

22 Hillcrest,
Pembroke Wood,
Passage West,
Co. Cork.

An Bord Pleanála,
64 Marlborough Street,
Dublin 1.

22nd January, 2009.

RE: Case Reference PL04.PA0010
Waste to Energy Facility and Transfer Station at Ringaskiddy, Co. Cork

Dear Sir/Madam,

We, the Cork Harbour Environmental Protection Association (CHEPA Monkstown), c/o Mr. Dominick Donnelly, 4 Lucia Place, Passage West, Co. Cork, state our strongest objection to the above proposal submitted by Indaver Ireland to An Bord Pleanála for a waste to energy facility and transfer station at Ringaskiddy, Co. Cork.

It is our opinion that the proposal fails utterly in the context of proper planning and sustainable development for both Ringaskiddy and Cork Harbour. We further consider it to fail in the wider context of proper planning and sustainable development for the Cork Region and Ireland generally.

We consider the Environmental Impact Statement (EIS) submitted in conjunction with the planning application to fail to demonstrate that the proposed development would neither severely detrimentally impact the environment of Cork Harbour nor have potentially negative impact on public health and safety.

We state at the outset that we acknowledge and support the national drives to reduce exports of hazardous waste, to reduce waste to landfill, to improve the range of facilities available for waste handling, to reduce emissions of greenhouse gases and to increase both renewable and indigenous sources of energy. The proposed development purports to contribute to all of these aims. It is our opinion that any such small contribution from the proposed development to these aims is achieved at a cost far too great to sustainability generally, particularly with regard to negating the attainment of priority aims in the waste hierarchy, increasing exports of hazardous waste for landfill disposal and increasing transportation of hazardous waste nationally.

Proposed development fails in the context of local, regional and national proper planning and sustainable development

Section 6 of the EIS accompanying the planning application for the proposed development lists a range of national and local policy documents, most of which support the aims of reducing exports of hazardous waste, reducing biodegradable waste to landfill, increasing energy production and reducing emissions of greenhouse gases. By identifying the proposed

development's contribution to these aims, the implication is that the proposed development is in general support of national and local policy. This is most certainly not the case.

Nor is it the case that, as is claimed by Section 6 of the EIS, that the “*determining issues in the consideration of the current planning application will not be whether the land use type is appropriate for this site*”. The planning approval granted for the previous facility and transfer station has expired. As such, the revised proposed development, now of a considerably larger scale than that granted planning permission heretofore, will be considered within the context of current local and national policy for planning, development and waste management. A key concern will also be the predicted impact of the proposed intensified activity on the environment.

There is not one mention throughout Section 6 of the EIS of local and regional policies relating to Cork Harbour. Yet virtually all planning/development policy documents relating to County Cork recognise the unique asset to the Cork Region that is Cork Harbour, they all emphasise the importance of preserving environmental quality generally and several relate to the desirability of capitalising on the multi-faceted benefits of Cork Harbour.

Nor is there any mention throughout the EIS of the proposed relocation of the Port of Cork from its current terminals at Tivoli and the City Quays. In its *Strategic Development Plan*⁴⁷, the Port of Cork emphasises its urgent need for a new container terminal to facilitate deeper draught vessels. The Port of Cork already operates a deepwater berth and bulk loading facilities at Ringaskiddy. While all of the development locations it has chosen to advance are in the greater Ringaskiddy area, its preferred location for a new container terminal is the Oyster Bank at Ringaskiddy. An application made to An Bord Pleanála in November 2007 for permission for a new container terminal at the Oyster Bank (Planning Ref: PL04.PA0003) was refused by virtue of, firstly, the pressure the resulting freight would place on the carrying capacity of the strategic road network in and around Cork City and, secondly, the absence of rail to Ringaskiddy to support freight movement. Most planning/development policy documents relating to the Cork Region support the proposed Port of Cork move downstream and it is clear that limitations in transportation infrastructure are inhibiting this aim. The Port of Cork is a key economic driver in the region and its expansion is part of the Gateway concept of the *National Spatial Strategy*³⁴ for Cork. It is of considerable concern to us that whatever limited capacity is available in the existing road network to Ringaskiddy should be considered for intensification of uses outlined in the draft *County Development Plan*¹¹, such as port activities. A waste management facility does not need to be next to the sea; a port does.

CHEPA would like An Bord Pleanála to note that it had grave concerns about impact of the most recent Port of Cork proposals for Ringaskiddy (Planning Ref: PL04.PA0003) on both Harbour residents and the environment, expressed both as a written submission and at an Oral Hearing during the planning process. CHEPA recognises that the draft *County Development Plan* has a stated aim of port expansion at Ringaskiddy. However, CHEPA's support for any future port proposals for Ringaskiddy would be mindful of the potential impact of those proposals on the unique residential, recreational and environmental asset that is Cork Harbour.

Regional Planning Guidelines for the South West Region⁴⁹

The *Regional Planning Guidelines for the South West Region* support multi-faceted, integrated waste management and signal a potential need for incineration to be considered to support to the pharmachem sector. It is worth pointing out that they do not, as Section 6.5.1 of the EIS states, consider that incineration is “*necessary to support the continued growth*” of the Region's pharmachem sector. The *Guidelines* provide equally strong support for

advancing cultural and tourism activities as key ingredients of the future of the Cork Metropolitan Area, protection of landscapes and coastlines and the integration of land-use and transportation infrastructure such that development will be sustainable, effective and efficient. The *Guidelines* also highlight the importance of the Port of Cork to the Region, advising that local and port authorities “*identify and reserve key strategic sites for the further development of the Port at downstream locations*”.

Cork Area Strategic Plan⁵⁶

The aim of the *Cork Area Strategic Plan* (CASP) is to drive appropriate development forward until 2020. CASP considers itself to be working alongside the Cork County and Cork City Waste Management Plans and, in Section 7.5, notes the key policies of the plans to be an increased emphasis upon recycling of municipal, construction and demolition waste, a reduction in the amount of waste going to landfill, rationalisation of the number of landfill sites, reduced emissions of methane gases from landfill and the development of composting and other biological treatment facilities. Incineration is not noted as being an element of either Waste Management Plan, nor is it identified as playing a role in the policy objective of effective waste management. On the other hand, CASP³⁴ is one of the few strategic documents which unequivocally recognises the unique asset that is Cork Harbour. It supports its potential to become “*Europe’s most exciting waterfront, the ‘focus’ for a mosaic of different opportunities*”. It emphasises the huge marketing asset that is Cork’s high quality environment and, in this regard, comments on the vital need to protect the “*spectacular Harbour area*” which is without comparison elsewhere in Europe. Section 2.6 encourages improved visitor access to Cork Harbour, identifying Cobh, Crosshaven and Monkstown as offering particular tourism potential. It recommends promotion and development of the Harbour as a facility for water-based sport and leisure, identifies the potential for tourism/leisure development of Spike Island and, in Section 4.2, envisages the Cork Harbour Area generally as having the potential to offer a superb environment for a Cork Technopole. We can see little in the proposed development to support these aims of CASP. In addition, CASP gives clear support to the Port of Cork and comments on the significant contribution it makes to both local and national commerce, industry and tourism. It does, however, specifically identify traffic congestion at Ringaskiddy as being a major problem. As noted in Section 6.6.1 of the EIS supporting the proposed development, CASP does indeed also express concern about the quality of transmission infrastructure to support increasing electrical demand. However, the new 200kV link between Raffeen and Aghada it identifies as having the potential to solve the problem is included in the ESB’s *Transmission Development Plan 2006 – 2010*²² and timetabled for completion by October 2009.

Draft Cork County Development Plan¹¹

We strongly disagree with the suggestion in the EIS that the proposed development is “*closely aligned to the terms and objectives of the draft County Development Plan*”. We see tremendous and irreconcilable dichotomy between them. With regard to waste policy, the draft *County Development Plan* merely incorporates the provisions of the *Waste Management Plan for County Cork* – which does not include incineration. With regard to energy, the draft *County Development Plan* does indeed align itself to national policy with regard to energy from renewable sources and improved security of supply and Section 6.6.3 is legitimate in claiming that the proposed development would contribute in a small way to those aims. Nonetheless, the draft *County Development Plan* demonstrates little or no support for incineration. Objective ECON 3-1 states that “*industrial areas that are not used for small to medium sized industry, warehousing or distribution are considered generally to be suitable for waste management activities (... but not including landfill or contract incineration facilities)*”. On the other hand, Paragraph 6.4.4 of the draft *County Development Plan*

specifically states its support for the relocation of the Port of Cork facilities in the Upper Harbour to Ringaskiddy. To this end, Objective ECON 3-4 has the aim of ensuring that “*land with the potential to accommodate port-related development, particularly at Ringaskiddy*” is protected from development that would prejudice its long term potential for port-related use. We are of the opinion that the site of the proposed development would be of considerable use to the Port of Cork, to support further port development either at Ringaskiddy or at the Curlane Bank. It is relevant that the Port of Cork has purchased the site on the other side of the public road from the proposed development.

The draft *County Development Plan* has clear policy in relation to the identification of Cork Harbour, and in particular Spike Island, as one of six areas of Strategic Tourism Potential. Paragraphs 5.6.10 and 5.6.12 recognise the potential of Cork’s maritime history to contribute to further development of the marine leisure sector. Objective ECON 6-2 has an objective of protecting and conserving the “*natural, built and cultural heritage features that form the resources on which the County’s tourist industry is based*”. This objective is further supported by ENV 4-2 which has the objective of ensuring protection of all structures contained in the Record of Protected Structures. The Ringaskiddy Martello Tower is identified in the Record of Protected Structures (RPS No. 00575) and Section 16 of the EIS accompanying the planning application for the proposed development identifies the zone of archaeological potential for the Martello Tower as being merely 30 metres from the proposed development. Objective INF 3-17 is equally relevant to the proposed development in its objective to preserve established public Rights of Way.

Bearing in mind the significant visual impact of the proposed development, we believe it would have been appropriate for Section 6 to acknowledge the draft *County Development Plan*’s strong recognition of landscape as being a “*special and unique resource*”. Objective ENV 2-10 has a particular objective to preserve the character of views from designated scenic routes. We do not consider Section 12 of the EIS to have in any way adequately addressed the requirements of ENV 2-12 in demonstrating that the proposed development would not create any “*adverse obstruction or degradation of the views towards and from vulnerable landscape features*”.

