritage site.

The existing industrial developments (apart from one large hilltop complex – Janssen's Bio Pharma unit, set back from the water's edge) do not intrude significantly into this visual context, because of their scale, and in particular their low height. Those developments situated at the water's edge are located away from the centre of the harbour, around inlets (such as Loughbeg and Monkstown Creek), or have sizeable site areas for provision of effective screening through landscaping.

In contrast, the proposed development would seriously intrude on the landscape, visual and historical context of the harbour, and would be contrary to the policies for protection and sustainable development of Cork Harbour. This application by nature of its size and scale, its visual dominance and negative

pollution impacts could cause an indirect negative economic impact and could jeopardise future recreational growth in the greater lower harbour area.

3.7.5 Proximity of Ringaskiddy Village

The centre of Ringaskiddy village is located approximately 800m to the west of the site of the proposed development, and the Ringaskiddy and District Residents Association has recently constructed a community children's playground on a site less than 800 metres from the proposed development site.

The applicant is incorrect in stating that *"the Ringaskiddy peninsula is industrial in character"*; in our opinion the Ringaskiddy area, despite the presence of several pharmaceutical plants and the Port of Cork terminal, is better described as a mixture of industrial, agricultural and residential areas, with the village of Ringaskiddy providing the essential social centre and focal point.

In this connection we would draw the Board's attention to the conclusions and recommendations of the Board's Senior Planning Inspector following the oral hearing of the appeal (ABP reference **PL04.131196**) against the decision by Cork County Council in May 2003 to refuse planning permission (planning reference S/01/6215), in which he stated that:

"10. The proposed development, because of its nature and function, its location in close proximity to high density housing development at Ringaskiddy, and the resultant noise and disturbance arising from its construction and operation, would be seriously injurious to residential amenity, and would be likely to depreciate the value of residential property. The proposed development would, therefore, be contrary to the proper planning and development of the area" (Inspector's Report, page 72 of 377).

3.7.6 Restricted Area of the Site

The site of the proposed development is quite restricted in terms of usable area. Due to its inability to be extended in the future (because of the road, seashore and hillside boundaries), it is not suitable for the provision of an integrated *national hazardous waste facility*. It is not centrally located, but is on a cul-de-sac at the seashore.

The preferred option as expressed in the environmental report of the proposed National Hazardous Waste Management Plan 2008-2012 is for provision of a centrally located integrated hazardous waste facility to include solvent recovery, co-incineration and hazardous waste landfill. The proposed development site is a significant distance from any central national location or class 1 landfill for bottom ash and fly ash, and it fails to meet the criteria needed to qualify as a solution to a *national hazardous waste facility*.

3.7.7 Flooding of the Site

Parts of the site are subject to frequent annual flooding along the roadside and near roadside sections (from hillside water flows), particularly the area where a waste transfer station may be located. The road serving the site is also liable to flooding, and the most recent flooding was in January 2016.

While the planning application states that the level of the proposed site, and part of the road, will be raised, it is our submission that not enough attention has been paid to flooding of the site. Near future sea level rise, and heavier rainfall events which will increase the flow of water from the nearby hillside, are likely to make flooding more frequent, with higher water levels.

The Flooding Guidelines recommend a sequential approach in areas subject to flooding giving priority to avoidance; and we suggest that the Board takes a similar view and refuses planning permission for the purpose requested.

3.8 Planning History

On 13 November, 2001, Indaver made its first application to Cork County Council for planning permission (planning register reference 01/6215) to construct a waste management facility consisting of a waste transfer station and other elements. Cork County Council decided to refuse permission on 27 May 2003. However, on appeal, on 15 January, 2004, An Bord Pleanála granted permission (under ref. no. PL04.131196) for a waste management facility comprising an incinerator and waste transfer station and recycling park.

On 28 November 2008, a second planning application was submitted directly to An Bord Pleanála (ref. no PL04.PA0010) for a waste-to-energy facility for hazardous and non-hazardous wastes and a transfer station; and on 9 June 2011, the Board decided to refuse permission for four reasons.

It is our submission that having failed on two previous occasions to obtain planning permission for an essentially similar development, the applicant should not be granted permission by the Board for the currently proposed incineration facility.

3.9 Dangers and Risks

The applicant has stated in the application that the proposed development is not an establishment for the purposes of the Major Accidents Directive or the Major Accident Regulations. While accepting that this statement might be technically correct, we would point out that the applicant has also stated that *“the operation of the waste-to-energy facility will involve hazards associated with the handling of combustible materials, chemicals and high-pressure steam”* (EIS, chapter 4, Section 4.17.2, page 46).

A Site Emergency Plan will be prepared prior to operational start-up (EIS, section 4.17.5), and this is a further clear indication that there are dangers and risks associated with the proposed incineration facility.

As if to emphasise the dangers associated with incineration, there was a very recent occurrence of an explosion and fire at a rotary kiln incinerator operated by Indaver at Antwerp. This incident happened on 26 February 2016, and is believed to be associated with a waste producer's road tanker. Images of the explosion and fire were captured on video by several "dash cameras" and are available on social internet sites, from which it can be seen that the incident was not a minor occurrence but a very significant event. However, all employees who were on-site at the time of the incident were evacuated quickly and safely, and (at the time of writing this submission) the incinerator is again in operation and the incident is being investigated by Belgium's Federal Service for Chemical Risk.

The incident illustrates the ever-present risk of fire or explosion at incineration facilities,; and we would point out that a very recent (2013) review of incidents at hazardous waste management facilities in Britain concluded that *"the hazardous waste treatment and storage sector has a history of serious accidents and incidents occurring over recent years"*. Not all of these incidents occurred at incineration facilities, but they indicate the difficulty of completely eliminating risk when handling dangerous substances. In fact, even non-hazardous substances, when present in the air as a flammable dust cloud, can give rise to major incidents.

In this connection we would draw the Board's attention to the conclusions and recommendations of the Board's Senior Planning Inspector following the oral hearing of the appeal (ABP reference **PL04.131196**) against the decision by Cork County Council in May 2003 to refuse planning permission (planning reference S/01/6215), in which he stated that:

"14 The Board is not satisfied, on the basis of the evidence submitted to it and heard at the oral hearing, that the proposed development would not pose significant risks to public safety in the event of major accident hazard, particularly in view of the proximity of the site to the National Maritime College, and to nearby Seveso II establishments, and having regard to the inadequacy of emergency infrastructure in the area and to the location of the site at the end of the peninsula, with limited road access" (Inspector's Report, page 74 of 377).

3.10 Conflict with the Aims of the Stockholm Convention

This application is in conflict with Ireland's obligations under the Stockholm Convention, which has been ratified and a National Implementation Plan put into force. A new international agreement has been in force since the 17th May 2004, aimed at eliminating twelve of the most toxic chemicals from the world's environment. Ireland ratified the Stockholm Convention on 29 June 2010.

These chemicals, referred to as Persistent Organic Pollutants (POPs) remain for long periods in the environment, bio-accumulate through the food chain and pose a risk of causing adverse effects to human health and the environment worldwide. The international community has therefore called for action to reduce and eliminate the production and release of these substances. To that end, internationally binding instruments have been negotiated and concluded. This international agreement is known as the Stockholm Convention.

The goal of this legally binding agreement is to avoid, minimise and where feasible eliminate emissions of POPs. The Convention requires Ireland to adopt methods and waste management strategies that will eventually eliminate and avoid emissions of two of these POPs, dioxins and furans.