As the draft *Cork County Development Plan* will come into force on 9th February 2009, we do not discuss the proposed development in the context of the *Cork County Development Plan 2003*⁷.

Carrigaline Electoral Area Local Area Plan⁹

Failure to discuss the *Carrigaline Electoral Area Local Area Plan* in any detail is a remarkable omission of Section 6 of the EIS accompanying the planning application. While this *Local Area Plan* reflects policy as outlined in the *Cork County Development Plan 2003 - 2008*, it also contains considerable in-depth assessment of general County aims for Cork Harbour and the landscape values associated with the Harbour and its environs. Paragraph 7.7.8 comments on Cork Harbour’s “*wealth of natural and built heritage of national significance*”, highlighting Cobh and the military and maritime heritage associated with Haulbowline Island, Spike Island, Fort Camden and Fort Carlisle. Paragraph 7.7.9 recognises the extensive use of Cork Harbour for both land and marine-based recreation and notes the value of the undeveloped areas within the Harbour for their “*visual amenity and as a counterbalance to urban areas*”. The *Local Area Plan* echoes the *County Development Plan* in recommending protection of the built and natural environment both for their own sake and for their importance to tourism. Paragraphs 4.5.6 and 7.8.14 note the importance of further development of the tourism industry in the Carrigaline Electoral Area. In Paragraph 7.8.10, it cautions against inappropriate land use which might undermine the long term viability of

the Harbour area and Paragraph 5.2.9 acknowledges traffic congestion in and around Carrigaline, Ringaskiddy and Passage West.

The *Local Area Plan* notes Cork's "outstanding harbour and port" to be amongst its strongest attributes. Paragraph 7.8.7 explains one of the key reasons for designation of Cork as a gateway in the *National Spatial Strategy*³⁴ to be its ready access to "adequate, reliable, cost effective and efficient" port facilities. In the development of tourism, it anticipates greater interaction between attractions and facilities on the Harbour, suggesting increased movement of visitors over water. Key to maintaining this attraction is the "distinctive and spectacular landscape setting" spoken of in Paragraph 7.8.18. That landscape has led to the designation of a number of scenic routes around the Harbour, all of which are identified in the draft *Cork County Development Plan*. Paragraph 7.3.6 clarifies that the merit of development which has negative impact on the quality of any such scenic route will be judged against any planning benefits which that development may bring.

Cork Harbour Integrated Management Strategy⁴

A European Community initiative, Interreg IIIB, funded a project called COREPOINT, the objectives of which included establishing NW Europe as a region of excellence in Integrated Coastal Zone Management (ICZM). The concept of ICZM was promoted by the European Commission in 2000 when it recommended its introduction throughout Europe for improved resolution of conflicts and other issues in coastal zones²⁶. The lead partner in the project is the Coastal and Marine Resources Centre (CMRC) of University College Cork. Paragraph 7.8.21 of the *Local Area Plan* refers to this partnership and to its anticipated outcome in formulating what is anticipated to be the beginning of a coastal zone management policy for Cork Harbour. Using Cork Harbour as a case study, the CMRC and the Planning Policy Unit of Cork County Council initiated the Cork Harbour Forum, a collective gathering of stakeholders representative of the multi-faceted uses of Cork Harbour. Arising from the Forum, the *Cork Harbour Integrated Management Strategy* was drafted in May 2008. Although this is a non-statutory plan, its objectives are being advanced through a gathering of representatives of key statutory bodies with remits relevant to Cork Harbour. While the concept of Integrated Coastal Zone Management is founded on the principles of participation and sustainability, we find the development proposed by Indaver Ireland for what is a prominent site at the centre of Cork Harbour to be in direct conflict with many of the objectives of the *Cork Harbour Integrated Management Strategy*.

Environmental Impact Statement fails to demonstrate that the proposed development would not severely detrimentally impact the environment of Cork Harbour

The World Health Organisation⁵⁵, which recognises and supports the role of incineration in waste management, clearly states that hazardous waste incineration facilities should not be established in areas subject to flooding, coastal erosion or thermal inversions.

The site of the proposed development is one which is registered by the Office of Public Works on its National Flood Hazard Mapping⁴³ as being prone to floods. Being on the edge of a soft cliff exposed to wave action, coastal defences will be necessary to protect the site over the lifetime of the proposed development. Because of the peculiar interaction between air temperature, sea temperature and topography, Cork Harbour experiences an unusual frequency of thermal inversions. The proposed site is 2 km upwind of the town of Cobh with its population of over 11,000. Defined by ridges on the north, south and west, Cork Harbour is an enclosed air basin, described most accurately by the EIS for a former development on this site: "The harbour is located in a broad, east-west trending valley between high ridges.

On the valley floor, the Ringaskiddy peninsula is formed by a low ridge between Monkstown Creek and the Owenboy River estuary. To the east is the broad expanse of the Lower Harbour. The high ridges to the north and south are intersected at right-angles by deep, steep-sided valleys containing channels of Cork Harbour". We note that all references to "ridges" and "valleys" have been removed from the EIS accompanying the proposed development; Section 12 now describes the Cork Harbour bowl as having "ridgelines" and a "rolling landscape".

Whatever terminology is used to describe the site at the end of the Ringaskiddy peninsula, there is no way to conceal the fact that the site proposed for this development contravenes World Health Organisation advice. CHEPA therefore states at the outset that the environmental assessment performed on the site can do little to assure that the proposed facility will not cause environmental pollution.

Visual impact

Although landscape character definition has attempted to objectivise the assessment of visual impact of a development, this still remains a largely subjective task. CASP⁵⁶ describes Cork Harbour as being "*spectacular*", while Cork County Council's *Draft Landscape Strategy*¹⁰ classifies the landscape of the City Harbour and Estuary area as being of national importance and of very high sensitivity.

It is the opinion of CHEPA that the negative visual impact of the proposed Indaver development is simply too high. Taken as they are with a wide-angle lens and thereby making the site seem further away than it really is, the photomontages provided with the EIS are indicative of the proposal rather than representative.

We cannot accept the evaluation of Section 12 of the EIS in relation to the visual impact of the proposed development. There would be direct views across the Harbour to the development from designated scenic routes A54 through Passage West and on to Ringaskiddy and A53 from Belvelly to Cobh. We strongly disagree that the visual impact from Monkstown would be moderate at operational stage. Equally, we strongly disagree that the visual impact in approaching Ringaskiddy village would be moderate, that the view from the Martello Tower, Rocky Island or Spike Island would be significant or that the view from water level in Cork Harbour would be merely neutral. In fact, it is our opinion that the visual impact of the development from a local amenity perspective has been very poorly presented in the EIS. There is no photomontage provided of the view from the Monkstown Golf Course, we note the complete absence of views as one travels on the designated scenic route from Ringaskiddy to Gobby Beach and the failure to include the proposed view for visitors to Ireland arriving on the passenger ferry at Ringaskiddy.

The waste to energy plant proposed as part of the Indaver development is of massive scale. With a building height of over 48 mOD and a stack of ultimate height almost 91 mOD, it will render irrelevant the ridge of the hill over Ringaskiddy. Until recently, industries in Ringaskiddy have all been situated on lower ground, effectively mitigated against by screening and lie nestled into the backdrop of the Ringaskiddy hill. Buildings towards the eastern end of the Ringaskiddy peninsula get lower and lower in height. While the National Maritime College of Ireland might present itself as quite a large building in a different and more urban setting, it looks of small scale from scenic route A54 with the backdrop of the hills all around. The only exception to this has been the Centacor facility, constructed in 2005 on the peak of the Ringaskiddy hill (Planning Ref: 05/2431). The visual impact of this development generated such local horror that when a further planning application for an extension was submitted the following year (Planning Ref: 06/7499), Centacor plant management and Cork County Council collaborated with residents of Monkstown and

Ringaskiddy in drawing up an extensive programme of landscaping to “sit” the building into its surroundings.

The Centocor landscaping succeeded in reducing the stark nature of its visual impact. However, at no stage has the Centocor plant ever obliterated the line of the Ringaskiddy ridge. The Indaver facility, situated as is proposed at the eastern end of the peninsula where the ridge is at its lowest, would hide the line of that ridge as no industrial development in Ringaskiddy has succeeded in doing in the last forty years. It does not, as is claimed in Section 12.5.1 of the EIS, remain “*in scale with the ridgeline, following the height and angles of the slope*”. The *Draft Landscape Strategy* classifies the City Harbour and Estuary Landscape of being of high sensitivity. Paragraph 7.2.19 of the draft *Cork County Development Plan* notes how the “*capacity of each landscape character type to absorb new development will largely depend on the sensitivity of the landscape type*”. Whatever chance there is that the mammoth scale of the plant might be visually absorbed somewhere on the western side of Ringaskiddy village, for the site proposed, it would always present a significantly negative and permanent visual impact from all scenic routes across Monkstown Bay.

The EIS defines a profound visual impact as one which “*obliterates sensitive characteristics*”. If this is the case, then there can be little doubt that the visual impact of the waste to energy facility from the A54 on the eastern side of Ringaskiddy would be nothing less than profound. This is also the case for its visual impact for students of and visitors to the National Maritime College (NMCI), situated directly across the public road from the proposed facility. The absence of a photomontage to illustrate the potential visual impact of the proposed facility from the NMCI appears to be a silent admission of the tremendous profound, negative and permanent impact the proposed facility would have on the NMCI surroundings. The NMCI has a far greater sensitivity than identified in the EIS. While it may be the case that the primary function of the College is tuition, it is also the case that the College is a frequent host to visitors from all over the world who come either to see its state-of-the-art facilities or to use its conference facilities. One of the key highlights in a visitor trip to the Maritime College is to experience the vista from the Chart Room, stretching from Ringaskiddy through Monkstown, Rushbrooke, White Point, Black Point, Cobh, Haulbowline Island, Spike Island, Whitegate to Carlisle Fort and beyond. This will be profoundly negatively impacted by the proposed Indaver development.

We disagree entirely with the assessment contained in Section 13.6.2 of the EIS that the degree and scale of the visual impact from the proposed development on Haulbowline Island is significantly negative. Because of the heritage value of the site, Haulbowline Island is regularly opened to tours and visitors. To this end, a heritage trail was established throughout the Naval Base. Both the attraction and intrinsic value of the designated heritage would be seriously compromised should the proposed development proceed. It is therefore our contention that the scale of impact of the proposed waste to energy facility on Haulbowline Island would be profoundly and permanently negative.