New direction of the Stockholm Convention

Unlike previous international legal obligations, the Stockholm Convention places a requirement on all nations as follows;

- It requires a commitment by the participating nations to the goals of reduction and elimination of these chemical emissions where feasible;
- The Convention requires as a primary consideration, the adoption of strategies and methods that avoid the use of technologies that emit dioxins and furans;
- Unlike previous international agreements, the Stockholm Convention makes no allowance for “avoidable” sources or the permitting of any additional increase in the quantities of dioxins and furans emitted to the atmosphere; instead there are clear statements in the Convention requiring their further reduction and the adoption of alternative methods that eliminates or avoids these emissions;
- Best available techniques and practices are no longer confined solely to the consideration of incinerator filter technologies; the new emphasis is on consideration of methods and technologies that eliminate or avoid dioxin emissions as the primary goal; and,
- Most importantly, the Stockholm Convention requires the Irish Government to adopt clean technologies in preference to technologies such as incineration that would result in new and avoidable or increasing sources of dioxins.

The Convention’s initial statements may be summarised as follows:

- 1. It underlines the public health threat of POPs in the environment;*
- 2. It makes note of the health impacts on women and through them upon future generations; and,*
- 3. It notes the present threat to peoples in the Arctic ecosystem and the bio-magnification of POP’s in their traditional foods.*

Relevant excerpts of the convention need to be stated here in relation to the planned facility which will be a source of POPs (dioxins and furans) as well as CO₂.

Article 5: Measures to reduce or eliminate releases from unintentional production

*“Each party **shall** at a minimum take the following measures to reduce the total releases derived from anthropogenic sources (of Dioxins and Furans) with the goal of their continuing minimization and where feasible ultimate elimination”:*

- (c) Promote the development and, where it deems appropriate, require the use of substitute or modified processes to prevent the formation and release of dioxins and furans, taking into consideration the general guidance on prevention and release reduction measures;*
- (d) Parties shall promote the use of best environmental practice. When applying best available techniques and best environmental practices, Parties should take into consideration the general guidance on prevention and release reduction measures;*
- (f) (1) “Best Available techniques” means the most effective and advanced stage in the development of activities for release limitations designed to prevent dioxins and furans;*
 - (2) “Available” techniques mean the techniques that are accessible to the operator and that are developed on a scale that allows implementation in the relevant industrial sector under economically viable conditions, taking into consideration the costs and advantages...*

The above statements (c), (d), and (f) make the granting of planning permission for new dioxin emitters such as incineration, a breach of the Stockholm Convention whenever it can be demonstrated that an alternative process such as waste recycling or Zero Waste are available, feasible and economically more cost competitive. Before determining this planning application, the Board must therefore consider any alternative method or alternative technique aimed at avoiding dioxin emissions.

3.11 Conflict with the Urgent Need and Policy to Mitigate Climate Change by Reducing and Eventually Eliminating Greenhouse Gas Emissions

The applicant’s EIS states that the proposed development will generate 21 MW of electricity, of which 18.5 MW will be exported to the national grid. A portion of this electricity will be generated from the biodegradable fraction of industrial and municipal waste and is therefore considered to be energy from renewable sources. Waste is also described as an indigenous energy resource (EIS, section 2.3 Energy and Climate Change Policies).

The EIS also notes that the Renewable Energy Directive (2009/28/EC) seeks to promote the use of energy from renewable sources, and the Directive provides the following definition in Article 2:

“energy from renewable sources means energy from renewable non-fossil sources, namely wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogas” (EIS, section 2.3.1.1 Renewable Energy Directive)

The relevance of this definition to the proposed development is unclear, as the above definition does not include energy recovered from the incineration of waste.

The EIS also states that:

“the proposed Ringaskiddy Resource Recovery Centre would help to reduce greenhouse gas emissions from waste management by diverting biodegradable waste away from landfill, and recovering renewable energy from it” (EIS, Chapter 2, page 16, section 2.3.2.1).

While it is accepted that biodegradable waste should (and must) be diverted from landfills, it does not follow that the incineration of this waste and the recovery of some energy from the incineration process would help to reduce greenhouse gas emissions.

On the contrary, it is our submission that burning biodegradable wastes, even with some energy recovery, is simply a form of disposal, in contrast to anaerobic digestion or the alternative of composting (depending on the water content and composition of the wastes) which have the advantage of making use of the organic content of the waste. A further benefit of not incinerating biodegradable wastes is that improvements in soil stability, fertility and moisture retaining properties derived from the use of compost in agriculture must be considered as part of the assessment of the overall ‘best’ option for dealing with these wastes.

The relationship between waste management and climate change is more complex when a variety of wastes has to be considered. For example, source segregation of municipal solid wastes (MSW) followed by recycling (for paper, metals, textiles and plastics) and composting or anaerobic digestion (for biodegradable wastes) gives the lowest net flux of greenhouse gases, compared with all other options for the treatment of bulk MSW.

Comparisons with incineration are more difficult, and depend on whether the energy recovered displaces energy derived from fossil fuels, or displaces energy derived from other renewable sources. For example, if incineration is part of a combined heat and power (CHP) installation, and the energy replaces that from a fossil fuelled plant, the incineration process would yield a net benefit by reducing greenhouse gas emissions overall. However, energy recovery from incineration as electricity only would produce very little benefit, based on the

replacement of electricity and heat from an EU-average electricity generation plant fuel mix.

Given that Ireland is now generating significant amounts of electricity from wind, and has the potential to generate equally large amounts from solar photovoltaic, the replacement of this electricity by the estimated 18.5 MW exported to the national grid from the proposed incineration facility would be of no benefit, and would result in an increase in greenhouse gas emissions.

It is therefore our submission that the applicant's EIS is incorrect in stating that the proposed development will be beneficial as it will generate electricity from a renewable resources; in reality the situation is more complex; and, on the whole, the incinerator will be a net contributor to greenhouse gas emissions, and therefore in conflict with Ireland's international obligation to reduce such emissions.

3.12 Road Traffic

We would point out that the L2545 road, from Ringaskiddy village to the car park which is adjacent to the north-eastern corner of the proposed incinerator development, is designated in the County Development Plan as a scenic route (S54).

Taken in conjunction with the massive increase in traffic expected as a result of the permitted relocation of a large-scale container transit facility from Tivoli to Ringaskiddy by the Port of Cork (work is in progress at present), the proposed development will result in significant additional traffic to/from Carrigaline and Ringaskiddy.

There is existing serious traffic congestion at two key roundabouts on the N28 providing access to the site, and the proposed development would exacerbate traffic congestion on the N28 on Carrs Hill and the Shannonpark Roundabout. The configuration of the Shanbally village roundabout is very limiting, and any significant increase would reduce the capacity of this junction. Any additional traffic associated with the proposed development, particularly HGV traffic, would endanger public safety by reason of traffic hazard.

Cork County Council in association with the Transport Infrastructure Ireland (TII) (formerly the National Roads Authority (NRA)) have plans to construct a new N28 dual carriageway road from the Bloomfield Interchange, near Douglas, to Ringaskiddy; but there are no immediate plans or even a timeframe for the construction of this road. Therefore, to grant planning permission for the proposed development in the absence of definite and firm proposals for improvement and upgrading of the road infrastructure would be premature.

In this connection we would draw the Board's attention to the conclusions and recommendations of the Board's Senior Planning Inspector following the oral hearing of the appeal (ABP reference **PL04.131196**) against the decision by

Cork County Council in May 2003 to refuse planning permission (planning reference S/01/6215), in which he stated that:

- “11. Having regard to the location of the proposed development at the end of the peninsula of Ringaskiddy, with a single road access and no rail access, on the southern coast of the State, and to the scale of the development which is designed to source waste from all parts of the State, it is considered that the proposed development would involve excessive movement of vehicular traffic through urban areas, and hence would give rise to conditions that would be prejudicial to public safety and amenity. The proposed development would therefore be contrary to the proper planning and development of the area.*
- 12. The existing road infrastructure in the vicinity of the site, particularly along the N28 national primary route at Carr’s Hill, the Shannonpark and Shanbally roundabouts, and along the LP2545 local road within Ringaskiddy, is currently the subject of serious traffic congestion, and is inadequate to accommodate the extra volume of traffic and traffic movements that would be generated by the proposed development, both during construction and operational phases, particularly the significant H.G.V. content. It is considered that the proposed development would endanger public safety by reason of a serious traffic hazard and obstruction of road users.*
- 13. The proposed development would be premature by reference to the existing deficiencies in the road network serving the area of the proposed development, which it is not likely will be rectified within a reasonable period” (Inspector’s Report, pages 73 and 74 of 377).*