Gobby Beach is the only relatively undisturbed beach remaining on the Ringaskiddy side of Cork Harbour. Contrary to the description in Section 12.5.2.3 of the EIS, Gobby Beach is a long, pebbly strand which provides a popular walk along the shoreline from the end of scenic route A54, around Paddy’s Block and back up over the bridge to Haulbowline Island. It is well used and, at times, it is difficult to find space in the adjacent car park. On Gobby Beach, the vista out to Spike Island and beyond to Roches Point at the mouth of Cork Harbour is splendid; here it is easy to forget the industrialised nature of Ringaskiddy. For the EIS to claim the impact of the proposed waste to energy plant on the shores of Gobby Beach would be merely significant is an understatement of mammoth proportion. A photomontage, should it have been included, would have illustrated that the proposed waste to energy facility would

alter the amenity value of Gobby Beach forever in a way that could never be other than profoundly negative.

The draft *Cork County Development Plan* and CASP both specifically identify the tourism potential of Spike Island. Spike Island demonstrates a wealth of national heritage dating back to the 7th century AD. It has been internationally acknowledged as offering as much and more than internationally noted heritage sites such as Alcatraz (California, US), Robben Island (South Africa), Fort McArthur (California, US), Fort McHenry (Maryland, US) and the Citadel at Halifax (Nova Scotia, Canada). The difference is that while many of these have had their historical value utilised to benefit from tourism, the tourism potential of Spike Island remains under threat. Local drivers are in the process of enlisting the island as a candidate for UNESCO World Heritage status. When on Spike Island, other than the adjacent relic of Irish Ispat, there is little visual evidence of the industrialisation of Ringaskiddy. Some industrial buildings are visible in the distance, but these do not impact on the feeling of space enjoyed on an island in the centre of the second largest natural harbour in the world. To place an industrial building of the scale of the proposed development on the Ringaskiddy shore would be an impact so profound on the heritage of Spike Island that it would seriously, significantly and permanently threaten the viability of its international tourism potential.

The marine recreational status of Cork Harbour is nationally and internationally recognised. Yet the waste to energy plant with its 91 m stack is proposed for what is one of the most prominent sites virtually at the centre of Cork Harbour. When sailing in Cork Harbour, the image of industrialisation is removed from the water. The Pfizer and GlaxoSmithkline facilities are relatively nestled into Loughbeg. Johnson & Johnson, while being further out on the Ringaskiddy promontory is a low-lying building well below the ridgeline of the hill. Industrialisation in Ringaskiddy is not evident until one passes Haulbowline Island. Even then, the scale of the buildings is relatively successfully incorporated into the Ringaskiddy landscape. So while this area of the Harbour is undisputedly industrialised, industrialisation is not predominant in the context of the overall water-borne experience. However, this is not the case for the proposed waste to energy facility. Its scale on this site would be an all-encompassing flagship at the centre of the Harbour: a flagship sending messages contrary to all those planned by the draft *Cork County Development Plan*¹¹, CASP⁵⁶ and the *Cork Harbour Integrated Management Strategy*⁴. There are no photomontages in the EIS to illustrate the views to a sailor or to those on the passenger ferry entering Cork Harbour at water level. It is our opinion that because it would bring industrialisation down to the water, the visual impact of the proposed development from water level would always be negative rather than neutral.

Protected structures

Cork Harbour boasts a rich maritime and naval heritage. Many of the 18th and 19th structures remaining around the Harbour have been included in the Record of Protected Structures defined in the draft *Cork County Development Plan*¹¹. These are recognised by Paragraph 7.7.8 of the *Carrigaline Electoral Area Local Area Plan*⁹ as being of national significance. ENV 4-2 of the draft *Cork County Development Plan*¹¹ has as a particular objective the protection of all structures contained in the Record of Protected Structures. Two such sites are in close proximity to the proposed Indaver development: the Martello Tower at Ringaskiddy (RPS No. 00575) and the Martello Tower on Haulbowline Island (RPS No. 00578). Four more are within a 2.5 km radius of the proposed development and with a clear view directly to it: Westmoreland Fort on Spike Island (RPS No. 01272), Monkstown Castle (RPS No. 00569), Monkstown Catholic Church (RPS No. 00571), the Old Parochial House, Monkstown (RPS No. 00568). Those structures listed for protection in the *Cobh Development Plan*⁵ with direct view to the site of the proposed development include the internationally acclaimed Cobh Cathedral.

Protection of the structures listed in the Record of Protected Structures is a statutory requirement under the Planning and Development Act 2000³³. However, we do not agree with the claim in Section 12 of the EIS that the policy of the draft *Cork County Development Plan*¹¹ is to deal with protection of the structure itself rather than its setting, views or landscape character. In fact, Paragraph 7.4.2 of the *draft County Development Plan*¹¹ defines the purpose for inclusion of a structure in the Record of Protected Structures as being a “*positive recognition of the structures’ importance [and] protection from adverse impacts...*”. So if a proposed development proximate to a protected structure is impacting negatively on that protected structure merely by detracting from its place and setting, then it must be considered to be contrary to the aims of ENV 4-2. The importance of setting is reinforced by Article 7 of the Granada Convention¹² which states that: “*in the surroundings of monuments ... each Party undertakes to promote measures for the general enhancement of the environment*”. Ireland ratified the Granada Convention in 1996.

Martello Towers formed a key part of Britain’s coastal defences throughout the 19th century, primarily as a lookout post. The defensive function of Martello Towers relied entirely on a clear view of the sea. So, in particular for Martello Towers, an unobstructed line of sight to the sea from all angles is essential to preserving the character of the structure. The Ringaskiddy Martello Tower is correctly identified in Section 16 as being the largest of the five Martello Towers in Cork Harbour. It too is correctly identified as being the only one to be enclosed by a ditch and the only one to have an access path marked by ordnance stones. The path from Gobby Beach to the Martello Tower running through the site of the proposed development is clearly an integral part of the Ringaskiddy Martello Tower and, as such, forms part of RPS No. 00575.

The proposed development would do colossal, irredeemable and permanent harm to the Ringaskiddy Martello Tower. Figure 12.3b illustrates the proposed view from the Tower during the operational phase of the waste to energy facility. Any view of the sea in a north easterly direction would be clearly lost. The clear line of sight to Westmoreland Fort on Spike Island, an integral part of military strategy, would be completely obliterated. We note Table 12.3 to comment on the plume being apparent to those standing at the Tower and lights on the stack and from the service yard to be visible after sundown. No coastal defence lookout post would ever be constructed in a landscape where it did not have clear view of the sea, ability to communicate with its sister fortifications and optimum visibility at all hours of the day and night. Construction of the proposed waste to energy facility would be directly over the designated access path to the Tower. The alternative route proposed is along the eroding cliff, with a low timber fence on one side and the security fencing of the waste to energy plant on the other. It is proposed that the path should turn west at the top of the ridge, running along the southern boundary of the development site, under the line of electricity pylons. How could such an approach route ever facilitate optimisation of the tourist potential of this Martello Tower? Contrary to the assessment of Table 12.3 of the EIS, we consider the visual impact of the proposed development on the Ringaskiddy Martello Tower as being profound, permanent and negative.

The purpose of Chapter 16 is described as being evaluation of “*the potential impact that the proposed development would have on the cultural heritage of the land intended for development and on the surrounding area*”. This being the case, we consider it a serious omission that the effect of the proposed development in the visual envelope of any of the surrounding structures listed in the *draft County Development Plan*¹¹ has not been addressed. The omission is particularly relevant in the case of the Martello Tower on Haulbowline Island and Westmoreland Fort on Spike Island, both military installations in the immediate vicinity which would have been constructed to have permanent and clear view of each other and of the Ringaskiddy Martello Tower. We also note the absence of photomontages demonstrating whether there is any loss of visibility of the Martello Tower from the sea.

We therefore fundamentally disagree with the statement in Section 16.9 of the EIS which claims that “*the proposed development will not directly impact on any architectural heritage*”. We note the recommendation that “*new buildings should not obscure the outline of this impressive monument which overlooks Cork Harbour*”. Clearly this recommendation was not observed in the design of the proposed development.

Ecology

“... *It is the avian community which is notable at this site. The relatively high species diversity is associated with the structural complexity of the vegetation ... The habitats within which the proposed development is to take place have become rarer and so the bird community resident there are notable for this reason.* “ Thus spoke the flora and fauna assessment of the proposed development site undertaken on behalf of Indaver Ireland in 2001². Clearly the Aquatic Services Unit of UCC who undertook this survey agreed with Paragraph 7.1.20 of the draft *Cork County Development Plan*¹¹, which says that “*most of our biological diversity occurs in the ordinary landscapes ... The ordinary features of our landscape can be of high natural value in their own right ...*”.

The site proposed for the waste to energy facility and transfer station is clearly regarded by the flora and fauna assessment presented in Section 13 of the EIS for the proposed development as being an “ordinary landscape” of either low or moderate value. Although the breeding bird survey carried out in 2008 noted a similar number of species as that carried out in 2001, Section 13 offers no opinion as to the avian value of the site. Nonetheless, one species on the Red List was noted on the site, while six species on the Amber List were found breeding at the site. The Red and Amber Lists, drawn up by the Birdwatch Ireland and the Royal Society for the Protection of Birds, comprise bird species suffering decline in the Irish/European context. Birds on the Red List have had their breeding population or range decline by more than 50% in the past 25 years or a significant decline since 1900. Birds on the Amber list have either experienced a drop in breeding population of 25 – 50% over the past 25 years or their breeding or wintering population is internationally important and/or localised. Birds on the Red List are generally of global conservation concern, while those on the Amber list are of European conservation concern³.

Loughbeg, a designated proposed Natural Heritage Area (pNHA) and Special Protection Area (SPA), is situated immediately south of the Ringaskiddy peninsula. With the exception of Whitegate and Rostellan, all other designated areas within the Cork Harbour SPA are upstream of Loughbeg. Bird populations are highly mobile throughout the entire Harbour and areas such as Loughbeg cannot be considered in isolation. Birds travelling downriver from the Douglas Estuary or Lough Mahon to Loughbeg would be very likely to fly over the Ringaskiddy peninsula and, in some cases, over the site of the proposed development.