It is our submission that the Inspector’s conclusions apply equally to the present proposal, and they support our view that a decision to grant planning permission for the proposed development would be premature, given the deficiencies and traffic restrictions in the existing road network.

3.13 Lack of Community Support for the Project

One of the marked features of this proposed development is the widespread extent of community opposition to the project, ranging from environmental NGOs, residents groups, and others, since the project was first proposed in 2001.

At that time, some 14 to 15 years ago, there was very little recognition that communities have a right to engage in the planning process to the extent that their views mattered – whatever consultation took place was designed more to advance the project in question, to soften opposition, and to get the necessary consents in spite of local opposition. The context has now changed, in that organisations such as the National Economic and Social Council have stated very clearly that building societal acceptance is essential for energy infrastructure projects, based on a genuine and open participatory process.

The NESC report on Building Community Engagement and Social Support (July 2014) advocated an energy transition process that is intentional, participative and problem-solving, and the Green Paper on Energy Policy in Ireland recognised the importance of building societal acceptance in deploying renewable energy infrastructure.

Minister Alex White stated at the Renewable Energy Summit, in February 2015, that *“communities must be at the heart of the transition to a sustainable energy system”*; and the more recent White Paper on *“Ireland’s Transition to a Low Carbon Energy Future, 2015 to 2030”* (December 2015) affirms that:

“energy transition will require improved community engagement in policy making and planning”; and,

“citizens and communities will be active participants in the energy transition, with robust public and stakeholder engagement in energy policy, and effective community consultation on energy infrastructure developments”.

If we apply these policy statements to the area of waste management, and particularly to the infrastructure for dealing with waste, we arrive at the logical conclusion that community engagement and support are essential for this type of project. Communities will no longer tolerate planning decisions which may be technically or legally acceptable to the project promoter, but which go against the community’s wishes.

As the Board will also be aware, the Aarhus Convention guarantees three procedural rights – access to information, participation in decision-making and access to justice in environmental matters – which underpin the right of every person to live in an environment adequate for their health and well-being.

This is a dynamic international treaty with enormous potential to deliver environmental rights in practice; and, even though Ireland was the last Member State of the European Union to ratify it, the Convention is beginning to take effect, and we can see this (to some extent) in the changed attitude set out in the Energy White Paper mentioned above. These changed and improved attitudes to public participation are not yet fully accepted or widespread, but they are becoming increasingly important in planning; and it is our submission that the rights guaranteed by the Aarhus Convention, and the policy statements on energy infrastructure quoted above, should be taken into account by the Board when making a decision on this planning application.

3.14 Public Health Impacts

Important public health questions raised in previous oral hearings of the earlier planning applications for the proposed incinerator have never been adequately answered. These questions concern:

- i) the increased risk of cancer, particularly non-Hodgkin's lymphoma and soft tissue sarcoma, among populations living within 3km of existing incinerators;
- ii) the requirement for adequate and independent monitoring of the impact of the incinerator on public health, especially the health of local residents throughout the lifetime of the incinerator;
- iii) the need for a baseline assessment of the surrounding population to be undertaken in advance of the facility opening; and,
- iv) the absence of, and a need for, a clearly identified mechanism to know what the inventory of material for incineration is, at any given time.

Given the absence of answers to the above questions, we suggest that the Board should refuse planning permission for the proposed development.