This aspect of the site’s proposed contribution to the ecological value of Cork Harbour hasnot been considered at all in Section 13. The birds for which the pNHAs and SPAs are designated are generally migratory waders. As the site surveys were undertaken during early summer, these winter visitors would not have been seen flying overhead. However, evidence of interaction between the site and the sea is clear in that both herring gull and cormorant were noted on the site.

If the path of migratory waders traverses over the site of the proposed development, then the presence of the proposed 91 m stack could potentially be a real threat to the flight paths of commuting birds. Towers, including television-radio-telecommunication towers, water towers and smoke stacks cause more reported bird fatalities than other types of structures. Bird mortality is significantly affected by tower lighting and weather conditions⁴⁴. We

believe it essential that the flight paths of birds returning to Loughbeg are monitored such that full consideration can be given to the potential impact of the proposed facility and its stack on the welfare of the surrounding designated areas.

The active badger sett found in the 2001 mammal survey of the proposed development site was found again during the course of the 2008 survey. A specific recommendation of the 2001 survey was that the site should be resurveyed during the winter to confirm and clarify badger activity. As badger tracks were found under the Hammond Lane fencing, it further recommended that the Hammond Lane site should be investigated for active setts. Neither is there any indication in Section 13 of the EIS accompanying the proposed development of the time of year when the on-site badger sett was investigated, nor is there any indication of whether the Hammond Lane site was surveyed for presence of badgers. In addition, there is no clarification of when the small mammal survey was undertaken.

As described in Section 13.4.2 of the EIS, bats are a protected species. We are not at all satisfied with the bat survey undertaken on the site. The optimum time for carrying out bat surveys is in June or July; the survey undertaken for the EIS was carried out in May. While the main volume of the EIS states that the bat survey was done one hour before dusk, the bat survey report in the Appendices describes monitoring as having started 20 minutes before dusk. Although Section 13.4.2. notes there to be no suitable roosting areas within the site boundaries, the bat survey report does not mention bat roosting areas at all. The Martello Tower does not appear to have been investigated conclusively with regard to a roosting habitat: Section 13.4.2 describes a “*cursory examination*” suggesting that the presence of roosting habitat “*cannot be excluded*”. There is no indication of whether droppings were found nor of whether the tower was examined for bat presence either before or at dusk. It is worth noting that the British National Trust finds nearly all buildings in its care to support bat roosts⁵⁰. Although a mature oak at the entrance to Martello Park housing estate is identified as having potential to support bat roosts, this was not confirmed. No dawn survey was undertaken to assist in the identification of roosts. If roost sites are not identified, then we have no confirmation of population estimates, roost status or access points. We do not know whether construction on the site might disturb bats which are breeding or bats which are hibernating.

Common pipistrelle bats such as those found feeding on the site of the proposed development move only about 20 km from summer roosts to hibernation. They use the same roost year after year. One of the greatest threats to the common pipistrelle includes loss and degradation of insect-rich feeding habitat such as wetlands and hedgerows. One of the other great pressures on bat welfare is loss and disruption of linear landscape features such as hedgerows, along which the bats fly. On each of the three nights comprising the bat survey undertaken for this EIS, common pipistrelle was noted either feeding or commuting along hedgerows on the site boundary. The value of these hedgerows to bats cannot be confirmed without greater familiarisation with the size and roost of the local bat population. Furthermore, there is no discussion of the impact, adverse or otherwise, of the proposed site lighting on remaining hedgerows as a bat feeding ground. It is worth noting Paragraph 7.2.10 of the draft *Cork County Development Plan*¹¹ which comments that “*the ordinary features of our landscape can be of high natural value in their own right and provide the vital links and corridors to allow the movement of plants and animals between protected sites. They are a critical component of a functioning ecological network*”.

We also note that the impact of construction on the wildlife using the site of the proposed development has scarcely been evaluated at all. Section 5 of the EIS indicates that construction is likely to continue for 30 months and potentially for 38 months. Table 13.5 comments on the adverse impact which tracked machinery could have on the identified badger sett. However, there is no evaluation of the extent of impact of noise from rock-breaking, construction machinery or piling on mammals using habitats close by or on the

birds who are supposed to continue breeding in the undisturbed areas of the subject site. In addition, as construction is predicted to continue during the night-time, assessment of the impact of construction floodlighting on bats and other nocturnal creatures is a stark omission.

Air quality

Section 9 of the EIS for the proposed facility includes assessment of background air quality, anticipated worst-case emissions to air from the proposed facility and an air dispersion model, the purpose of which is to demonstrate the probable zone of impact of atmospheric emissions from the proposed facility.

Meteorological data input to the air dispersion models were gathered at Cork Airport. Concerns that meteorological conditions in the inner basin of the Lower Harbour are quite different from those at Cork Airport were expressed at length during An Bord Pleanála's assessment of Indaver's previous planning application for this site. At the time, it was suggested that the only way to obtain accurate information on the meteorological peculiarities of Cork's Inner Harbour was to erect a weather station at the proposed site. It is clear from Section 9 of the current EIS that a meteorological station was erected on site during the period October 2006 to December 2008. Data from Cork Airport were used as AERMOD input parameters, while data from the on-site meteorological station were used as CALPUFF input parameters. We find it extraordinary that, bearing in mind the tremendous concern in relation to the representativeness of data from Cork Airport, a comparison of data between the two meteorological sites is not presented in the EIS. We also find a key omission to be failure of the EIS to present meteorological data relating to the years 2003 – 2007 for which the modelling was carried out.

Although no data has been demonstrated either of on-site meteorological monitoring results or of calculation of the algorithms associated with the air dispersion modelling software, we accept that on-site meteorological data were used as inputs in the CALPUFF dispersion model. However, only the parameters of wind speed, wind direction, relative humidity and temperature were measured at the on-site meteorological station. The EIS does not indicate from whence the data for the many other inputs in to the CALPUFF model were obtained, nor the representativeness of same. There is little point in having four accurate inputs to the air dispersion model if some of the other critical parameters are irrelevant to the peculiarities of Inner Harbour.

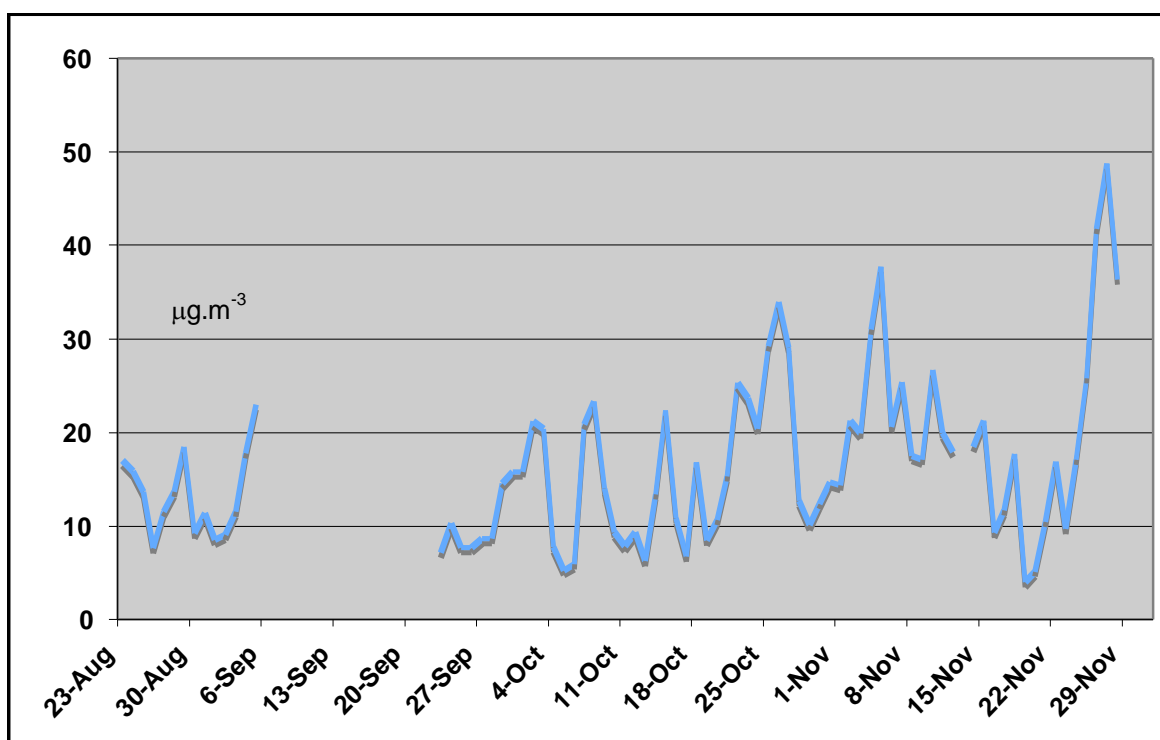
Quality background data are key to determining whether a facility of the kind proposed would create unacceptable conditions for human beings and the environment. Particulates in ambient air are becoming an increasing source of concern, particularly in relation to their impact on human health. Although Section 9.2 of the EIS claims that PM₁₀ monitoring was carried out over a three month period, it is clear that it was carried out for only 11 days in November 2006, 11 days in December 2006, 31 days in January 2007 and 7 days in February 2007. This is barely a two-month period. In addition, particulates in air are always lower during the winter. If the EIS is attempting to evaluate worst-case scenario, then PM₁₀ monitoring should have been done under dry, warm conditions, preferably during the summer. The timing and duration of this background monitoring is certainly not justification for the assumption that *“since no exceedences were recorded over the three months of this monitoring survey, it is extremely unlikely that 35 exceedences would occur over 365 days at the current location”*.

The tiny PM_{2.5} particles were monitored for only one month. Because they are of a smaller size than PM₁₀, the amount of PM_{2.5} collected during air sampling should be less than the amount of PM₁₀ collected. It is ironic that the average PM_{2.5} concentration measured as part of the baseline survey for this EIS over one month at the beginning of the summer is higher

than that of the PM₁₀ concentration measured over the preceding November – February period.

We note with concern the significant discrepancy between the particulate monitoring carried out during a previous baseline study undertaken by Indaver² and that currently being submitted as part of the EIS for the proposed development. During the previous baseline study, the mean PM₁₀ concentration measured was 21 µg.Nm⁻³. Over the period 11th April 2001 – 20th June 2001, three exceedences of the EU Limit Value were noted. However, during the baseline study undertaken for this EIS, the mean PM₁₀ concentration measured was 6 µg.Nm⁻³, while there were no exceedences of the EU Limit Value. This concern is compounded by comparing the results of particulate monitoring under by the EPA mobile air monitoring unit during September – November 2007 at the Bosun car park, Monkstown¹⁸. Results of the EPA monitoring can be seen on the graph to follow:

Ambient particulate monitoring carried out by the EPA during 2007¹⁸



results for the few months prior to its removal indicate particulate concentrations very much higher than detected for the EIS for the proposed development.

Neither can we understand the highly significant discrepancy between background measurements of metals in 2001 and those in 2006/2007. We present each in a table below for comparative purposes. It may be the case that the air quality in Cork Harbour during 2001 was extremely poor. However, if that is the case, the discrepancy in results between both background monitoring periods needs to be explained if there is to be confidence in the results.

Comparison between baseline data gathered in 2001 and 2006/2007 monitoring periods (ng.m⁻³)

	2006 – 2007 monitoring period		2001 monitoring period ²	
		Upper range average		Upper range average
Antimony	< 0.06 – 0.012	0.045	8 – 29	16
Arsenic	< 0.06 – < 0.069	0.062	< 13 – 29	16
Cadmium	< 0.069 – 0.23	0.055	13 – 29	16
Chromium	< 0.069 – 4.9	0.75	8 – 29	16
Cobalt	< 0.06 – < 0.069	0.062	13 – 29	16
Copper	< 0.06 – 3.3	0.42	13 – 34	22
Lead	1.8 – 20.6	9.9	29 – 85	69
Manganese	< 0.06 – 1.1	0.21	13 – 49	32
Mercury	< 0.06 – < 0.069	0.062	5 – 29	16
Nickel	< 0.06 – 0.097	0.073	53 – 123	94
Thallium	< 0.012 – < 0.014	0.012	12 – 29	17
Vanadium	< 0.06 - < 0.069	0.10	---	---

During the previous planning application submitted by Indaver Ireland for this site, the limit of detection of equipment used to check for background metals was an issue in that for some of the metals, it was considerably higher than the EU limit value. We cannot see the limit of detection of equipment used to check for metals in ambient air presented anywhere in Section 9 or its associated appendix.

Despite the fact that background concentrations of pollutants in air during the 2006 – 2007 monitoring period were found to be so much lower than those in the 2001 monitoring period, we note Indaver Ireland's previous comments in relation to ambient air quality in 2001²: *“Existing air quality in Ringaskiddy can be compared to levels measured elsewhere in the region. Cork City Centre generally experiences significantly higher levels of NO₂ and PM₁₀ whilst recent results from the EPA's mobile monitoring unit indicate that Blackpool, Cork, which is a suburban area, also has significantly higher levels of PM₁₀ and NO₂. Thus, the current region is characterised by good air quality and is significantly better than current air quality in suburban locations of Cork.”* We reiterate that it would be beneficial should Section 9 of the EIS discuss the dramatic improvement in air quality during the five years previous to 2006/2007.

Results of modelling in predicting the dispersion of NO₂ from the facility previously proposed by Indaver Ireland for this site indicated the annual average NO₂ concentration and maximum 1 hour NO₂ concentration to be worst at the southern site boundary. Modelling carried out in 2008 for the currently proposed facility has concluded that dispersion will cause the annual average NO₂ concentration and maximum 1 hour NO₂ concentration is worst at north and north-eastern boundaries. Reasons and explanations for these significantly different results need to be explained if there is to be general confidence in the modelling exercise.

Figure 9.4 appears to show air dispersion modelling predicting cadmium from the proposed facility to increase ambient cadmium in the air by over 40% of the ambient air quality standards such that cadmium in air from all sources would be over 70% of the ambient air quality standards. If this is the correct interpretation of Figure 9.4, then this is not acceptable. The aim of Directive 2004/107/EC³⁰ is the reduction of cadmium and other genotoxic carcinogenic metals for which there is no identifiable safe threshold.

Human beings

Section 7.1.1.3 of the EIS mentions the “*extensive*” recreational use of Cork Harbour. However, it fails utterly to illustrate it. Currently there are 515 marina berths available in the Harbour. An additional 82 berth marina is due to start construction in Monkstown this year (Planning Ref: PL04.223102) while a further planning application for 280 berths is currently under consideration by An Bord Pleanála (Planning Ref: 08/9317). A recently submitted planning application for a development in Passage West includes a proposal for a 293-berth marina (Planning Ref: PL04.231646). Over 1,000 boats are maintained at moorings throughout the Harbour. Of these, 122 are in Monkstown, 71 in Passage, 57 in White Point, 40 in Glenbrook, 31 in Carrigaloe, 11 in Rushbrooke and 6 in Ringaskiddy. As the principal sailing ground in the Harbour is downstream of Monkstown Bay, all will pass under the shadow of the proposed waste to energy facility. The number of registered moorings in the Harbour has increased by over 70% since 1998³⁸. These figures do not take account of the vast number of trailer-based smaller powerboats and jetskis launched from slipways at Blackrock, Glenbrook, Monkstown, Ringaskiddy, Cobh, Crosshaven and Ballinacurra on a sunny weekend, and pulled out again at the end of a day’s enjoyment.

The seven sailing clubs around Cork Harbour have over 2,100 members³⁸. The largest club is the Royal Cork Yacht Club, based in Crosshaven. This claims to be the oldest yacht club in the world and hosts the international sailing regatta, Cork Week, every second summer. In 2006, the regatta brought 50,000 spectators to watch 5,000 competitors from as far afield as Australia, Belgium, Canada, Channel Islands, England, France, Ireland, Isle of Man, Netherlands, New Zealand, Northern Ireland, Philippines, Scotland, South Africa, Sweden, United States and Wales in an event worth some €10 million to the local economy¹.

We note that despite the numerous relevant references of the draft *County Development Plan*¹¹, CASP⁵⁶ and the *Carrigaline Electoral Area Local Area Plan*⁹, visitors to Cork Harbour are scarcely discussed in the EIS. Some 56 cruise liners are booked to berth at Cobh in the 2009 season⁴⁶. There is little doubt that the proposed Indaver development would not affect the berthing of cruise liners. However, there is equally little doubt that if cruise-liner passengers are bussed to a scenic and attractive environment further afield, local Harbour communities will accrue no economic benefit from the cruise liner terminal. Cobh, directly across the water from the proposed facility, is the premier tourist attraction in Cork Harbour. There is no mention in the EIS of the Titanic Trail, recently developed by Cobh Tourism, nor the unique Lusitania Memorial visited by those associated with the sinking of that ship off Kinsale. The EIS does not say that the 47 bells of Cobh Cathedral, that magnificent edifice designed by renowned architects Ashlin and Pugin, is the largest carillon in the whole of Ireland and Britain. These ring out over Cork Harbour four times each day. The EIS does not describe how Cobh, being a naval town, was the last port of call of the Titanic or that 1 million Irish people left from this town for America during the 19th century. Their emigration is remembered at the Cobh Heritage Centre, which attracts over 100,000 visitors each year⁴². All visitors to Cobh access the town by the A53 designated scenic route.

The EIS does not tell of local co-ordinated efforts to have the heritage of Spike Island acknowledged with UNESCO World Heritage status. Neither does it tell of the 100,000 visitors to Midelton Distillery Heritage Centre each year, nor the 300,000 visitors to Fota House and Wildlife Park⁴². While Section 7.5.6.1 states that “*no economic activity will be displaced by constructing the proposed waste to energy facility on the site*”, it does not address at all the potential impact of the proposed facility on displacement of economic activities already taking place around Cork Harbour.

For more detail on Cork Harbour generally and its recreation and amenity potential, please go to the Passage West/Monkstown website at <http://www.passagewestmonkstown.ie/cork-harbour.asp>.

That Monkstown is the premier local afternoon and weekend destination for walkers appears irrelevant. That the slipway in Monkstown is one of the most frequented water access points by day-trippers on the western side of the Harbour is not acknowledged. That the Port of Cork's *Strategic Development Plan*⁴⁷ would result in relocation of the community slipway to below the bridge onto Haulbowline Island is not mentioned. Whether planning application PL04.0003 for the Port of Cork's proposed Oyster Bank facility⁴⁵ was approved or not is incidental: the fact is that the draft *Cork County Development Plan*¹¹ anticipates and plans for relocation of the Port of Cork from Cork City to Ringaskiddy. As the community slipway provided by the Port of Cork in Ringaskiddy is likely to be subsumed by any further port expansion at Ringaskiddy, then it too must be relocated. The only other place in Ringaskiddy where public access is not affected by tide is Paddy's Block. Therefore all amenity users availing of the community slipway would become principle potential receptors within 700 m of the proposed Indaver development.

Other principal potential receptors not mentioned in Section 7.1.1.2 include users of Gobby Beach, described in Section 7.1.1.3 as being a well-used local amenity. Nor are the 250 members of Monkstown Bay Sailing Club who organise dinghy racing in Monkstown Bay at least twice weekly during the season discussed in the EIS. Over 100 children attend the sailing courses run by Monkstown Bay Sailing Club every summer during the month of July. The sailing grounds used by the Club encompass the entire of Monkstown Bay. On their annual picnic, the children in their dinghies frequently follow the more experienced members of the Club under the bridge to Haulbowline, through the West Channel and down to the Lower Harbour. Neither are those working in or visiting the crematorium on Rocky Island identified as being principal potential receptors. However, they will all have to pass in front of the proposed Indaver facility and, when on Rocky Island, will be within 700 m of its operations. While Section 7.1.1.2 mentions the NMCI as being "*across the public road from the site*", it does not explain how, at this point, the public road is 10 m wide, with a further 10 m of grassy verge (principally used to divert flood water). And although people travelling on the N28 are merely 70 m from the main tank farm of the proposed facility, they are not mentioned in Section 7.1.1.2 as being principal potential receptors either.