We also wish to point out that, under the Ambient Air Quality Directive (2008/50/EC), individual citizens and residents who have bronchial breathing problems can force the Local Authority and the EPA to implement an Air Quality Action Plan, and to undertake effective ambient air monitoring in order to protect public health.

3.15 Deficiencies in the Applicant's EIS

In the preceding sections we have drawn attention to a number of deficiencies in the applicant's EIS.

The EIS is deficient in content and impact analysis, particularly in identification and examination of interactions and cumulative impacts, and the impacts arising from proposed mitigation measures. In some areas the statements of no impact are without a clear analysis of the likely significant impacts individually or cumulatively. In other areas, information on the receiving environment is seriously deficient.

It is our submission that the limited information in the EIS is insufficient to enable the Board to carry out an environmental impact assessment in an appropriate manner or to form the basis for an informed decision on the application; and therefore planning permission should be refused. Of course it is open to the Board to request further information, either before or after the oral hearing, but we suggest that this is not the most appropriate way in which to address deficiencies in the EIS.

3.16 Relevance of the ECJ Judgment in Case C-50/09

The planning application is an activity licensable by the EPA, and therefore is affected by this judgment, and it is our submission (a) that the EPA should not have granted an industrial emissions licence without a planning decision first

having been made by An Bord Pleanála, and (b) that the Board should not make a decision on the application without first consulting the EPA.

However, as the Agency has already made a decision in November 2005 to grant a waste licence (subsequently amended to an industrial emissions licence) to Indaver for the proposed incinerator, its role in advising the Board has been compromised; and the entire consent process conflicts with the above ECJ judgment.

4. CONCLUSIONS

The principal reasons for our objection to the development are set out above, and they include:

- burning additional quantities of waste would lead to an increase in emissions to the atmosphere, which are likely to exacerbate the existing air quality problems in the local area;
- burning additional quantities of waste would be contrary to Ireland's obligations under the Stockholm Convention, and contrary to Ireland's international obligation to substantially reduce greenhouse gas emissions in order to assist in mitigating the adverse effects of climate change;
- the applicant appears not to have taken into account the cumulative impacts of emissions to the atmosphere from the proposed incinerator together with other industrial sources of atmospheric contamination in the Cork Harbour area;
- the applicant appears not to have taken fully into account the adverse health effects of these emissions, and particularly the effects of PM₁₀ and PM_{2.5} particulates;
- the applicant has failed to justify a need for the proposed incinerator, and has not comprehensively examined alternative processes for dealing with the planned intake of wastes, such as waste elimination, segregation at source, waste reduction, avoiding the use of hazardous substances, etc.;
- alternative sites have not been examined in a logically appropriate manner;
- the proposed waste intake would contain significant quantities of organic substances which could be more appropriately dealt with by composting or anaerobic digestion;
- the proposed facility is not a "recovery" facility (i.e., a designated waste-to-energy plant, with a high rate of energy recovery), but is a "disposal" facility (i.e., an incinerator for the partial destruction of waste, with limited recovery of the embodied energy in the wastes);
- the proposed site is unsuitable by reason of the proximity of the National Maritime College and the IMERC research campus, and it is a restricted site which is liable to flooding;

- the proposed site is very close to residential areas of the village of Ringaskiddy, and the development would injure the residential and social amenities of the village and the surrounding area;
- the existing road network serving the proposed site already carries a high volume of traffic, does not have the capacity to handle the additional traffic which would be generated by the proposed development, and this extra traffic would therefore become a source of danger to other road users;
- there are no immediate or near-future plans to improve the existing road network, and therefore a decision to grant planning permission for the proposed incineration facility would be premature; and,
- on two previous occasions planning permission has been refused for the proposed development, and many of the reasons for refusal are relevant and applicable to the present planning application.

We must therefore conclude that the proposed development would be a retrograde step in Ireland's overall waste management policy, and should not be granted planning permission by the Board.

Ollan Herr

Jack O'Sullivan

On behalf of Zero Waste Alliance Ireland