Assessment of the impact of construction of the proposed facility on local receptors is, at best, cursory. Section 7.5.3.1 notes that there may be "*some minor temporary disturbance to residents in the vicinity of the site due to traffic, dust and noise during the construction phase*". But rock breaking, mammoth earth movement, night working and potential piling are all anticipated. Students taught in the NMCI would be "*across the public road from the site*", people would be living 220 m from the transfer station, commemorative ceremonies would be taking place in the Rocky Island crematorium merely 700 m from the waste to energy facility and Naval Officers would be sleeping some 900 m away. But neither construction noise nor vibration has been adequately assessed over a construction period which Section 5.3 suggests may be more than three years.

The end of the Ringaskiddy peninsula has seen much pollution in the past. But the closure of Irish Ispat in 2001 brought new hope to the area. This began with construction of the NMCI (Planning Ref: 02/1867), equipped with some of the most modern facilities in the world. It was swiftly followed with the transfer of University College Cork's Marine Research Centre to the Naval Base on Haulbowline. In 2006, the then Minister for Enterprise, Micheal Martin, announced that a special interdepartmental team was to be set up to mastermind the redevelopment of the former Irish Ispat site⁴⁸. Development to be considered for the site included more than 200 apartments, a marina and club-house, a 300-bedroom hotel and a landmark office building. He also commented on the project's having the potential "*to*

transform Haulbowline and the Lower Cork Harbour, making it an attractive place to work, live and do business". Also in 2006, a crematorium was granted permission to construct a facility on Rocky Island (Planning Ref: PL04.214319). So sensitive was the facility in incorporating the gunpowder store formerly serving the Haulbowline Island Naval Base that it received a Heritage Award at the OPUS Architecture and Construction Awards 2007. In that same year, the Irish Naval Service and the Heritage Council commissioned a scoping study of the potential to create a maritime museum on Haulbowline Island. Although neither this nor the development plans for Haulbowline have yet materialised, work on the clean up of the relic of Irish Ispat is ongoing. CHEPA believes that to permit construction of the proposed development at this site would be a severely retrograde step in what has, over the past eight years, been a very positive direction. We note Section 7.5.4 to assess the impact of the proposed facility on local recreational amenity as being "*slightly reduced ... as the site will have a more industrial ambience than it has currently*". Far more accurate was Section 14.10 of the EIS prepared for Indaver in 2001², which suggested that the previous proposed development, while being smaller, would have "*a significant residual impact on the recreational amenity of the site and its immediate vicinity*".

Despite these positive trends, some relic of the past appears to have left its impact on the people of Cork's Lower Harbour. Statistics from the National Cancer Registry Ireland⁴⁰ indicate incidence of cancer in Cobh to be 44% above the national average, while incidence in the urban area of Monkstown is 16% above the national average. Whether or not these statistics are related to environmental impact is a debate for another time. What is absolutely clear, however, is that those living in the urban areas of both Cobh and Monkstown were not identified as sensitive populations in the Health Impact Assessment appended to the EIS for the proposed development.

The World Health Organisation defines the function of a Health Impact Assessment (HIA) as being to judge "*the potential health effects of a policy, programme or project on a population, particularly on vulnerable or disadvantaged groups*". This definition is known as the Gothenburg Consensus. The principal concepts of HIA are outlined in the Gothenburg Consensus Paper⁵⁵ drafted by a collaboration of the WHO, the European Centre for Health Policy and the European Commission.

One of the key steps in HIA is gathering evidence. This is acknowledged in page 5 of the HIA for the proposed development: "*When the potential effects on human health of any emissions are assessed, among the most important factors to be considered will be the number of people who may be exposed, the duration of that exposure and the vulnerability or sensitivity of those individuals to those emissions*". The HIA mentions the nearest towns to be Ringaskiddy, Monkstown, Carrigaline and Cobh. It does not discuss the population statistics for those towns, nor that they evidence a higher than national average proportion of child-bearing adults and young families. The closest schools identified are Shanbally and Loughbeg. This is incorrect. There is no school in Loughbeg, while the closest school to the proposed development is the NMCI. The next closest school to the proposed development is the primary school at Ringaskiddy. Cobh school is some 2 km away, Monkstown school is 2.5 km away, Crosshaven school is 3 km away and Shanbally school is over 5 km away.

The only other people exposed to emissions from the proposed development considered in the HIA are those working in the industries in Ringaskiddy. There is no discussion of nursing homes or old folks homes in the locality. Neither the NMCI nor the Naval Base is mentioned. And critically, the already compromised health of those living in Cobh or Monkstown and their potential vulnerability to emissions from the proposed facility, is not acknowledged at all. Section 3.6.2 of the *Review of Environmental and Health Effects of Waste Management*¹³ published by the Department of Environment, Food and Rural Affairs and quoted from in the HIA advises that "*there is no doubt that air pollution (from all sources) can have an adverse effect on the health of susceptible people (i.e. young children, the elderly and particularly*

those with pre-existing respiratory disease). Recent work in the UK by the Committee on the Medical Effects of Air Pollutants (COMEAP) has demonstrated that exposure to air pollution can bring forward death in patients with severe preexisting disease ...”

Although the HIA proposes to deal with potential effects of transport and storage of waste associated with the proposed facility, the transport element of the proposed development is dealt with in two sentences: *“The transport of this waste is not without risk. Reducing the distance required to travel will result in a reduction in this risk as well as producing economic benefits”*. None of the aforementioned risks are identified. That waste is leaving both the waste to energy facility and the proposed transfer station is not mentioned. There is no assessment of the effectiveness of procedures covering the transport of hazardous waste by road from one end of the country to the other. And it is our opinion that economic benefits are entirely irrelevant to a HIA.

The storage of waste is further dealt with in three sentences: *“It is true that the facility will not itself treat all waste that comes on site. Some will be stored in the associated waste transfer station before further transport and management. However, as this is simply a storage facility no environmental effect is anticipated during normal operation.”* We would have considered the undertaking of a Hazard Identification Report (HAZID) sufficient to indicate that more can happen in the transfer station than merely storage. Surely it is the function of a HIA to assess the health effects of the potential scenarios identified in the HAZID with particular focus on their impact on the vulnerable sectors of the local population?

The HIA includes no assessment of the potential impact of handling, transport and subsequent management of ash from the proposed waste to energy plant. Section 7.2.2 of the HIA-quoted DEFRA report¹³ suggests that while *“some ash and char residues from thermal treatment processes can be re-used, [again] the potential exists for trace constituents of these substances to be leached out and potentially impact on receptors. These emissions have not been quantified in this study ... Field evidence suggests that emissions to land, groundwater or surface waters in this way could potentially be significant”*.

The only pollutant to air discussed in any detail in the HIA is dioxin. Yet there are a myriad of other compounds to be released routinely from the stack of the incinerators which have significant health impacts. None of the health impacts of any of these compounds are mentioned in the HIA. But acute inhalation exposure to antimony causes irritation of the nose and mouth, abnormalities in the circulatory system and disruption of the respiratory tract. Arsenic is an established human carcinogen. Short-term exposure to high levels of inhaled cadmium causes respiratory effects, whereas long-term exposure can lead to emphysema, anaemia and cancer. Chromium VI is a known carcinogen causing lung cancer via inhalation. The toxic effects of cobalt include lung irritation, immunological deficiency, heart disease, cancer and death. Mild exposure to lead causes tiredness, irritability, abdominal pain, anaemia, and behavioural changes in children. The effects of long-term exposure on child neurological development is well documented. Mercury and in particular methylmercury, also has neurological effects. Inhalation of all forms of nickel causes irritation, lesions and immunological responses, while some forms of nickel are carcinogenic. The toxicity of thallium extends to a degeneration of nerve fibres.

The HIA includes no discussion of the potential synergistic effects of emissions either from the waste to energy facility alone or from the waste to energy facility and other industrial plant in the Ringaskiddy area. A report from the National Society for Clean Air⁴¹ concludes that while *“the potential for impacts on the health of local populations is extremely small ... some uncertainties remain, e.g. in relation to pollutant mixtures and for potentially susceptible groups, such as unborn children”*.

According to the Institute of Public Health in Ireland³⁶, the purpose of HIA is to “*influence decision-making in favour of health*”. It should allow decision makers make “*evidence-based recommendations to maximise the positive and minimise the negative health impacts of proposals*”. As far as CHEPA can ascertain, the HIA undertaken on behalf of the proposed development has given blind support to incineration as a waste management tool from the outset, rather than carrying out an unbiased assessment as to the suitability of the location in minimising impact on public health. Page 8 of the report states that “*there is no doubt that incineration is the most satisfactory way of managing much of this hazardous waste*”. Page 11 comments on the Department of the Environment, Heritage and Local Government’s explanation of dioxin from incineration as being “*a very reassuring position for a Government Department to take*”. CHEPA is of the opinions that irrelevant subjectivity such as this has no place in a HIA, particularly when the required content of the HIA is absent.

The assessment demonstrates an extraordinary lack of familiarity with the proposals under examination. The assessment is based on the premise that “*the flue gas cleaning systems have been design[ed] to ensure that regardless of the waste input, the emissions will not exceed the waste directive limit.*” Of course, this is not the case. Were it the case, accidental emissions would never happen. We understand evaluation of the health impacts of both expected and unexpected emissions to be the function of a HIA. The assessment further assumes that “*the air modelling takes into account the nature of the waste being treated in arriving at it’s (sic) conclusion.*” This is not the case either. The air modelling does not take into account the nature of the waste being treated at all: it assumes maximum permitted emissions at to be those limits set by Directive 2000/76/EC²⁷. On page 12, in quoting the WHO on the economics of incineration, the HIA says that the proposed Indaver facility will generate both electricity and heat water. However, at the outset, the facility is proposed to generate electricity only. Section 1.3.3 of the EIS describes how the feasibility of heat recovery using combined heat and power will be investigated.

Page 12 of the HIA advises that “*the requirements of the [Waste Incineration] Directive were developed to reflect the ability of incineration plants to more cost effectively achieve high standards of emission control in comparison to the 1980s*”. Even a cursory glance at the preamble to Directive 2000/76/EC²⁷ would indicate that this is not the case. The reduction in emissions permitted by the Directive is explained as having been in response to:

- the 5th Environmental Action Programme²⁴, which has as an objective reduction in critical loads and levels of pollutants such as NO_x, SO₂, heavy metals and dioxins
- Protocol on Persistent Organic Pollutants⁵¹ and the Protocol on Heavy Metals⁵², both agreed as part of the United Nations Economic Commission for Europe (UN-ECE) Convention on Long-Range Transboundary Air Pollution
- findings of the International Agency for Research on Cancer (IARC) and the WHO that some Polycyclic Aromatic Hydrocarbons are carcinogenic
- the Precautionary Principle.

Rather than being a categoric protection of human health and the environment under all circumstances, as this HIA leads one to believe, the preamble to the Directive also advises that the limits set in the Directive are the minimum requirements to be achieved by all incineration plant.

The Health Service Executive²⁸ (HSE) notes the key principles of HIA as being:

- a social model of health and well-being
- an explicit focus on equity and social justice
- a multidisciplinary, participatory approach
- the use of qualitative as well as quantitative evidence
- explicit values and openness to public scrutiny.

Sadly, CHEPA finds the HIA undertaken in association with the EIS for the Indaver proposed development as exhibiting none of these principles. It demonstrates little interest in either the robust or vulnerable populations living in the surrounding towns of Ringaskiddy, Cobh, Monstown, Shanbally, Crosshaven or Carrigaline. With stated bias towards incineration from the outset, it exhibits little in the way of equity or social justice. No participation from any of the surrounding receptors has been invited, as is advised by the Gothenburg Consensus Paper⁵⁵ and no quantitative evidence at all is presented. CHEPA is therefore of the opinion that the study presented as Appendix 7.1 is not a HIA within the meaning of the definition of the WHO, the IPH, the HSE or the Gothenburg Consensus Paper.

Transport

The site of the proposed development is at the end of a cul-de-sac, served by just one road. Should a major accident occur at the site when the wind is blowing from the east, there is no route by which firefighters can access the site. Equally, there is no escape route for students and teachers of the National Maritime College. Similarly, there is but one bridge on to Haulbowline Island, where the Naval Base has its headquarters and where the University College Cork has its Marine Research Institute. This same bridge serves the crematorium on Rocky Island. Should there be a major accident at the site, people on Haulbowline or Rocky Islands may have no means of escape. If weather and tide conditions such as those experienced during the week of 25/10/2004 should prevail when a major accident takes place at the site, access would be hampered even further. Under these conditions, it would be impossible to evacuate the town of Cobh, as there is but one bridge at Belvelly serving the Great Island.

Because the site is relatively long and linear and running alongside the public road, the main tank farm is only 70 m from the public road. Seven of the consequence distances calculated by the HAZID report for Major Accident Scenarios are greater than 70 m. This could have major consequences for public health and safety, further exacerbated by the site's position at the end of the Ringaskiddy peninsula.

A very poor public transport service to Ringaskiddy increases potential public exposure to risk. Most people coming to Ringaskiddy have to come by car or by bicycle. The number of cars using the single road to the end of the peninsula has increased significantly and noticeably since the previous planning application for this site. Because it provides neither information on the intensity of traffic on the N28 east of the Loughbeg junction nor assessment of what Section 8.2.3 describes as the Haulbowline Bridge junction, it is not possible to tell from the EIS what the real increase in traffic on this section of the N28 has been since 2001.

Table 8.4 of the EIS anticipates 1,134 daily traffic movements associated with the construction of the proposed development. Of these, 190 would be HGVs, involving 14 movements every hour. One of the principal construction traffic mitigation measures proposed is to bring construction workers on site before 0700 h, prior to the morning peak.

What is evident from the traffic counts presented is that there appears to have been a tremendous increase in early morning traffic between 2001 and 2008. In the case of traffic on the N28 west of the Ferry Port, that increase has been over 115%. As the increase in vehicles during the morning peak has not been so acute, we suggest the early morning increase may be at least in part due to people trying to avoid the tailbacks at the Shanbally Roundabout.

That the Shanbally roundabout has reached a situation of dire overcapacity is indisputable. A tailback of over 200 cars on the N28 east-west arm of the roundabout has been identified in Appendix 8.1. This creates tremendous difficulty for those trying to get to work in the

mornings and may explain the phenomenal 330% increase in traffic using the Raffeen Road between 2001 and 2008. Section 8.7.7 anticipates “*during the construction AM and PM peak periods, it is expected that the Shanbally Roundabout will have sufficient capacity to accommodate the projected temporary increase in traffic associated with the construction of the development*”. But Appendix 8.2 estimates the east-west arm of the Shanbally roundabout to be 183% over capacity by 2012 even without the proposed development. Even with planned mitigation measures, Table 8.4 projects a regular 14 HGV movements and 20 general site traffic movements associated with construction of the proposed facility during the AM peak. Section 8.4.1 estimates the 17-week excavation period to involve 24 truck movements each hour, assumedly including during the AM peak. HGVs are particularly problematic on small roundabouts and would create additional loads which the Shanbally roundabout simply cannot accommodate.

Construction traffic would have a tremendous impact on local residents and the local road network. Table 8.11 shows that it would increase traffic travelling through Ringaskiddy village in the early morning by 65%. Noise and vibration effects on the houses along the main road through Ringaskiddy village have not been adequately assessed in the EIS.

When operational, the facility is expected to generate 344 traffic movements every day, 188 of which would be HGVs. Again, the predicted impact on local residents is significant. Table 8.13 predicts a lunchtime increase in traffic of 15% through Ringaskiddy village. Note that all these vehicles will be passing Ringaskiddy primary school as junior and senior infants are being collected by their parents. Of those vehicles travelling through Ringaskiddy village during lunchtime, 24 will be HGVs, some of which will be carrying hazardous materials. But there is no assessment in the EIS of the risk to sensitive populations in Ringaskiddy village from increased movement of hazardous materials.

The indisputable and unavoidable fact is that the entire N28 and its feeder roads are operating drastically over design capacity for certain periods each day. The link capacity of the N28 is 1,470 vehicles per hour⁴⁵. But the existing flow on the N28 east of the Shannonpark Roundabout during the AM peak is 1,550 vehicles. Even without the proposed development, the hourly AM peak count is anticipated to increase to 1,757, approximately 20% over design capacity. When a road system operates over capacity, the risk of accidents increases. While this might be an acceptable risk under certain circumstances, CHEPA does not consider it an acceptable risk to introduce HGVs carrying hazardous waste to a road network that is widely recognised as being significantly over design capacity.

Although most of the traffic associated with the proposed development will turn north at the Shannonpark roundabout, we note that Section 8 contains no assessment of the impact of this traffic on the N25. The Kinsale Road roundabout, the Sarsfield Road roundabout and the Bandon Road roundabout are key junctions on the N25. All are signalised roundabouts. Because they delay traffic in taking off and because they occupy much available space between traffic lights, HGVs are problematic at signalised roundabouts. That grade separations of the Sarsfield Road and Bandon Road roundabouts were mooted prior to 2003 is an indicator of existing traffic intensity at these junctions. All HGVs coming from North Cork and beyond to the proposed facility at Ringaskiddy would have no option but to either go through Cork City or through the Jack Lynch Tunnel. Last year, only 9 years after its construction, the Tunnel was estimated to be close to capacity. The EIS does not contain any evaluation of the risk of an accident involving hazardous waste in the Jack Lynch Tunnel. Accidents involving trucks in the Tunnel have been recorded in 2004, 2006 and 2007. (The accident in 2007 resulted in no damage to the truck, but considerable damage to the tunnel.) Cork City Council estimates that the overheight vehicle detection beams at the entrance to the Tunnel trigger alarms 60 – 90 times each month³⁹. Any accident resulting in a spill of hazardous waste in the Jack Lynch Tunnel would not merely lead to extreme conditions of public risk, but could lead to increased public and environmental exposure should the spilled

material enter the River Lee. There is an urgent need for comprehensive assessment of risks associated with transport of hazardous waste to and from the proposed facility, with particular focus on the risk of transporting hazardous waste through the Jack Lynch Tunnel.

Proposed development impacts negatively on achieving national and local waste management policy

Government policy in relation to non-hazardous waste management was clearly outlined in 2002 by *Delivering Change – Preventing and Recycling Waste*¹⁵. It considers thermal treatment to an aim of integrated waste management. However, it places indisputable emphasis on the higher steps of the waste hierarchy as being national priorities:

“This Statement concentrates on the 3 highest steps on the waste hierarchy recognising, as do the local and regional waste management plans, that emphasis must be given to the widest practicable realisation of waste prevention, minimisation, reuse, materials recycling and biological treatment, before energy recovery through thermal treatment, and final disposal in landfill.”

When Indaver first applied for planning permission in 2001 to build a waste to energy facility in Ringaskiddy, non-hazardous municipal waste production in Ireland was 0.69 tonnes per person per year. It was of considerable concern at the time that waste prevention should be realised before the introduction of thermal treatment with energy recovery. Now, eight years later, the most recent statistics estimate per capita waste production to have increased to 0.8 tonnes per year¹⁹. In fact, waste production per capita in Ireland is the highest in Europe³¹. Clearly a great deal more work needs to be done in this country if the production – consumption cycle is to be broken in favour of waste prevention and sustainability. It is of great concern to CHEPA that with a ready insatiable outlet for waste, such as incineration, targets for waste prevention and other actions higher on the waste hierarchy will be even more difficult to achieve.

The national target for recycling of municipal solid waste was outlined in the policy document *Changing our Ways*¹⁴ in 1998 as being 35% by 2013. The most recent published statistics estimate some 36% of municipal solid waste to have been recycled in 2006. So, on the face of it, this target has been reached.

However, municipal solid waste comprises both household and commercial waste. *Changing our Ways*¹⁴ set a national target for diversion of 50% of household waste from landfill by 2013. But only 14.8% of household waste was recovered in 2006. Yet, householders are responding to recycling: use of recycling facilities at civic amenity sites was 84% higher than it had been the previous year. The difficulty is that volumes of both household and commercial waste generated have continued to increase and, consequently, volumes of waste to landfill have also continued to increase²⁶. So while incineration would assist in achieving the target of diverting 50% of household waste from landfill¹⁴, it would do so at the cost of achieving prevention and other elements of waste management superior in the waste hierarchy.

Section 2.5 of the EIS claims that the proposed waste to energy plant can help Ireland to achieve its obligations in relation to biodegradable waste under Directive 99/31/EC²⁵ on the landfill of waste. It is true that it can, but at a cost.

Government’s *National Strategy on Biodegradable Waste Management*¹⁷ outlines policy by which Ireland aims to achieve targets for diversion of biodegradable waste from landfill. This policy does not include incineration other than as a management strategy for residual waste.

The Strategy outlines targets to be achieved before next year, including recycling of selected organic waste streams, specific actions to increase recovery of biodegradable waste, separate collection of household organics and dedicated green waste collection facilities at civic amenity sites.

At present, Ireland has already achieved the paper/cardboard commercial recycling target and has almost reached that for paper/cardboard from households²⁶. But there is much more to do. By next year, 13% of all households are to be home composting. Separate organic waste collection was available in only 8 counties in 2006; it must increase to 40% of households by next year¹⁷. In 2008, the Environmental Protection Agency published suggestions to help move the *National Strategy on Biodegradable Waste Management* along²⁰. None of its 10 suggestions included incineration. So although incineration may certainly assist in diverting biodegradable waste from landfill, its introduction before national targets for biodegradable waste management are achieved may well result in their never being achieved. Consequently, biodegradable waste would forever be regarded as a residual waste rather than a resource.

Prevention is also the cornerstone of national hazardous waste management. Policy for hazardous waste management nationally is detailed in the *National Hazardous Waste Management Plan*²¹ published by the Environmental Protection Agency. It outlines 29 recommendations for hazardous waste management to 2012. None of these specifically includes incineration. They propose measures in relation to solvent recycling rather than combustion. The recommendations do, however, encourage national self-sufficiency in hazardous waste management and Section 6.2 advises that indigenous use of wastes currently exported for incineration is one of three key needs if total self-sufficiency is to be advanced. But the recommendations note that much of the waste currently exported for incineration could be dealt with at existing authorised facilities and in cement kilns in Ireland.

If self-sufficiency in hazardous waste management is a national aim, then there is little point in advancing a hazardous waste incinerator without co-advancing the development of hazardous waste landfill. Section 4.15.4 of the EIS for the proposed development anticipates that, depending on the type of flue gas treatment to be employed, hazardous ash production from both incinerators would be 12,500 – 23,500 tonnes each year. In the absence of hazardous landfill, this would all have to be exported for disposal. So, rather than being eliminated, Irish exports for disposal would decrease by only 7%.

One of the environmental targets and indicators of the *National Hazardous Waste Management Plan*²¹ is that any new hazardous waste facilities should be developed on previously used lands or brownfield sites. It is relevant to note that Paragraph 5.3.11 of the draft *Cork County Development Plan*¹¹ also supports the redevelopment of brownfield sites: “It is important to acknowledge that the redevelopment of brownfield sites is inherently more sustainable than the development of greenfield sites and should be encouraged”. The Indaver proposals for Ringaskiddy are for a greenfield site of significant visual, recreational, heritage and ecological value.

The proximity principle has been part of waste management since the Waste Framework Directive²³ was passed in 1975. It states that waste should be disposed of in the nearest appropriate installation. Its aim is to limit the environmental impact of transporting waste over long distances and to reinforce the polluter pays principle. The proposed Indaver facility does not comply with the proximity principle in a number of ways:

- Thermal treatment is not part of the Waste Management Plan for County Cork⁸. The Waste Management Plan has targets relating to prevention, collection and recycling. It commits to opening a new engineered landfill and a new Materials Recovery Facility to pre-treat waste prior to disposal of residuals. The new landfill has been provided at Bottlehill, but a Materials Recovery Facility has not yet got through the planning process.

Should Cork choose not to send municipal waste to the proposed development, would waste be transported to Ringaskiddy from Kerry, Limerick and/or Clare? Incineration is a planned element of the Limerick/Clare/Kerry Region Waste Management Plan³⁷.

- When fully operational, the landfill at Bottlehill is licensed to take 33,500 tonnes of industrial waste per year²⁹. But, according to Section 4.15.4, annual production of non-hazardous ash from the Indaver Ireland incinerators at Ringaskiddy would be expected to be more than 45,000 tonnes. Assuming the ash is defined as industrial non-hazardous waste, Bottlehill simply cannot take it all and it will have to be taken further afield.
- CHEPA cannot understand how it could ever be considered best environmental practice to have what will be a national hazardous waste facility operating at the end of a peninsula in the very south of Ireland. Hazardous waste would be transported to this facility from all over the country, with the ensuing risk and production of greenhouse gases. The EIS proposes that the facility should treat hazardous waste from Northern Ireland. While an all-Ireland approach to treatment of hazardous waste is not in question, Belfast to Cork is a journey of over 400 km and a drive time of 5½ hours. Certainly there is a major concentration of pharmaceuticals in Ringaskiddy, but most of these recover or dispose of large volumes of their hazardous waste on site. The EIS does not produce any evidence to support the argument that most of the hazardous waste exported from Ireland comes from Ringaskiddy.

Ireland has committed to a reduction in greenhouse gases as outlined in the *National Climate Change Strategy 2007 – 2012*¹⁶. Incineration with energy recovery is more favourable to a reduction in emission of greenhouse gases than is landfill with energy recovery. But those waste management policies further up the waste hierarchy contribute much more to reducing emissions of greenhouse gases than incineration with energy recovery. For example, the United States Environmental Protection Agency⁵³ estimates the combustion of steel cans to have an emission rate of -0.42 MTCE/ton (metric tones of carbon equivalent per short ton), whereas source reduction of steel cans has an equivalent emission rate of -0.87 MTCE/ton. If mixed recyclables are burned in an incinerator such as that proposed for Ringaskiddy, the subsequent emission rate is -0.17 MTCE/ton. However, if those recyclables are recycled, the equivalent emission rate is -0.79 MTCE/ton. So while incineration with energy recovery may provide some small reduction in the emission of greenhouse gases, should it delay advances in waste management policies further up the waste hierarchy, then it may do more harm than good to national policies in relation to reducing greenhouse gas emissions.

Conclusion

“Site selection for waste management facilities is a complex and difficult task, yet it is perhaps one of the most important aspects of waste management.”

Thus spoke the Health Research Board (HRB) in its 2003 publication, *The Health and Environmental Effects of Landfill and Incineration*³⁵. It is CHEPA’s opinion that the HRB is correct. And with this site in Ringaskiddy, Indaver has got it wrong.

WHO guidelines published in 1993 on *Site Selection for New Hazardous Waste Management Facilities*⁵⁴ were not followed in the course of the Indaver site selection procedure for this proposed waste to energy facility. Had they been followed, the site at Ringaskiddy would have been excluded as unsuitable from the outset. But Indaver chose and purchased the site in Ringaskiddy from Irish Ispat prior to carrying out any assessment of its environmental merits or otherwise. It was not until one month after purchase that an EIS was commissioned. And Indaver has now spent eight years trying to make an environmentally sensitive greenfield site fit the parameters which mark it suitable for construction of a contract incineration facility.

Local waste policy does not support the proposed development. Local planning and development policy does not support the proposed development on this site. Indeed, it is doubtful as to whether local planning and development policy supports a development such as that proposed on any site in County Cork. But local planning policy has a wide range of development objectives for the peninsula of Ringaskiddy and Cork Harbour, many of which would be thwarted should the proposed development be granted planning permission.

Indaver first applied for planning permission for construction of a waste management facility on this site in Ringaskiddy in 2001 (Planning Ref: PL04.131196). In 2003, an investigative Oral Hearing, chaired by a Senior Inspector of An Bord Pleanála, was held during the course of determination of the planning application. Subsequent to the Oral Hearing, the Senior Inspector published his recommendation that the proposed facility should not be granted planning permission on the following grounds:

1. The EIS submitted to support the planning application was inadequate.
2. Waste prevention is a higher priority than waste to energy and a reduction in waste arisings nationally had not yet been achieved.
3. Hazardous landfill is needed for disposal of hazardous ash from incineration. No hazardous waste landfill had been proposed, consequently negating the aim of self-sufficiency.
4. The proposed development was not in accordance with local waste management policy.
5. Contract incineration was a material contravention of the *County Development Plan 2003 – 2008*.
6. The proposed development was a material contravention of the zoning for the site as outlined in the *County Development Plan 2003 – 2008*.
7. It would be a material contravention of the *County Development Plan 2003 – 2008* to fail to reserve the proposed site for port use.
8. The bulk, scale, height, design and location of the proposed development would be visually obtrusive and seriously injurious to the visual amenities of the area.
9. The proposed site suffers from erosion, it floods, it is too steep and its geology and hydrogeology are unsuitable.
10. The proposed development is too close to Ringaskiddy village and would depreciate the value of residential property.

11. The site is at the end of a peninsula with a single road access and no rail access on the southern coast of the State. This would lead to excessive road transport compromising public health and safety.
12. Local road infrastructure is inadequate and traffic associated with the proposed development would lead to increased risk to public health and safety.
13. The proposed development was premature because the local road infrastructure is inadequate.
14. There would be a significant risk to public safety if a major accident at the proposed development took place.

CHEPA strongly supports these recommendations of the Senior Inspector and believes them to be equally valid and even more relevant now in 2009 than they were in 2001.

In 2004, An Bord Pleanála took the decision to grant planning permission to the development which Indaver proposed in 2001 for this site. It is CHEPA's opinion that, since this decision was taken in 2004, published national hazardous and non-hazardous waste management policy has become even stronger with regard to waste management policies in the upper tier of the waste hierarchy and no longer supports a development such as that proposed to the potential detriment of waste policies which are more sustainable in the longer term.

Consequently, CHEPA respectfully requests that An Bord Pleanála should refuse to grant permission to Indaver Ireland for its proposed waste to energy facility and transfer station at Ringaskiddy on the grounds outlined above and on the basis of the proposal's incompatibility with proper planning and sustainable development. Furthermore, should a favourable decision, with or without conditions be considered, CHEPA respectfully requests the opportunity to expand on the views expressed in the above submission at an Oral Hearing.

The issues outlined above are those which are of greatest concern to the members of CHEPA. We understand that other submissions will be received by An Bord Pleanála in relation to this proposed development and we support the concerns outlined in those submissions also.

Yours faithfully,

Marcia D'Alton, B.E., M.Eng.Sc., M.I.E.I.

on behalf of CHEPA (Monkstown)

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